FERRO CORP Form 10-Q
November 02, 2016
<u>Table of Contents</u>
8Mag
Mag
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q
(Mark One) QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 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 Eile Number 1 504
Commission File Number 1-584

FERRO CORPORATION

(Exact name of registrant as specified in its charter)

Ohio 34-0217820

(State or other jurisdiction of (I.R.S. Employer Identification No.)

incorporation or organization)

6060 Parkland Boulevard 44124

Suite 250 (Zip Code)

Mayfield Heights, OH

(Address of principal executive offices)

216-875-5600

(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

YES NO

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (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 Act). YES NO

At September 30, 2016, there were 83,385,550 shares of Ferro Common Stock, par value \$1.00, outstanding.

Table of Contents

TABLE OF CONTENTS

	Page
<u>PART</u> I	
Item 1. Financial Statements (Unaudited)	3
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	25
Item 3. Quantitative and Qualitative Disclosures about Market Risk	42
Item 4. Controls and Procedures	43
<u>PART</u> II	
Item 1. Legal Proceedings	44
Item 1A. Risk Factors	44
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	44
Item 3. Defaults Upon Senior Securities	44
<u>Item 4. Mine Safety Disclosures</u>	44
<u>Item 5. Other Information</u>	44
<u>Item 6. Exhibits</u>	44
Exhibit 10.2	
Exhibit 31.1	
Exhibit 31.2	
Exhibit 32.1	
Exhibit 32.2	

PART I — FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

Ferro Corporation and Subsidiaries

Condensed Consolidated Statements of Operations

	Three Mon	the Ended	Nine Month	s Ended
	Three Months Ended September 30,		September 3	
	2016 2015		2016	2015
			xcept per sha	
Net sales	\$ 288,527	\$ 279,365	\$ 863,955	\$ 810,351
Cost of sales	199,546	202,337	592,372	585,048
Gross profit	88,981	77,028	271,583	225,303
Selling, general and administrative expenses	55,588	48,417	166,105	150,568
Restructuring and impairment charges	26	3,844	1,694	5,469
Other expense (income):	20	3,044	1,094	3,409
Interest expense	5,304	3,877	15,579	10,137
Interest earned	(214)	(97)	(414)	(191)
Foreign currency losses, net	867	1,203	2,867	5,758
Miscellaneous expense (income), net	705	467	(2,079)	705
Income before income taxes	26,705	19,317	87,831	52,857
	*	*	•	•
Income tax expense	6,157	3,792	22,659	11,930
Income from continuing operations	20,548	15,525	65,172	40,927
(Loss) from discontinued operations, net of income taxes	(29,222)	(19,086)	(64,464)	(28,688)
Net (loss) income	(8,674)	(3,561)	708	12,239
Less: Net income (loss) attributable to noncontrolling interests	210	498	589	(1,271)
Net (loss) income attributable to Ferro Corporation common	Φ (0.004)	Φ (4.050)	Φ 110	Φ 12.510
shareholders	\$ (8,884)	\$ (4,059)	\$ 119	\$ 13,510
Earnings (loss) per share attributable to Ferro Corporation common				
shareholders:				
Basic earnings (loss):				
Continuing operations	\$ 0.24	\$ 0.17	\$ 0.78	\$ 0.48
Discontinued operations	(0.35)	(0.22)	(0.77)	(0.33)
	\$ (0.11)	\$ (0.05)	\$ 0.01	\$ 0.15
Diluted earnings (loss):				
Continuing operations	\$ 0.24	\$ 0.17	\$ 0.77	\$ 0.48
Discontinued operations	(0.35)	(0.22)	(0.77)	(0.32)

\$ (0.11) \$ (0.05) \$ — \$ 0.16

See accompanying notes to condensed consolidated financial statements.

Table of Contents

Ferro Corporation and Subsidiaries

Condensed Consolidated Statements of Comprehensive (Loss)

	Three Months Ended September 30,		Nine Mon September		
	2016	2015	2016	2015	
	(Dollars in	thousands)		
Net (loss) income	\$ (8,674)	\$ (3,561)	\$ 708	\$ 12,239	
Other comprehensive income (loss), net of income tax:					
Foreign currency translation income (loss)	1,565	(5,301)	(3,382)	(33,690)	
Reclassification adjustment for foreign currency translation included in					
net (loss) income	1,115		1,115		
Postretirement benefit liabilities (loss) gain	(2)	(4)	293	(6)	
Other comprehensive income (loss), net of income tax	2,678	(5,305)	(1,974)	(33,696)	
Total comprehensive (loss)	(5,996)	(8,866)	(1,266)	(21,457)	
Less: Comprehensive income (loss) attributable to noncontrolling					
interests	191	376	450	(2,532)	
Comprehensive (loss) attributable to Ferro Corporation	\$ (6,187)	\$ (9,242)	\$ (1,716)	\$ (18,925)	

See accompanying notes to condensed consolidated financial statements.

Ferro Corporation and Subsidiaries

Condensed Consolidated Balance Sheets

ASSETS	September 30, 2016 (Dollars in the	December 31, 2015 aousands)
Current assets		
Cash and cash equivalents	\$ 40,556	\$ 58,380
Accounts receivable, net	282,827	231,970
Inventories	211,261	184,854
Deferred income taxes		12,088
Other receivables	36,360	34,088
Other current assets	8,013	15,695
Current assets held-for-sale		16,215
Total current assets	579,017	553,290
Other assets	,	,
Property, plant and equipment, net	249,497	260,429
Goodwill	142,880	145,669
Intangible assets, net	112,021	106,633
Deferred income taxes	99,326	87,385
Other non-current assets	50,247	48,767
Non-current assets held-for-sale	<u> </u>	23,178
Total assets	\$ 1,232,988	\$ 1,225,351
LIABILITIES AND EQUITY		
Current liabilities		
Loans payable and current portion of long-term debt	\$ 10,221	\$ 7,446
Accounts payable	123,325	120,380
Accrued payrolls	32,255	28,584
Accrued expenses and other current liabilities	60,708	54,664
Current liabilities held-for-sale	_	7,156
Total current liabilities	226,509	218,230
Other liabilities		
Long-term debt, less current portion	477,100	466,108
Postretirement and pension liabilities	147,682	148,249
Other non-current liabilities	65,533	66,990
Non-current liabilities held-for-sale	_	1,493
Total liabilities	916,824	901,070
Equity		
Ferro Corporation shareholders' equity:		
	93,436	93,436

Common stock, par value \$1 per share; 300.0 million shares authorized; 93.4 million shares issued; 83.4 million and 84.0 million shares outstanding at September 30, 2016, and December 31, 2015, respectively

Paid-in capital	304,839	314,854
Retained earnings	135,626	135,507
Accumulated other comprehensive loss	(63,153)	(61,318)
Common shares in treasury, at cost	(162,354)	(166,020)
Total Ferro Corporation shareholders' equity	308,394	316,459
Noncontrolling interests	7,770	7,822
Total equity	316,164	324,281
Total liabilities and equity	\$ 1,232,988	\$ 1,225,351

See accompanying notes to condensed consolidated financial statements.

Ferro Corporation and Subsidiaries

Condensed Consolidated Statements of Equity

	Ferro Con Common in Treasu		areholders Common	Paid-in	Retained	Accumulated Other Comprehensing	Non-	Total
		Amount in thousands)	Stock	Capital	Earnings	(Loss)	Interests	Equity
Balances at December 31, 2014 Net income (loss) Other	6,445	\$ (136,058) —	\$ 93,436 —	\$ 317,404 —	\$ 71,407 13,510	\$ (21,805) —	\$ 11,632 (1,271)	\$ 336,016 12,239
comprehensive (loss) Purchase of	_	_	_	_	_	(32,435)	(1,261)	(33,696)
treasury stock Stock-based	580	(6,998)	_	_	_	_	_	(6,998)
compensation transactions Distributions to noncontrolling	(290)	8,352	_	(2,801)	_	_	_	5,551
interests Balances at	_	_	_	_	_	_	(868)	(868)
September 30, 2015	6,735	(134,704)	93,436	314,603	84,917	(54,240)	8,232	312,244
Balances at December 31, 2015 Net income Other	9,431	(166,020)	93,436	314,854	135,507 119	(61,318) —	7,822 589	324,281 708
comprehensive (loss) Purchase of	_	_	_	_	_	(1,835)	(139)	(1,974)
treasury stock Stock-based	1,175	(11,429)	_	_	_	_	_	(11,429)
compensation transactions Distributions to noncontrolling	(556) —	15,095 —	_ _	(10,015) —	_ _		 (502)	5,080 (502)

interests
Balances at
September 30,

2016 10,050 \$ (162,354) \$ 93,436 \$ 304,839 \$ 135,626 \$ (63,153) \$ 7,770 \$ 316,164

See accompanying notes to condensed consolidated financial statements.

Ferro Corporation and Subsidiaries

Condensed Consolidated Statements of Cash Flows

Cook flaves from apareting activities	Nine Months September 3 2016 (Dollars in the	0, 2015
Cash flows from operating activities	\$ 6,742	\$ 31,498
Net cash provided by operating activities	\$ 0,742	\$ 31,490
Cash flows from investing activities	(19 217)	(26.251)
Capital expenditures for property, plant and equipment and other long lived assets Proceeds from sale of assets	(18,217)	(36,251) 144
	3,598	
Business acquisitions, net of cash acquired	(11,417)	
Net cash (used in) investing activities	(26,036)	(203,104)
Cash flows from financing activities	2 (0)	1.501
Net borrowings under loans payable	2,606	1,791
Proceeds from revolving credit facility	212,906	
Principal payments on revolving credit facility	(149,696)	
Principal payments on term loan facility	(52,250)	(2,250)
Payment of debt issuance costs	(661)	_
Purchase of treasury stock	(11,429)	(6,998)
Other financing activities	416	(1,160)
Net cash provided by financing activities	1,892	107,419
Effect of exchange rate changes on cash and cash equivalents	(422)	(6,820)
(Decrease) in cash and cash equivalents	(17,824)	(71,007)
Cash and cash equivalents at beginning of period	58,380	140,500
Cash and cash equivalents at end of period	\$ 40,556	\$ 69,493
Cash paid during the period for:		
Interest	\$ 15,032	\$ 11,141
Income taxes	\$ 12,929	\$ 17,504

See accompanying notes to condensed consolidated financial statements.

Table of Contents

Ferro Corporation and Subsidiaries

Notes to Condensed Consolidated Financial Statements

1. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of Ferro Corporation ("Ferro," "we," "us" or "the Company") have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information, the instructions to Form 10-Q, and Article 10 of Regulation S-X. These statements reflect all normal and recurring adjustments which are, in the opinion of management, necessary to present fairly the financial position, results of operations and cash flows for the periods presented. The preparation of financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. These interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2015.

The Company owned 51% of an operating affiliate in Venezuela that was a consolidated subsidiary of Ferro. During the fourth quarter of 2015, we sold our interest in the operating affiliate in Venezuela for a cash purchase price of \$0.5 million.

During the second quarter of 2014, all of the assets and liabilities of the Europe-based Polymer Additives business were classified as held-for-sale. As further discussed in Note 3, in the third quarter of 2016, we completed the disposition of the Europe-based Polymer Additives business and have classified the related operating results, net of income tax, as discontinued operations in the accompanying condensed consolidated statements of operations for all periods presented.

Operating results for the three and nine months ended September 30, 2016, are not necessarily indicative of the results expected in subsequent quarters or for the full year ending December 31, 2016.

2. Recent Accounting Pronouncements

Recently Adopted Accounting Standards

In November 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2015-17, Income Taxes: Topic 740: Balance Sheet Classification of Deferred Taxes. ASU 2015-17 requires deferred tax assets and liabilities to be classified as noncurrent in a classified statement of financial position. During the second quarter of 2016, we elected to prospectively adopt ASU 2015-17, thus reclassifying current deferred tax assets

to noncurrent on the accompanying condensed consolidated balance sheets. The prior reporting period was not retrospectively adjusted. Other than this reclassification, the adoption of ASU 2015-17 did not have an impact on the Company's condensed consolidated financial statements.

New Accounting Standards

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flow: Topic 230: Classification of Certain Cash Receipts and Cash Payments. ASU 2016-15 is intended to address eight specific cash flow issues with the objective of reducing the existing diversity in practice. This pronouncement is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted. The Company is in the process of assessing the impact the adoption of this ASU will have on our condensed consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, Compensation – Stock Compensation: Topic 718: Improvements to Employee Share-Based Payment Accounting. ASU 2016-09 is intended to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This pronouncement is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted. The Company is in the process of assessing the impact the adoption of this ASU will have on our condensed consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases: Topic 842. ASU 2016-02 requires companies to recognize a lease liability and asset on the balance sheet for operating leases with a term greater than one year. This pronouncement is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The Company is in the process of assessing the impact the adoption of this ASU will have on our condensed consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers: Topic 606. This ASU replaces nearly all existing U.S. GAAP guidance on revenue recognition. The standard prescribes a five-step model for recognizing revenue, the application of which will require significant judgment. This standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. The Company is in the process of assessing the impact the adoption of this ASU will have on our condensed consolidated financial statements.

No other new accounting pronouncements issued or with effective dates during fiscal 2016 had or are expected to have a material impact of the Company's condensed consolidated financial statements.

3. Discontinued Operations

During the second quarter of 2014, we commenced a process to market for sale all of the assets within our Europe-based Polymer Additives business, including the Antwerp, Belgium dibenzoates manufacturing assets, and related Polymer Additives European headquarters and lab facilities. We determined that the criteria to classify these assets as held-for-sale under ASC Topic 360, Property, Plant and Equipment, were met. On August 22, 2016, the Company completed the disposition of the Europe-based Polymer Additives business to Plahoma Two AG, an affiliate of the LIVIA Group. The Company made a capital contribution of €12 million (approximately \$13.6 million) to its subsidiaries that owned the assets prior to the close of the sale. In August 2016, prior to the sale, an impairment charge of \$26.8 million was recorded under ASC Topic 360 Property, Plant and Equipment. The charge was calculated as the difference of the executed transaction price and the carrying value of the assets. The impairment charge included \$1.1 million associated with the reclassification of foreign currency translation loss from Accumulated other comprehensive loss (Note 17). The Europe-based Polymer Additives operating results, net of income tax, are classified as discontinued operations in the accompanying condensed consolidated statements of operations for all periods presented and the assets and liabilities are classified as held-for-sale in the accompanying condensed consolidated balance sheets at December 31, 2015 as the criteria to do so under ASC Topic 360, Property, Plant and Equipment were met as the respective periods.

The table below summarizes results for the Europe-based Polymer Additives assets, for the three and nine months ended September 30, 2016 and 2015, which are reflected in our condensed consolidated statements of operations as discontinued operations. Interest expense has been allocated to the discontinued operations based on the ratio of net

assets of each business to consolidated net assets excluding debt.

	Three Months Ended		Nine Month	ns Ended
	September	30,	September	30,
	2016	2015	2016	2015
	(Dollars in	thousands)		
Net sales	\$ 3,831	\$ 7,493	\$ 18,481	\$ 27,229
Cost of sales	5,654	13,231	28,473	39,689
Gross loss	(1,823)	(5,738)	(9,992)	(12,460)
Selling, general and administrative expenses	588	1,156	3,094	3,384
Restructuring and impairment charges	26,843	11,792	50,902	11,792
Interest expense	49	237	325	557
Miscellaneous (income) expense	(4)	163	(392)	495
(Loss) from discontinued operations before income taxes	(29,299)	(19,086)	(63,921)	(28,688)
Income tax (benefit) expense	(77)		543	
(Loss) from discontinued operations, net of income taxes	\$ (29,222)	\$ (19,086)	\$ (64,464)	\$ (28,688)

The following table summarizes the assets and liabilities that are classified as held-for-sale at September 30, 2016, and December 31, 2015:

	September 30, December 2016 31, 2015 (Dollars in
	thousands)
Accounts receivable, net	\$ \$ 4,028
Inventories	— 9,733
Other current assets	- 2,454
Current assets held-for-sale	— 16,215
Property, plant and equipment, net	— 22,973
Other non-current assets	— 205
Total assets held-for-sale	\$ —\$ 39,393
Accounts payable	\$ —\$ 5,736
Accrued expenses and other current liabilities	— 1,420
Current liabilities held-for-sale	— 7,156
Other non-current liabilities	— 1,493
Total liabilities held-for-sale	\$ —\$ 8,649

4. Acquisitions

Delta Performance Products

On August 1, 2016, the Company acquired certain assets of Delta Performance Products, LLC, for a cash purchase price of \$4.4 million. The Company preliminarily recorded \$3.2 million of amortizable intangible assets, \$1.8 million of goodwill, \$1.2 million of a deferred tax liability related to the amortizable intangible assets, and \$0.6 million of net working capital on the condensed consolidated balance sheet.

Pinturas

On June 1, 2016, the Company acquired 100% of the equity of privately held Pinturas Benicarló, S.L. ("Pinturas") for €16.5 million in cash (approximately \$18.4 million). The information included herein has been prepared based on the preliminary allocation of the purchase price using estimates of the fair value and useful lives of the assets acquired and liabilities assumed, which were determined with the assistance of third parties who performed independent valuations using discounted cash flow and comparative market approaches and estimates made by management. As of September 30, 2016, the purchase price allocation is subject to further adjustment until all information is fully evaluated by the Company. The Company preliminarily recorded \$8.5 million of amortizable intangible assets, \$3.8 million of goodwill, \$0.7 million of personal and real property, \$2.6 million of a deferred tax liability related to the amortizable intangible assets, and \$8.0 million of net working capital on the condensed consolidated balance sheet.

Ferer

On January 5, 2016, the Company completed the purchase of 100% of the equity of privately held Istanbul-based Ferer Dis Ticaret Ve Kimyasallar Anonim Sirketi A.S. ("Ferer") on a cash-free and debt-free basis for approximately \$9.4 million in cash, subject to customary working capital and other adjustments. The information included herein has been prepared based on the preliminary allocation of the purchase price using estimates of the fair value and useful lives of the assets acquired and liabilities assumed, which were determined with the assistance of third parties who performed independent valuations using discounted cash flow and comparative market approaches and estimates made by management. As of September 30, 2016, the purchase price allocation is subject to further adjustment until all information is fully evaluated by the Company. The Company preliminarily recorded \$3.3 million of amortizable intangible assets, \$4.5 million of goodwill, \$0.6 million of personal and real property, \$0.7 million of a deferred tax liability related to the amortizable intangible assets, and \$1.7 million of net working capital on the condensed consolidated balance sheet.

Table of Contents

Al Salomi

On November 17, 2015, the Company acquired 100% of the equity of Egypt-based tile coatings manufacturer Al Salomi for Frits and Glazes ("Al Salomi") for Egyptian Pound ("EGP") 307 million (approximately \$38.2 million), including the assumption of debt. The acquired business contributed net sales of \$6.2 million and \$18.2 million for the three and nine months ended September 30, 2016 and net income attributable to Ferro Corporation of \$0.6 million and \$2.8 million for the three and nine months ended September 30, 2016.

The information included herein has been prepared based on the preliminary allocation of the purchase price using estimates of the fair value and useful lives of the assets acquired and liabilities assumed, which were determined with the assistance of third parties who performed independent valuations using discounted cash flow and comparative market approaches and estimates made by management. As of September 30, 2016, the purchase price allocation is subject to further adjustment until all information is fully evaluated by the Company. The Company preliminarily recorded \$15.0 million of amortizable intangible assets, \$14.3 million of goodwill, \$10.7 million of personal and real property, \$4.8 million of a deferred tax liability related to the amortizable intangible assets, and \$3.0 million of net working capital on the condensed consolidated balance sheet.

Nubiola

On July 7, 2015, the Company acquired the entire share capital of Corporación Química Vhem, S.L., Dibon USA, LLC and Ivory Corporation, S.A. (together with their direct and indirect subsidiaries, "Nubiola") on a cash-free and debt-free basis for €167 million (approximately \$184.2 million). The acquisition was funded with excess cash and borrowings under the Company's existing revolving credit facility. See Note 8 for additional detail on the revolving credit facility. During the second quarter of 2016, the Company finalized a purchase price adjustment for the settlement of an escrow that reduced the fair value of net assets acquired to \$168.1 million. As a result of the purchase price adjustment, the carrying amount of goodwill decreased by \$11.7 million, amortizable intangible assets decreased \$6.4 million and the related deferred tax liability decreased \$1.9 million. The impact of the change on the condensed consolidated statements of operations was not material.

The information included herein has been prepared based on the allocation of the purchase price using estimates of the fair value and useful lives of the assets acquired and liabilities assumed, which were determined with the assistance of third parties who performed independent valuations using discounted cash flow and comparative market approaches and estimates made by management.

The following table summarizes the purchase price allocations:

July 7, 2015 (Dollars in thousands) \$ 46,642 19,966

Net working capital (1) Cash and equivalents

Personal property	39,444
Real property	28,510
Intangible assets	26,757
Other assets and liabilities	(20,733)
Goodwill	27,498
Net assets acquired	\$ 168,084

(1) Net working capital is defined as current assets, less cash, less current liabilities.

The acquired business contributed net sales of \$33.0 million and \$97.2 million for the three and nine months ended September 30, 2016, and net income attributable to Ferro Corporation of \$7.2 million and \$21.4 million for the three and nine months ended September 30, 2016.

The fair value of the receivables acquired is \$24.5 million, with a gross contractual amount of \$25.2 million. The Company recorded acquired intangible assets subject to amortization of \$21.1 million, which is comprised of \$5.4 million of customer relationships and \$15.7 million of technology/know-how, which will be amortized over 20 years and 15 years, respectively. The Company recorded acquired indefinite-lived intangible assets of \$5.6 million related to trade names and trademarks. Goodwill is

Table of Contents

calculated as the excess of the purchase price over the fair values of the assets acquired and the liabilities assumed in the acquisition and is a result of anticipated synergies. Goodwill is not deductible for tax purposes.

The following unaudited pro forma information represents the consolidated results of the Company as if the Nubiola acquisition occurred as of January 1, 2015:

	Three months ended September 30, 2015 (unaudited) (In thousan per share an	ds, except
Net sales	\$ 279,365	\$ 902,092
Net income attributable to Ferro Corporation common shareholders	\$ 17,731	\$ 48,658
Net earnings per share attributable to Ferro Corporation common shareholders - Basic	\$ 0.20	\$ 0.55
Net earnings per share attributable to Ferro Corporation common shareholders - Diluted	\$ 0.20	\$ 0.55

The unaudited pro forma information has been adjusted with the respect to certain aspects of the acquisition to reflect the following:

- · Additional depreciation and amortization expenses that would have been recognized assuming fair value adjustments to the existing Nubiola assets acquired, including intangible assets and fixed assets.
- Elimination of revenue and cost of goods sold for sales from Nubiola to the Company, which would be eliminated as intercompany transactions for Nubiola and the Company on a consolidated basis.
- · Increased interest expense due to additional borrowings to fund the acquisition.
- · Acquisition-related costs, which were included in the Company's results.
- · Adjustments for the income tax effect of the pro forma adjustments related to the acquisition.

Thermark

In February 2015, the Company acquired TherMark Holdings, Inc., a leader in laser marking technology, for a cash purchase price of \$5.5 million. The Company recorded \$4.6 million of amortizable intangible assets, \$2.5 million of goodwill, \$1.7 million of a deferred tax liability related to the amortizable intangible assets, and \$0.1 million of net working capital on the condensed consolidated balance sheet.

5. Inventories

	September	December		
	30,	31,		
	2016	2015		
	(Dollars in	thousands)		
Raw materials	\$ 63,754	\$ 56,291		
Work in process	35,895	33,099		
Finished goods	111,612	95,464		
Total inventories	\$ 211,261	\$ 184,854		

Table of Contents

In the production of some of our products, we use precious metals, some of which we obtain from financial institutions under consignment agreements with terms of one year or less. The financial institutions retain ownership of the precious metals and charge us fees based on the amounts we consign. These fees were \$0.2 million for the three months ended September 30, 2016 and 2015, and were \$0.6 million for the nine months ended September 30, 2016 and 2015. We had on-hand precious metals owned by participants in our precious metals consignment program of \$26.8 million at September 30, 2016, and \$20.5 million at December 31, 2015, measured at fair value based on market prices for identical assets and net of credits.

6. Property, Plant and Equipment

Property, plant and equipment is reported net of accumulated depreciation of \$447.0 million at September 30, 2016, and \$421.3 million at December 31, 2015. Unpaid capital expenditure liabilities, which are non-cash investing activities, were \$2.4 million at September 30, 2016, and \$3.4 million at September 30, 2015.

As discussed in Note 3 - Discontinued Operations, our Europe-based Polymer Additives assets have been classified as held-for-sale under ASC Topic 360, Property, Plant and Equipment until the ultimate sale of the business in August 2016. As such, at each historical reporting date, these assets were tested for impairment comparing the fair value of the assets less costs to sell to the carrying value. The fair value was determined using both the market approach and income approach, utilizing Level 3 measurements within the fair value hierarchy, which indicated the fair value less costs to sell was less than the carrying value during the first quarter of 2016, resulting in an impairment charge of \$24.1 million, representing the remaining carrying value of long-lived assets at that reporting date. During the third quarter of 2016, prior to the sale, an impairment charge of \$26.8 million, representing net working capital, was recorded under ASC Topic 360 Property, Plant and Equipment. The impairment charges of \$26.8 million and \$50.9 million are included in Loss from discontinued operations, net of income taxes in our condensed consolidated statements of operations for the three and nine months ended September 30, 2016, respectively.

During the third quarter of 2015, we recorded an impairment charge of \$11.8 million, which represented additional capital expenditures related to the construction of the facility. The impairment charge of \$11.8 million is included in Loss from discontinued operations, net of income taxes in our condensed consolidated statements of operations for the three and nine months ended September 30, 2015.

The following table presents information about the Company's impairment charges on assets that were measured on a fair value basis for the nine months ended September 30, 2016, and for the year ended December 31, 2015. The table also indicates the level within the fair value hierarchy of the valuation techniques used by the Company to determine the fair value:

	Fair Value Measurements Using			Total	
	Level Le	vel	_		
Description	1 2	Level 3	Total	(Losses)	
	(Dollars	in thousands)			
September 30, 2016					
Assets held for sale	\$ —\$	— \$ —	\$ —	\$ (50,902)	
December 31, 2015					
Assets held for sale	\$ \$	 \$ 33,711	\$ 33,711	\$ (11,792)	

The inputs to the valuation techniques used to measure fair value are classified into the following 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.

7. Goodwill and Other Intangible Assets

Details and activity in the Company's goodwill by segment follow:

		Pigments, Powders	Pe	rformance	
	Performan	cend	Co	olors and	
	Coatings	Oxides	Gl	ass	Total
	(Dollars in	thousands)			
Goodwill, net at December 31, 2015	\$ 43,484	\$ 48,794	\$	53,391	\$ 145,669
Acquisitions	_	(9,825) (3), (4))	8,286	(1), (2) (1,539)
Foreign currency adjustments	(1,010)	156		(396)	(1,250)
Goodwill, net at September 30, 2016	\$ 42,474	\$ 39.125	\$	61.281	\$ 142,880

- (1) During the first quarter of 2016, the Company recorded goodwill related to the Ferer acquisition. Refer to Note 4 for additional details.
- (2) During the second quarter of 2016, the Company recorded goodwill related to the Pinturas acquisition. Refer to Note 4 for additional details.
- (3) During the second quarter of 2016, the Company recorded a purchase price adjustment within the measurement period for goodwill related to the Nubiola acquisition. Refer to Note 4 for additional details.
- (4) During the third quarter of 2016, the Company recorded goodwill related to the Delta Performance Products acquisition. Refer to Note 4 for additional details.

	September	December		
	30,	31,		
	2016	2015		
	(Dollars in thousands)			
Goodwill, gross	\$ 188,149	\$ 190,938		
Accumulated impairment losses	(45,269)	(45,269)		
Goodwill, net	\$ 142,880	\$ 145,669		

Goodwill is calculated as the excess of the purchase price over the estimated fair values of the assets acquired and the liabilities assumed in the acquisition.

Goodwill is tested for impairment at the reporting unit level on an annual basis in the fourth quarter and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value.

Amortizable intangible assets consisted of the following:

	September 30, 2016 (Dollars in	31, 2015
Gross amortizable intangible assets:		
Patents	\$ 5,251	\$ 5,229
Land rights	4,865	4,947
Technology/know-how and other	83,213	66,558
Customer relationships	55,044	46,320
Total gross amortizable intangible assets	148,373	123,054
Accumulated amortization:		
Patents	(5,040)	(4,880)
Land rights	(2,719)	(2,671)
Technology/know-how and other	(33,911)	(16,473)
Customer relationships	(4,269)	(2,234)
Total accumulated amortization	(45,939)	(26,258)
Amortizable intangible assets, net	\$ 102,434	\$ 96,796

Indefinite-lived intangible assets consisted of the following:

SeptemberDecember

30, 31,

2016 2015 (Dollars in

thousands)

Indefinite-lived intangibles assets:

Trade names and trademarks \$ 9,587 \$ 9,837

8. Debt

Loans payable and current portion of long-term debt consisted of the following:

	September December	
	30,	31,
	2016	2015
	(Dollars in	1
	thousands)	
Loans payable	\$ 6,033	\$ 2,749
Current portion of long-term debt	4,188	4,697
Loans payable and current portion of long-term debt	\$ 10,221	\$ 7,446

Long-term debt consisted of the following:

September	December	
30,	31,	
2016	2015	
(Dollars in thousands)		
\$ 240,078	\$ 291,717	
233,210	170,000	
3,839	4,478	
4,161	4,610	
481,288	470,805	
(4,188)	(4,697)	
\$ 477,100	\$ 466,108	
	2016 (Dollars in 1) \$ 240,078 233,210 3,839 4,161 481,288 (4,188)	

Table of Contents

Credit Facility

On July 31, 2014, the Company entered into a credit facility (the "Credit Facility") with a group of lenders to refinance the majority of its then outstanding debt. The Credit Facility consisted of a \$200 million secured revolving line of credit with a term of five years and a \$300 million secured term loan facility with a term of seven years. On January 25, 2016, the Company amended the Credit Facility by entering into the Incremental Assumption Agreement (the "Incremental Agreement") to increase the revolving line of credit commitment amount from \$200 million to \$300 million. The Company then used a portion of the increase in the revolving line of credit to repay \$50 million of the term loan facility. The Credit Facility was amended and a portion of the outstanding term loan was repaid to increase the amount of total liquidity available under the Credit Facility and reduce the total cost of borrowings. On August 29, 2016, the Company amended the Credit Facility by entering into the Second Incremental Assumption Agreement (the "Second Incremental Agreement") to increase the revolving line of credit commitment amount to \$400 million. The increase in the revolving line of credit commitment will be used for general corporate purposes, including acquisitions.

Principal payments on the term loan facility of \$0.75 million quarterly, are payable commencing December 31, 2014, with the remaining balance due on the maturity date. At September 30, 2016, after taking into account all prior quarterly payments and the \$50 million prepayment that was made in January 2016, the Company had borrowed \$244.0 million under the term loan facility at an annual rate of 4.0%. There are no additional borrowings available under the term loan facility.

Certain of the Company's U.S. subsidiaries have guaranteed the Company's obligations under the Credit Facility and such obligations are secured by (a) substantially all of the personal property of the Company and the U.S. subsidiary guarantors and (b) a pledge of 100% of the stock of most of the Company's U.S. subsidiaries and 65% of most of the stock of the Company's first tier foreign subsidiaries.

Interest Rate – Term Loan: The interest rates applicable to the term loans will be, at the Company's option, equal to either a base rate or a London Interbank Offered Rate ("LIBOR") rate plus, in both cases, an applicable margin.

- The base rate will be the highest of (i) the federal funds rate plus 0.50%, (ii) syndication agent's prime rate or (iii) the daily LIBOR rate plus 1.00%.
- The applicable margin for base rate loans is 2.25%.
- The LIBOR rate will be set as quoted by Bloomberg and shall not be less than 0.75%.
- The applicable margin for LIBOR rate loans is 3.25%.
- · For LIBOR rate loans, the Company may choose to set the duration on individual borrowings for periods of one, two, three or six months, with the interest rate based on the applicable LIBOR rate for the corresponding duration.

Interest Rate – Revolving Credit Line: The interest rates applicable to loans under the revolving credit line will be, at the Company's option, equal to either a base rate or a LIBOR rate plus an applicable variable margin. The variable margin will be based on the ratio of (a) the Company's total consolidated debt outstanding at such time to (b) the Company's consolidated EBITDA computed for the period of four consecutive fiscal quarters most recently ended.

- The base rate will be the highest of (i) the federal funds rate plus 0.50%, (ii) syndication agent's prime rate or (iii) the daily LIBOR rate plus 1.00%.
- The applicable margin for base rate loans will vary between 1.50% and 2.00%.
- · The LIBOR rate will be set as quoted by Bloomberg for U.S. Dollars.
- · The applicable margin for LIBOR Rate Loans will vary between 2.50% and 3.00%.

.

For LIBOR rate loans, the Company may choose to set the duration on individual borrowings for periods of one, two, three or six months, with the interest rate based on the applicable LIBOR rate for the corresponding duration.

At September 30, 2016, the Company had borrowed \$233.2 million under the revolving credit facilities at an annual weighted average interest rate of 3.5%. The borrowing on the revolving credit facilities was used to fund the acquisitions, the share repurchase programs, and for other general business purposes. After reductions for outstanding letters of credit secured by these facilities, we had \$162.4 million of additional borrowings available under the revolving credit facilities at September 30, 2016.

Table of Contents

The Credit Facility contains customary restrictive covenants including, but not limited to, limitations on use of loan proceeds, limitations on the Company's ability to pay dividends and repurchase stock, limitations on acquisitions and dispositions and limitations on certain types of investments. The Credit Facility also contains standard provisions relating to conditions of borrowing and customary events of default, including the non-payment of obligations by the Company and the bankruptcy of the Company.

Specific to the revolving credit facility, the Company is subject to financial covenants regarding the Company's outstanding net indebtedness and interest coverage ratios.

If an event of default occurs, all amounts outstanding under the Credit Facility may be accelerated and become immediately due and payable. At September 30, 2016, we were in compliance with the covenants of the Credit Facility.

Other Financing Arrangements

We maintain other lines of credit to provide global flexibility for our short-term liquidity requirements. These facilities are uncommitted lines for our international operations and totaled \$32.9 million and \$8.0 million at September 30, 2016 and December 31, 2015, respectively. The unused portions of these lines provided additional liquidity of \$28.8 million at September 30, 2016, and \$7.3 million at December 31, 2015.

9. Financial Instruments

The following financial instrument assets (liabilities) are presented at their respective carrying amount, fair value and classification within the fair value hierarchy:

	September 30, 2016				
	Carrying	Fair Value			
					Level
	Amount	Total	Level 1	Level 2	3
	(Dollars in th	nousands)			
Cash and cash equivalents	\$ 40,556	\$ 40,556	\$ 40,556	\$ —	\$ —
Loans payable	(6,033)	(6,033)	_	(6,033)	
Term loan facility(1)	(240,078)	(249,255)	_	(249,255)	
Revolving credit facility	(233,210)	(235,825)	_	(235,825)	
Other long-term notes payable	(4,161)	(3,571)	_	(3,571)	
Foreign currency forward contracts, net	468	468		468	

	December 31	1, 2015			
	Carrying	Fair Value			
					Level
	Amount	Total	Level 1	Level 2	3
	(Dollars in th	nousands)			
Cash and cash equivalents	\$ 58,380	\$ 58,380	\$ 58,380	\$ —	\$ —
Loans payable	(2,749)	(2,749)		(2,749)	_
Term loan facility(1)	(291,717)	(297,552)	_	(297,552)	
Revolving credit facility	(170,000)	(169,019)	_	(169,019)	
Other long-term notes payable	(4,610)	(3,956)		(3,956)	_
Foreign currency forward contracts, net	(1,207)	(1,207)		(1,207)	

(1) The carrying value of the term loan facility is net of unamortized debt issuance costs.

The fair values of cash and cash equivalents are based on the fair values of identical assets. The fair values of loans payable are based on the present value of expected future cash flows and approximate their carrying amounts due to the short periods to maturity. The fair values of the term loan facility, the revolving credit facility and other long-term notes payable are based on the present value of expected future cash flows and interest rates that would be currently available to the Company for issuance of similar types of debt instruments with similar terms and remaining maturities adjusted for the Company's non-performance risk.

Table of Contents

Foreign currency forward contracts. We manage foreign currency risks principally by entering into forward contracts to mitigate the impact of currency fluctuations on transactions. These forward contracts are not formally designated as hedges. Gains and losses on these foreign currency forward contracts are netted with gains and losses from currency fluctuations on transactions arising from international trade and reported as Foreign currency losses, net in the condensed consolidated statements of operations. We recognized net foreign currency losses of \$0.9 million and \$2.9 million in the three and nine months ended September 30, 2016, respectively, and net foreign currency losses of \$1.2 million and \$5.8 million in the three and nine months ended September 30, 2015, respectively, which is primarily comprised of the foreign exchange impact on transactions in countries where it is not economically feasible for us to enter into hedging arrangements and hedging inefficiencies, such as timing of transactions. The net foreign currency loss of \$5.8 million for the nine months ended September 30, 2015, includes a loss on a foreign currency contract related to the Euro denominated purchase of Nubiola of \$2.7 million. We recognized net losses of \$1.2 million and \$5.8 million in the three and nine months ended September 30, 2016, respectively, and net losses of \$2.3 million and \$1.0 million in the three and nine months ended September 30, 2015, respectively, arising from the change in fair value of our financial instruments, which offset the related net gains and losses on international trade transactions. The fair values of these contracts are based on market prices for comparable contracts. The notional amount of foreign currency forward contracts was \$243.3 million at September 30, 2016, and \$338.4 million at December 31, 2015.

The following table presents the effect on our condensed consolidated statements of operations for the three and nine months ended September 30, 2016 and 2015, respectively, of our foreign currency forward contracts:

Amount of (Loss)
Recognized in
Earnings
Three Months Ended
September 30,
2016 2015 Location of (Loss) in Earnings
(Dollars in thousands)

Foreign currency forward contracts

\$ (1,163) \$ (2,279) Foreign currency losses, net

Amount of (Loss) Recognized in Earnings

Nine Months Ended September 30,

2016 2015 Location of (Loss) in Earnings

(Dollars in thousands)

Foreign currency forward contracts \$ (5,848) \$ (951) Foreign currency losses, net

The following table presents the fair values on our condensed consolidated balance sheets of foreign currency forward contracts:

SeptemberDecember

30, 31,

2016 2015 Balance Sheet Location

(Dollars in thousands)

Asset derivatives:

Foreign currency forward contracts \$ 733 \$ 913 Other current assets

Liability derivatives:

Foreign currency forward contracts \$ (265) \$ (2,120) Accrued expenses and other current liabilities

10. Income Taxes

Income tax expense for the nine months ended September 30, 2016, was \$22.7 million, or 25.8% of pre-tax income, compared with \$11.9 million, or 22.6% of pre-tax income in the prior-year same period. The tax expense, as a percentage of pre-tax income, is lower than the U.S. federal statutory income tax rate of 35% primarily as a result of foreign statutory rate differences. Through the third quarter of 2015, tax expense was further lowered as a result of pre-tax losses in jurisdictions for which no tax benefit is recognized in proportion to the amount of pre-tax income in jurisdictions with no tax expense due to the utilization of fully valued tax

Table of Contents

attributes. Additionally, during the third quarter of 2015, the Company made a tax payment to a foreign tax jurisdiction for the ability to deduct specific intangible items in the future which resulted in the accounting for the net benefit in the period.

11. Contingent Liabilities

We have recorded environmental liabilities of \$7.6 million at September 30, 2016, and \$7.4 million at December 31, 2015, for costs associated with the remediation of certain of our properties that have been contaminated. The liability at September 30, 2016, and December 31, 2015, was primarily related to a non-operating facility in Brazil, and for retained environmental obligations related to a site in the United States that was part of the sale of our North American and Asian metal powders product lines in 2013. The costs include legal and consulting fees, site studies, the design and implementation of remediation plans, post-remediation monitoring and related activities. The ultimate liability could be affected by numerous uncertainties, including the extent of contamination found, the required period of monitoring and the ultimate cost of required remediation.

In the fourth quarter of 2013, the Supreme Court in Argentina ruled unfavorably related to certain export taxes associated with a divested operation. As a result of this ruling, we have recorded a liability of \$8.5 million and a \$7.8 million at September 30, 2016, and December 31, 2015, respectively.

There are various lawsuits and claims pending against the Company and its consolidated subsidiaries. We do not currently expect the resolution of these lawsuits and claims to materially affect the consolidated financial position, results of operations, or cash flows of the Company.

12. Retirement Benefits

Net periodic benefit (credit) cost of our U.S. pension plans (including our unfunded nonqualified plans), non-U.S. pension plans, and postretirement health care and life insurance benefit plans for the three months ended September 30, 2016 and 2015, respectively, follow:

			Non-U.S		Other I	Benefit
	U.S. Pensi	ion Plans	Pension	Plans	Plans	
	Three Months Ended September 30,					
	2016	2015	2016	2015	2016	2015
	(Dollars in	n thousands)			
Service cost	\$ 4	\$ 5	\$ 346	\$ 385	\$ —	\$ —
Interest cost	3,937	4,697	914	926	236	242
Expected return on plan assets	(4,935)	(7,291)	(493)	(683)		

Amortization of prior service cost	3	3	12	17		
Net periodic benefit (credit) cost	\$ (991)	\$ (2,586)	\$ 779	\$ 645	\$ 236	\$ 242

Net periodic benefit (credit) cost for the nine months ended September 30, 2016 and 2015, respectively, follow:

	U.S. Pension Plans Nine Months Ended Sep		Non-U.S. Plans otember 30,		Other Benefi Plans		
	2016	2015	2016	2015	2016	2015	
	(Dollars in thousands)						
Service cost	\$ 13	\$ 14	\$ 1,081	\$ 1,160	\$ —	\$ —	
Interest cost	11,812	14,092	2,808	2,764	708	727	
Expected return on plan assets	(14,805)	(21,874)	(1,538)	(2,032)		_	
Amortization of prior service cost	8	9	34	47		_	
Net periodic benefit (credit) cost	\$ (2,972)	\$ (7,759)	\$ 2,385	\$ 1,939	\$ 708	\$ 727	

Net periodic benefit credit for our U.S. pension plans for the nine months ended September 30, 2016 decreased from the prior year due to reduced plan assets as a result of executing our terminated-vested buyout program in the fourth quarter of 2015. Net periodic benefit cost for our non-U.S. pension plans and our postretirement health care and life insurance benefit plans did not change significantly compared with the prior-year same period.

In 2015, the Company initiated and executed on a buyout of terminated vested participants in our U.S defined benefit pension plan. In October 2015, the buyout was funded and reduced plan assets and liabilities by approximately \$71 million.

13. Stock-Based Compensation

On May 22, 2013, our shareholders approved the 2013 Omnibus Incentive Plan (the "Plan"), which was adopted by the Board of Directors on February 22, 2013, subject to shareholder approval. The Plan's purpose is to promote the Company's long-term financial interests and growth by attracting, retaining and motivating high quality key employees and directors, motivating such employees and directors to achieve the Company's short- and long-range performance goals and objectives and thereby align their interests with those of the Company's shareholders. The Plan reserves 4,400,000 shares of common stock to be issued for grants of several different types of long-term incentives including stock options, stock appreciation rights, restricted shares, performance shares, other common stock based awards, and dividend equivalent rights.

In the first nine months of 2016, our Board of Directors granted 0.3 million stock options, 0.3 million performance share units and 0.3 million deferred stock units under the Plan.

We estimate the fair value of each stock option on the date of grant using the Black-Scholes option pricing model. The following table details the weighted-average grant-date fair values and the assumptions used for estimating the fair values of stock option grants made during the nine months ended September 30, 2016:

Stock Options

Weighted-average grant-date fair value \$ 4.94

Expected life, in years 6.0

Risk-free interest rate 1.4% - 1.6 % Expected volatility 52.0% - 53.6 %

The weighted average grant date fair value of our performance share units granted in the nine months ended September 30, 2016, was \$10.02. We measure the fair value of performance share units based on the closing market price of our common stock on the date of the grant. These shares are evaluated each reporting period for likelihood of achieving the performance criteria.

We measure the fair value of deferred stock units based on the closing market price of our common stock on the date of the grant, which is when the awards immediately vest. The weighted-average grant date fair value per unit for grants made during the nine months ended September 30, 2016, was \$10.46.

We recognized stock-based compensation expense of \$5.3 million for the nine months ended September 30, 2016, and \$7.4 million for the nine months ended September 30, 2015. At September 30, 2016, unearned compensation cost related to the unvested portion of all stock-based compensation awards was approximately \$9.3 million and is expected to be recognized over the remaining vesting period of the respective grants, through the first quarter of 2019.

14. Restructuring and Cost Reduction Programs

In 2013, we initiated a Global Cost Reduction Program that was designed to address three key areas of the company - (1) business realignment, (2) operational efficiency and (3) corporate and back office functions. Business realignment was targeted at right-sizing our commercial management organizations globally. The operational efficiency component of the program was designed to improve the efficiency of our plant operations and supply chain. The corporate and back office initiative relates to work that we are doing with our strategic partners in the areas of finance and accounting, information technology outsourcing, and procurement. The cumulative charges incurred to date associated with this Program are \$51.3 million. Total costs related to the Program expected to be incurred, as of September 30, 2016, are approximately \$51.3 million. Total restructuring charges were approximately \$0.0 million and \$1.7 million for the three and nine months ended September 30, 2016, respectively, and \$3.8 million and \$5.3 million for the three and nine months ended September 30, 2015, respectively.

The activities and accruals related to our restructuring and cost reduction programs are summarized below:

	Employee Severance	Total			
	(Dollars in thousands)				
Balances at December 31, 2015	\$ 693	\$ 2,077	\$ 2,770		
Restructuring charges	1,161	533	1,694		
Cash payments	(1,164)	(1,041)	(2,205)		
Non-cash items	27	54	81		
Balances at September 30, 2016	\$ 717	\$ 1,623	\$ 2,340		

We expect to make cash payments to settle the remaining liability for employee termination benefits and other costs over the next twelve months, except where legal or contractual restrictions prevent us from doing so.

15. Earnings Per Share

Details of the calculation of basic and diluted earnings per share are shown below:

	Three Months Ended September 30, 2016 2015		Nine Mon September 2016	
	(Dollars in	thousands,	except per	share
	amounts)			
Basic earnings per share computation:				
Net (loss) income attributable to Ferro Corporation common				
shareholders	\$ (8,884)	\$ (4,059)	\$ 119	\$ 13,510
Adjustment for loss from discontinued operations	29,222	19,086	64,464	28,688
Total	\$ 20,338	\$ 15,027	\$ 64,583	\$ 42,198
Weighted-average common shares outstanding	83,268	87,130	83,263	87,169
Basic earnings per share from continuing operations attributable to				
Ferro Corporation common shareholders	\$ 0.24	\$ 0.17	\$ 0.78	\$ 0.48
Diluted earnings per share computation:				
Net (loss) income attributable to Ferro Corporation common				
shareholders	\$ (8,884)	\$ (4,059)	\$ 119	\$ 13,510
Adjustment for loss from discontinued operations	29,222	19,086	64,464	28,688
Total	\$ 20,338	\$ 15,027	\$ 64,583	\$ 42,198
Weighted-average common shares outstanding	83,268	87,130	83,263	87,169
Assumed exercise of stock options	544	433	499	443
Assumed exercise of deferred stock unit conditions	80	126	_	101
Assumed satisfaction of restricted stock unit conditions	473	327	419	305
Assumed satisfaction of performance stock unit conditions	111	384	58	395
Weighted-average diluted shares outstanding	84,476	88,400	84,239	88,413
Diluted earnings per share from continuing operations attributable to	•	•	•	•
Ferro Corporation common shareholders	\$ 0.24	\$ 0.17	\$ 0.77	\$ 0.48

The number of anti-dilutive or unearned shares was 2.3 million and 2.5 million for the three and nine months ended September 30, 2016, respectively, and 2.3 million for the three and nine months ended September 30, 2015. These shares were excluded from the calculation of diluted earnings per share due to their anti-dilutive impact.

16. Share Repurchase Program

On July 25, 2016, the Company's Board of Directors approved a new share repurchase program, under which the Company is authorized to repurchase up to an additional \$25 million of the Company's outstanding shares of Common Stock on the open market, including through a Rule 10b5-1 plan, or in privately negotiated transactions. This new program is in addition to the \$75 million of authorization previously approved and announced.

The timing and amount of shares to be repurchased will be determined by the Company, based on evaluation of market and business conditions, share price, and other factors. The share repurchase programs do not obligate the Company to repurchase any dollar amount or number of common shares, and may be suspended or discontinued at any time.

For the nine months ended September 30, 2016, the Company repurchased 1,175,437 shares of common stock at an average price of \$9.72 per share for a total cost of \$11.4 million. Under the share repurchase programs, the Company has repurchased an aggregate of 4,458,345 shares of common stock, at an average price of \$11.21 per share, for a total cost of \$50.0 million. As of September 30, 2016, \$50.0 million may still be purchased under the programs.

Table of Contents

17. Accumulated Other Comprehensive Income (Loss)

Changes in accumulated other comprehensive income (loss) by component, net of tax, were as follows:

	Three Months Ended September 30,					
	Postretire	ement				
	Benefit					
	Liability	Translation	Other			
	Adjustm	en A sdjustments	Adjustments	Total		
	(Dollars	in thousands)	-			
Balances at June 30, 2015	\$ 886	\$ (49,873)	\$ (70)	\$ (49,057)		
Other comprehensive income (loss) before reclassifications	_	(5,179)		(5,179)		
Reclassification to earnings:						
Postretirement benefit liabilities (loss)	(4)			(4)		
Foreign currency translation adjustment	_	_				
Net current period other comprehensive (loss) income	(4)	(5,179)		(5,183)		
Balances at September 30, 2015	\$ 882	\$ (55,052)	\$ (70)	\$ (54,240)		
Balances at June 30, 2016	1,106	(66,886)	(70)	(65,850)		
Other comprehensive income (loss) before reclassifications	_	1,584		1,584		
Reclassification to earnings:						
Postretirement benefit liabilities (loss)	(2)			(2)		
Foreign currency translation adjustment(1)	_	1,115		1,115		
Net current period other comprehensive income (loss)	(2)	2,699		2,697		
Balances at September 30, 2016	\$ 1,104	\$ (64,187)	\$ (70)	\$ (63,153)		

	Nine Months Ended September 30, Postretirement Benefit				
		Translation	Ot	her	
	Adjustments		Ad	ljustments	Total
	(Dollars	in thousands)			
Balances at December 31, 2014	\$ 888	\$ (22,623)	\$	(70)	\$ (21,805)
Other comprehensive income (loss) before reclassifications	_	(32,429)		_	(32,429)
Reclassification to earnings:					
Postretirement benefit liabilities (loss)	(6)			_	(6)
Foreign currency translation adjustment					

Net current period other comprehensive (loss) income Balances at September 30, 2015	(6) 882	(32,429) (55,052)	(70)	(32,435) (54,240)
Balances at December 31, 2015	811	(62,059)	(70)	(61,318)
Other comprehensive income (loss) before reclassifications		(3,243)	_	(3,243)
Reclassification to earnings:				
Postretirement benefit liabilities gain	293	_	_	293
Foreign currency translation adjustment(1)		1,115	_	1,115
Net current period other comprehensive income (loss)	293	(2,128)	_	(1,835)
Balances at September 30, 2016	\$ 1,104	\$ (64,187)	\$ (70)	\$ (63,153)

⁽¹⁾ Includes a release of accumulated foreign currency translation of \$1.1 million related to the Company's sale of the Europe-based Polymer Additives business (Note 3), which is included in Loss from discontinued operations, net of income taxes in our condensed consolidated statements of operations for the three and nine months ended September 30, 2016.

18. Reporting for Segments

Net sales to external customers by segment are presented in the table below. Sales between segments were not material.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(Dollars in	thousands)		
Performance Coatings	\$ 130,453	\$ 128,745	\$ 399,166	\$ 404,991
Performance Colors and Glass	92,793	92,168	276,896	290,361
Pigments, Powders and Oxides	65,281	58,452	187,893	114,999
Total net sales	\$ 288,527	\$ 279,365	\$ 863,955	\$ 810,351

Each segment's gross profit and reconciliations to income before income taxes are presented in the table below:

	Three Months Ended		Nine Montl	ns Ended
	September	r 30,	September	30,
	2016	2015	2016	2015
	(Dollars in	thousands))	
Performance Coatings	\$ 33,636	\$ 32,107	\$ 104,985	\$ 96,126
Performance Colors and Glass	32,282	31,662	100,825	99,540
Pigments, Powders and Oxides	23,178	13,179	65,868	30,325
Other cost of sales	(115)	80	(95)	(688)
Total gross profit	88,981	77,028	271,583	225,303
Selling, general and administrative expenses	55,588	48,417	166,105	150,568
Restructuring and impairment charges	26	3,844	1,694	5,469
Other expense, net	6,662	5,450	15,953	16,409
Income before income taxes	\$ 26,705	\$ 19,317	\$ 87,831	\$ 52,857

Subsequent Events

On October 31, 2016, the Company acquired 100% of the membership interests of Electro-Science Laboratories ("ESL"), a leader in electronic packaging materials for \$75 million, excluding customary adjustments and fees. ESL is headquartered in King of Prussia, Pennsylvania. The acquisition of ESL enhances the Company's position in the electronic packaging materials space with complementary products, and offers a platform for growth in Ferro's Performance Colors and Glass segment. ESL produces thick-film pastes and ceramic tape systems that enable important functionality in a wide variety of industrial and consumer applications.

The operating results related to the ESL acquisition will be included in the Company's condensed consolidated financial statements commencing October 31, 2016, the date of the acquisition.

Due to the timing of the acquisition, the Company's initial purchase price accounting was incomplete at the time these financial statements were issued. As such, the Company cannot disclose the allocation of the acquisition price to acquired assets and liabilities and the related disclosures at this time.

Table of Contents

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

Net sales for the three months ended September 30, 2016, increased by \$9.2 million, or 3.3%, compared with the prior-year same period. The increase in net sales was primarily driven by the sales from Al Salomi, which was acquired in the fourth quarter of 2015, the increase in sales in surface technology products, and the sales from Pinturas, which was acquired in the second quarter of 2016, of \$6.2 million, \$2.5 million and \$2.0 million, respectively. This increase was partially offset by \$1.8 million due to the sale of our interest in an operating affiliate in Venezuela ("Venezuela") in the fourth quarter of 2015. During the three months ended September 30, 2016, gross profit increased \$12.0 million, or 15.5%, compared with the prior-year same period; and, as a percentage of net sales, it increased approximately 320 basis points to 30.8%. The increase in gross profit was attributable to an increase in Pigments, Powders and Oxides, Performance Coatings, and Performance Colors and Glass of \$10.0 million, \$1.5 million and \$0.6 million, respectively.

For the three months ended September 30, 2016, selling, general and administrative ("SG&A") expenses increased \$7.2 million, or 14.8%, compared with the prior-year same period. The increase was primarily driven by higher expenses in stock-based compensation of \$2.0 million and incentive compensation of \$1.2 million as a result of the Company's performance relative to targets for certain awards compared with the prior-year same period and an increase in pension and other postretirement benefits of \$1.6 million which is a result of the effect of a lower expected return on plan assets in the current year as a result of executing our terminated-vested buyout program in the fourth quarter of 2015.

For the three months ended September 30, 2016, net loss was \$8.7 million, compared with net loss of \$3.6 million for the prior-year same period, and net loss attributable to common shareholders was \$8.9 million, compared with net loss attributable to common shareholders of \$4.1 million for the prior-year same period. Income from continuing operations was \$20.5 million for the three months ended September 30, 2016, compared with income from continuing operations of \$15.5 million for the three months ended September 30, 2015. Our total gross profit for the third quarter of 2016 was \$89.0 million, compared with \$77.0 million for the three months ended September 30, 2015.

2016 Transactional Activity

Disposition of the Europe-based Polymer Additives business

As discussed in Note 3, in the third quarter of 2016, the Company completed the disposition of the Europe-based Polymer Additives business to Plahoma Two AG, an affiliate of the LIVIA Group.

Business Acquisitions

Acquisition of Delta Performance Products: As discussed in Note 4, in the third quarter of 2016, the Company acquired certain assets of Delta Performance Products, LLC, for a cash purchase price of \$4.4 million.

Acquisition of Pinturas: As discussed in Note 4, in the second quarter of 2016, the Company acquired 100% of the equity of privately held Pinturas Benicarló, S.L. ("Pinturas") for €16.5 million in cash (approximately \$18.4 million).

Acquisition of Ferer: As discussed in Note 4, in the first quarter of 2016, the Company completed the purchase of 100% of the equity of privately held Istanbul-based Ferer Dis Ticaret Ve Kimyasallar Anonim Sirketi A.S. ("Ferer") on

a cash-free and debt-free basis for approximately \$9.4 million in cash.

Outlook

The Company delivered strong performance in the third quarter of 2016. Sales increased 3.3% primarily due to acquisitions acquired within the last year. In addition, gross profit, as a percentage of net sales, increased to 30.8% from 27.6%. Partially offsetting the higher gross profit were increased SG&A costs, primarily driven by an increase in stock-based compensation expense, incentive compensation expense and a reduction in pension and postretirement benefits income. Our effective tax rate for the third quarter of 2016 was 25.8%, compared with 22.6% in the third quarter of 2015. We continue to expect the full year 2016 tax rate to be in the range of 27% - 28%.

Table of Contents

For the remainder of 2016, we anticipate benefitting from strategic actions taken to improve growth in our core businesses and will continue to benefit from recent acquisitions. We expect Pigments, Powders and Oxides to provide growth through the remainder of 2016. The net impact is expected to result in increased sales growth over the remainder of the year, before consideration of foreign currency impacts.

We remain focused on the integration of our recent acquisitions and continue to work toward achieving the identified synergies. We will continue to focus on opportunities to optimize our cost structure and make our business processes and systems more efficient, and to leverage tax planning opportunities. We continue to expect cash flow from operating activities to be positive for the year, providing additional liquidity.

Factors that could adversely affect our future performance include those described under the heading "Risk Factors" in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2015.

Table of Contents

Results of Operations - Consolidated

Comparison of the three months ended September 30, 2016 and 2015

For the three months ended September 30, 2016, income from continuing operations was \$20.5 million, compared with \$15.5 million income from continuing operations for the three months ended September 30, 2015. Net loss was \$8.7 million, compared with net loss of \$3.6 million for the three months ended September 30, 2015. For the three months ended September 30, 2016, net loss attributable to common shareholders was \$8.9 million, or loss per share of \$0.11, compared with net loss attributable to common shareholders of \$4.1 million, or loss per share of \$0.05, for the three months ended September 30, 2015.

Net Sales

Three Months Ended September 30,

				%
	2016	2015	\$ Change	Change
	(Dollars in	thousands)		
Net sales	288,527	279,365	9,162	3.3 %
Cost of sales	199,546	202,337	(2,791)	(1.4)%
Gross profit	\$ 88,981	\$ 77,028	\$ 11,953	15.5 %
Gross profit as a % of net sales	30.8	% 27.6 %		

Net sales increased by \$9.2 million, or 3.3%, in the three months ended September 30, 2016, compared with the prior-year same period, driven by higher sales in Pigments, Powders and Oxides, Performance Coatings and Performance Colors and Glass of \$6.8 million, \$1.7 million and \$0.6 million, respectively. The increase in net sales was primarily driven by the sales in Pigments, Powders and Oxides from all product lines of \$6.8 million and the sales from Al Salomi of \$6.2 million, which was acquired in the fourth quarter of 2015, partially offset by \$1.8 million due to the sale of our interest in an operating affiliate in Venezuela in the fourth quarter of 2015.

Gross Profit

Gross profit increased \$12.0 million, or 15.5%, in the three months ended September 30, 2016, compared to the prior-year same period, and as a percentage of net sales, it increased 320 basis points to 30.8%. The increase in gross profit was attributable to an increase in Pigments, Powders and Oxides, Performance Coatings, and Performance Colors and Glass of \$10.0 million, \$1.5 million and \$0.6 million, respectively. The increase in gross profit was

primarily due to higher sales volumes and mix of \$7.7 million, lower raw material costs of \$6.1 million and lower manufacturing costs of \$3.8 million, partially offset by unfavorable product pricing of \$3.8 million and unfavorable foreign currency impacts of \$1.6 million.

Geographic Revenues

The following table presents our sales on the basis of where sales originated.

	Three Months Ended September 30,			
	•			%
	2016	2015	\$ Change	Change
	(Dollars in	thousands)		
Geographic Revenues on a sales origination basis				
Europe	\$ 124,801	\$ 120,840	\$ 3,961	3.3 %
United States	77,211	73,961	3,250	4.4 %
Asia Pacific	46,646	41,963	4,683	11.2 %
Latin America	39,869	42,601	(2,732)	(6.4) %
Net sales	\$ 288,527	\$ 279,365	\$ 9,162	3.3 %

The increase in net sales of \$9.2 million, compared with the prior-year same period, was driven by an increase in sales in Asia Pacific, Europe and the United States, partially offset by a sales decrease in Latin America. The increase in sales in Asia Pacific was attributable to increased sales across all segments. The increase in sales in Europe was primarily attributable to sales from acquisitions

Table of Contents

acquired within the last year of \$9.6 million, partially offset by a decrease in sales in Performance Coatings excluding sales from Al Salomi. The increase in sales in the United States was attributable to higher sales in Pigments, Powders and Oxides of \$5.4 million, partially offset by lower sales in Performance Colors and Glass of \$2.5 million. The decrease in sales in Latin America was primarily attributable to the sale of our interest in an operating affiliate in Venezuela in the fourth quarter of 2015.

The following table presents our sales on the basis of where sold products were shipped.

	Three Mont September			
				%
	2016	2015	\$ Change	Change
	(Dollars in	thousands)		
Geographic Revenues on a shipped-to basis				
Europe	\$ 122,986	\$ 118,209	\$ 4,777	4.0 %
United States	60,172	56,891	3,281	5.8 %
Asia Pacific	62,812	57,509	5,303	9.2 %
Latin America	42,557	46,756	(4,199)	(9.0) %
Net sales	\$ 288,527	\$ 279,365	\$ 9,162	3.3 %

Selling, General and Administrative Expenses

The following table includes significant components of SG&A and their respective changes between 2016 and 2015:

	Three Months Ended September 30,				
	-		\$		
	2016	2015	Change	% Cha	nge
	(Dollars in	n thousands)		
Personnel expenses	\$ 29,634	\$ 27,099	\$ 2,535	9.4	%
Incentive compensation	2,153	940	1,213	129.0	%

Edgar Filing: FERRO CORP - Form 10-Q

Stock-based compensation	1,442	(529)	1,971	(372.6)	%
Pension and other postretirement benefits	(109)	(1,699)	1,590	(93.6)	%
Bad debt	797	64	733	1,145.3	3 %
Business development	3,660	4,175	(515)	(12.3)	%
All other expenses	18,011	18,367	(356)	(1.9)	%
Selling, general and administrative expenses	\$ 55.588	\$ 48,417	\$ 7.171	14.8	%

SG&A expenses were \$7.2 million higher in the three months ended September 30, 2016, compared with the prior-year same period. Included in SG&A expenses were \$1.1 million of expenses related to acquisitions acquired within the last year. The increase in stock-based compensation expense of \$2.0 million and incentive compensation expense of \$1.2 million is a result of the Company's performance relative to targets for certain awards compared with the prior-year same period. The increase in pension and other postretirement benefits of \$1.6 million is a result of the effect of a lower expected return on plan assets in the current year as a result of executing our terminated-vested buyout program in the fourth quarter of 2015.

The following table presents SG&A expenses attributable to sales, research and development and operations costs as strategic services and other SG&A costs as functional services.

Three Months Ended September 30,

			\$	
	2016	2015	Change	% Change
	(Dollars in thousands)			
Strategic services	\$ 29,385	\$ 27,319	\$ 2,066	7.6 %
Functional services	22,608	20,687	1,921	9.3 %
Incentive compensation	2,153	940	1,213	129.0 %
Stock-based compensation	1,442	(529)	1,971	(372.6)%
Selling, general and administrative expenses	\$ 55,588	\$ 48,417	\$ 7,171	14.8 %

SG&A expenses were \$7.2 million higher in the three months ended September 30, 2016, compared with the prior-year same period. The increase in SG&A expenses was driven by higher expenses in strategic services from acquisitions acquired within the last year of \$0.9 million and the increase in bad debt expense of \$0.7 million for the three months ended September 30, 2016, compared with the prior-year same period. In addition, the functional services expense increase was driven by an increase in expense from acquisitions acquired within the last year of \$0.2 million and the increase in pension and other postretirement benefits of \$1.6 million for the three months ended September 30, 2016, compared with the prior-year same period.

Restructuring and Impairment Charges

Ended September 30, % 2016 2015 \$ Change Change (Dollars in thousands) \$ 20 \$ 669 \$ (649) Employee severance (97.0)%Other restructuring costs 6 3.175 (3,169) (99.8)% Restructuring and impairment charges \$ 26 \$ 3,844 \$ (3,818) (99.3)%

Three Months

Restructuring and impairment charges decreased in the third quarter of 2016 compared with the prior-year same period. The decrease was primarily due to early termination costs of a contract associated with restructuring a corporate function of \$2.8 million during the third quarter of 2015 and lower costs associated with employee severance for the three months ended September 30, 2016 compared with the prior-year same period.

Interest Expense

	Three M	onths		
	Ended			
	Septemb	er 30,		
	_		\$	%
	2016	2015	Change	Change
	(Dollars	in thousan	ds)	
Interest expense	\$ 4,967	\$ 4,079	\$ 888	21.8 %
Amortization of bank fees	347	289	58	20.1 %
Interest capitalization	(10)	(491)	481	(98.0)%
Interest expense	\$ 5,304	\$ 3,877	\$ 1,427	36.8 %

Interest expense increased the third quarter of 2016 compared with the prior-year same period. The increase in interest expense was due to an increase in the average long-term debt balance during the three months ended September 30, 2016, compared with the prior-year same period, as well as less interest capitalization associated with long-term capital projects.

Income Tax Expense

During the third quarter of 2016, income tax expense was \$6.2 million, or 23.1% of pre-tax income. In the third quarter of 2015, we recorded tax expense of \$3.8 million, or 19.6% of pre-tax income. The tax expense in the third quarter of 2016 and 2015, as a percentage of pre-tax income, is lower than the U.S. federal statutory income tax rate of 35% primarily as a result of foreign statutory rate differences. The third quarter 2015 tax expense was further lowered as a result of pre-tax losses in jurisdictions for which no tax benefit was recognized in proportion to the amount of pre-tax income in jurisdictions with no tax expense due to the utilization of fully

Table of Contents

valued tax attributes. Additionally, during the third quarter of 2015, the Company made a tax payment to a foreign tax jurisdiction for the ability to deduct specific intangible items in the future which resulted in a net benefit in the period.

Results of Operations - Segment Information

Comparison of the three months ended September 30, 2016 and 2015

Performance Coatings

	Three Months Ended September 30,			Change due to Volume /								
					\$		%					
	2016		2015		C	hange	Cha	ınge	Price	Mix	Currency	Other
	(Dollars in	thou:	sands)									
Segment net sales	\$ 130,453	;	\$ 128,745	,	\$	1,708	1.3	%	\$ (4,543)	\$ 12,029	\$ (5,778)	\$ —
Segment gross profit	33,636		32,107			1,529	4.8	%	(4,543)	1,919	(1,393)	5,546
Gross profit as a % of												
segment net sales	25.8	%	24.9	%								

Net sales increased in Performance Coatings compared with the prior-year same period, primarily driven by an increase in sales from Al Salomi of \$6.2 million and in digital inks of \$2.7 million, partially offset by a decrease in sales of \$5.1 million in frits and glazes and \$1.8 million in sales due to the sale of our interest in an operating affiliate in Venezuela in the fourth quarter of 2015. The increase in net sales was driven by increased sales volume and mix of \$12.0 million, partially offset by unfavorable foreign currency impacts of \$5.8 million and lower product pricing of \$4.5 million. Gross profit increased \$1.5 million from the prior-year same period, primarily driven by lower raw material costs of \$2.9 million, lower manufacturing costs of \$2.6 million and higher sales volumes and mix of \$1.9 million, partially offset by unfavorable product pricing impacts of \$4.5 million and unfavorable foreign currency impacts of \$1.4 million.

Three Months Ended September 30, 2016 2015

\$ Change

Edgar Filing: FERRO CORP - Form 10-Q

				%
				Change
	(Dollars in	thousands)		_
Segment net sales by Region				
Europe	\$ 69,171	\$ 66,476	\$ 2,695	4.1 %
Latin America	26,523	29,806	(3,283)	(11.0)%
Asia Pacific	22,715	20,792	1,923	9.2 %
United States	12,044	11,671	373	3.2 %
Total	\$ 130,453	\$ 128,745	\$ 1,708	1.3 %

The net sales increase of \$1.7 million was driven by increases in Europe, Asia Pacific and the United States, partially offset by a decrease in Latin America. The increase in sales in Europe was primary attributable to \$6.2 million in sales from Al Salomi, partially offset by a decrease in sales in digital inks and Vetriceramici products of \$1.8 million and \$1.5 million, respectively. The sales increase in Asia Pacific was driven by higher sales in frits and glazes and digital inks of \$1.3 million and \$0.6 million, respectively, and the increase in sales in the United States was fully attributable to higher sales in porcelain enamel of \$0.4 million. The sales decrease in Latin America was primarily driven by lower sales in frits and glazes of \$6.6 million and lower sales of \$1.8 million due to the sale of our interest in an operating affiliate in Venezuela in the fourth quarter of 2015, partially mitigated by increased sales in digital inks of \$3.9 million and opacifiers of \$1.3 million.

Performance Colors and Glass

	Three Month	Three Months Ended			Change due to			
					Volume			
	September 3	0,				/		
			\$	%				
	2016	2015	Change	Change	Price	Mix	Currency	Other
	(Dollars in th	nousands)						
Segment net sales	\$ 92,793	\$ 92,168	\$ 625	0.7 %	\$ 283	\$ 875	\$ (533)	\$ —
Segment gross profit	32,282	31,662	620	2.0 %	283	285	(225)	277
Gross profit as a % of segment								
net sales	34.8 %	34.4 %						

Net sales increased compared with the prior-year same period, primarily driven by \$2.0 million of sales attributable to Pinturas and \$1.1 million of sales attributable to Ferer, partially offset by lower sales of our decoration and electronics products (excluding the acquisitions acquired within the last year) of \$1.3 million and \$1.0 million, respectively. Net sales were impacted by favorable volume and mix of \$0.9 million and higher product pricing of \$0.3 million, partially offset by unfavorable foreign currency impacts of \$0.5 million. Gross profit increased from the prior-year same period, primarily due to lower raw material costs of \$1.3 million, higher sales volumes and mix of \$0.3 million and higher product pricing of \$0.3 million, partially offset by unfavorable manufacturing costs of \$1.0 million and unfavorable foreign currency impacts of \$0.2 million.

	Three Mor	nths Ended		
	September			
				%
	2016	2015	\$ Change	Change
	(Dollars in	thousands)		
Segment net sales by Region				
Europe	\$ 40,149	\$ 38,377	\$ 1,772	4.6 %
United States	31,924	34,410	(2,486)	(7.2)%
Asia Pacific	15,112	14,183	929	6.6 %
Latin America	5,608	5,198	410	7.9 %
Total	\$ 92,793	\$ 92,168	\$ 625	0.7 %

The net sales increase of \$0.6 million was driven by higher sales in Europe, Asia Pacific and Latin America, partially offset by lower sales in the United States. The increase in Europe was primarily attributable to \$2.0 million and \$1.1 million in sales from Pinturas and Ferer, respectively, and an increase of \$0.4 million in electronic products, partially offset by a decrease in decoration products (excluding the acquisitions acquired within the last year) of \$2.0 million. The increase in Asia Pacific was primarily due to higher sales of automotive products of \$1.1 million and the increase in Latin America was attributable to an increase in sales of decoration products of \$0.5 million. The decrease in sales in the United States was attributable to lower sales in electronics and automotive products of \$1.8 million and \$1.4 million, respectively, partially mitigated by an increase in sales of decoration products of \$0.9 million.

Pigments, Powders and Oxides

	Three Month	Three Months Ended September 30,			Change due to Volume /				
	September 3								
			\$	%					
	2016	2015	Change	Change	Price	Mix	Cu	rrency	Other
	(Dollars in th	nousands)							
Segment net sales	\$ 65,281	\$ 58,452	\$ 6,829	11.7 %	\$ 416	\$ 6,512	\$	(99)	\$ —
Segment gross profit	23,178	13,179	9,999	75.9 %	416	5,447		7	4,129
Gross profit as a % of									
segment net sales	35.5 %	22.5 %							

Net sales increased compared with the prior-year same period, primarily due to increased sales from Nubiola products, surface technology and pigment products of \$2.7 million, \$2.5 million, and \$1.4 million, respectively. Net sales were positively impacted by higher volumes and mix of \$6.5 million and higher product pricing of \$0.4 million, partially offset by unfavorable foreign currency impacts of \$0.1 million. Gross profit increased from the prior-year same period, primarily due to favorable sales volumes

Table of Contents

and mix of \$5.5 million, lower manufacturing costs of \$2.2 million, favorable raw material costs of \$1.9 million and higher product pricing of \$0.4 million.

	Three Mon September	nths Ended r 30,		
	-		\$	%
	2016	2015	Change	Change
	(Dollars in	thousands))	
Segment net sales by Region				
United States	\$ 33,243	\$ 27,880	\$ 5,363	19.2 %
Europe	15,481	15,987	(506)	(3.2) %
Asia Pacific	8,819	6,988	1,831	26.2 %
Latin America	7,738	7,597	141	1.9 %
Total	\$ 65,281	\$ 58,452	\$ 6,829	11.7 %

The net sales increase of \$6.8 million was driven by increased sales in the United States and Asia Pacific, partially offset by a decrease in sales in Europe. The increase in sales in the United States and Asia Pacific was attributable to higher sales in all products. The decrease in Europe was due to lower sales in pigment products of \$0.3 million.

Comparison of the nine months ended September 30, 2016 and 2015

For the nine months ended September 30, 2016, income from continuing operations was \$65.2 million, compared with \$40.9 million income from continuing operations for the nine months ended September 30, 2015. Net income was \$0.7 million for the nine months ended September 30, 2016, compared with net income of \$12.2 million for the nine months ended September 30, 2015. For the nine months ended September 30, 2016, net income attributable to common shareholders was \$0.1 million, or earnings per share of \$0.01, compared with net income attributable to common shareholders of \$13.5 million, or earnings per share of \$0.15, for the nine months ended September 30, 2015.

Net Sales

Nine Months Ended
September 30,

2016

2015

\$ Change Change

(Dollars in thousands)							
Net sales	863,955	810,351	53,604	6.6 %			
Cost of sales	592,372	585,048	7,324	1.3 %			
Gross profit	\$ 271,583	\$ 225,303	\$ 46,280	20.5 %			
Gross profit as a % of net sales	31.4 %	27.8 %					

Net sales increased by \$53.6 million, or 6.6%, in the nine months ended September 30, 2016, compared with the prior-year same period driven by higher sales in Pigments, Powders and Oxides of \$72.9 million, partially offset by lower sales in Performance Colors and Glass and Performance Coatings of \$13.5 million and \$5.8 million, respectively. The increase in net sales was primarily driven by the sales from Nubiola of \$66.9 million, which was acquired in the third quarter of 2015, and sales from Al Salomi of \$18.2 million partially offset by a decrease in frits and glazes in Latin America of \$20.1 million and electronic products of \$11.1 million.

Gross Profit

Gross profit increased \$46.3 million, or 20.5%, in the nine months ended September 30, 2016, compared with the prior-year same period, and as a percentage of net sales, it increased 360 basis points to 31.4%. The increase in gross profit was driven by increases in Pigments, Powders and Oxides, Performance Coatings and Performance Colors and Glass of \$35.5 million, \$8.9 million and \$1.3 million, respectively. The increase was primarily due to higher sales volumes and mix of \$29.3 million, lower raw material costs of \$20.7 million and lower manufacturing costs of \$16.6 million, partially offset by unfavorable product pricing of \$14.5 million and unfavorable foreign currency impacts of \$6.5 million.

Geographic Revenues

The following table presents our sales on the basis of where sales originated.

September 30,

2016 2015 \$ Change Change

(Dollars in thousands)

Nine Months Ended

	(Dollars in thousands)				
Geographic Revenues on a sales origination basis					
Europe	\$ 392,392	\$ 357,694	\$ 34,698	9.7 %	
United States	224,234	215,647	8,587	4.0 %	
Asia Pacific	134,470	119,152	15,318	12.9 %	
Latin America	112,859	117,858	(4,999)	(4.2) %	
Net sales	\$ 863,955	\$ 810,351	\$ 53,604	6.6 %	

The increase in net sales of \$53.6 million, compared with the prior-year same period, was driven by increases in Europe, Asia Pacific and the United States of \$34.7 million, \$15.3 million and \$8.6 million, respectively, partially offset by a decrease in Latin America of \$5.0 million. The increase in Europe was primarily attributable to Nubiola sales of \$24.8 million and an increase in Performance Coatings sales of \$10.8 million and the increase in Asia Pacific was attributable to an increase in sales in all segments. The increase in the United States was attributable to higher sales in Pigments, Powders and Oxides of \$23.9 million, partially offset by lower sales in Performance Colors and Glass of \$14.9 million. The decrease in sales in Latin America was due to lower sales in Performance Coatings, partially offset by higher sales in Pigments, Powders and Oxides.

The following table presents our sales on the basis of where sold products were shipped.

Nine Months Ended September 30,

2016 2015 \$ Change

% Change (Dollars in thousands) Geographic Revenues on a shipped-to basis Europe \$ 387,776 \$ 352,124 \$ 35,652 10.1 % **United States** 180,390 20,349 12.7 % 160,041 Asia Pacific 177,492 164,532 12,960 7.9 % Latin America 118,297 133,654 (15,357) (11.5)% Net sales \$ 863,955 \$ 810,351 \$ 53,604 6.6 %

Selling, General and Administrative Expenses

The following table includes SG&A components with significant changes between 2016 and 2015:

Nine Months Ended
September 30,

	2016	2015	\$ Change	% Chang	e
	(Dollars in	thousands)			
Personnel expenses	\$ 89,214	\$ 83,964	\$ 5,250	6.3	%
Incentive compensation	7,299	2,664	4,635	174.0	%
Stock-based compensation	5,279	7,451	(2,172)	(29.2)	%
Pension and other postretirement benefits	33	(5,093)	5,126	(100.6)	%
Bad debt	1,020	(86)	1,106	(1,286.0)	%
Business development	8,615	8,604	11	0.1	%
All other expenses	54,645	53,064	1,581	3.0	%
Selling, general and administrative expenses	\$ 166,105	\$ 150,568	\$ 15,537	10.3	%

Table of Contents

SG&A expenses were \$15.5 million higher in the nine months ended September 30, 2016, compared with the prior-year same period. Included in SG&A expenses were \$8.8 million of expenses from acquisitions acquired within the last year. The increase in pension and other postretirement benefits of \$5.1 million is a result of the effect of a lower expected return on plan assets in the current year as a result of executing our terminated-vested buyout program in the fourth quarter of 2015. The increase in incentive compensation expense of \$4.6 million was a result of the Company's performance relative to targets for certain awards compared with the prior-year same period. These increases were partially offset by lower stock-based compensation expense of \$2.2 million.

The following table presents SG&A expenses attributable to sales, research and development and operations costs as strategic services and other SG&A costs as functional services.

Nine Months Ended September 30,

				%
	2016	2015	\$ Change	Change
	(Dollars in			
Strategic services	\$ 86,801	\$ 79,301	\$ 7,500	9.5 %
Functional services	66,726	61,152	5,574	9.1 %
Incentive compensation	7,299	2,664	4,635	174.0 %
Stock-based compensation	5,279	7,451	(2,172)	(29.2)%
Selling, general and administrative expenses	\$ 166,105	\$ 150,568	\$ 15,537	10.3 %

SG&A expenses were \$15.5 million higher in the nine months ended September 30, 2016, compared with the prior-year same period. The increase in SG&A expenses was driven by higher expenses in strategic services from acquisitions acquired within the last year of \$6.1 million and an increase in bad debt expense of \$1.1 million for the first nine months of 2016, compared with the prior-year same period. In addition, the functional services expenses increase was driven by the increase in pension and other postretirement benefits of \$5.1 million the first nine months of 2016, compared with the prior-year same period.

Restructuring and Impairment Charges

Nine Months Ended September 30,

2016 2015 \$ Change Change

(Dollars in thousands)

Employee severance \$ 1,161 \$ 1,959 \$ (798) (40.7)% Other restructuring costs 533 3,510 (2,977) (84.8)% Restructuring and impairment charges \$ 1,694 \$ 5,469 \$ (3,775) (69.0)%

Restructuring and impairment charges decreased by \$3.8 million in the first nine months of 2016 compared with the prior-year same period. The decrease was primarily due to the early termination costs of a contract associated with restructuring a corporate function of \$2.8 million during the third quarter of 2015 and lower costs associated with employee severance for the nine months ended September 30, 2016 compared with the prior-year same period.

Interest Expense

Nine Months Ended September 30,

	2016	2015	\$ Change	% Change
	(Dollars in	thousands))	
Interest expense	\$ 14,629	\$ 10,682	\$ 3,947	37.0 %
Amortization of bank fees	991	875	116	13.3 %
Interest capitalization	(41)	(1,420)	1,379	(97.1)%
Interest expense	\$ 15,579	\$ 10,137	\$ 5,442	53.7 %

Interest expense increased in the first nine months of 2016 due to an increase in the average long-term debt balance for the 2016 period, compared with the prior-year same period, as well as less interest capitalization associated with long-term capital projects which was driven by lower spend for the Antwerp, Belgium facility, which was substantially completed in the fourth quarter of 2015.

Income Tax Expense

During the nine months ended September 30, 2016, income tax expense was \$22.7 million, or 25.8% of pre-tax income, compared with \$11.9 million, or 22.6% of pre-tax income in the prior-year same period. The tax expense, as a percentage of pre-tax income, is lower than the U.S. federal statutory income tax rate of 35% primarily as a result of foreign statutory rate differences. Through the third quarter of 2015, tax expense was further lowered as a result of pre-tax losses in jurisdictions for which no tax benefit is recognized in proportion to the amount of pre-tax income in jurisdictions with no tax expense due to the utilization of fully valued tax attributes. Additionally, during the third quarter of 2015, the Company made a tax payment to a foreign tax jurisdiction for the ability to deduct specific intangible items in the future which resulted in the accounting for the net benefit in the period.

Results of Operations - Segment Information

Comparison of the nine months ended September 30, 2016 and 2015

Performance Coatings

	Nine Months Ended September 30,			Change due to Volume /				
	2016	2015	\$ Change	% Change	Price	Mix	Currency	Other
	(Dollars in tho	usands)						
Segment net sales Segment gross	\$ 399,166	\$ 404,991	\$ (5,825)	(1.4)%	\$ (15,949)	\$ 34,421	\$ (24,297)	\$ —
profit Gross profit as a % of segment net	104,985 26.3 %	96,126 23.7 %	8,859	9.2 %	(15,949)	10,796	(5,125)	19,137

sales

Net sales declined in Performance Coatings compared with the prior-year same period, primarily driven by a decrease in sales of \$20.1 million in Latin America in frits and glazes, and \$6.8 million due to the sale of Venezuela, which was sold in the fourth quarter of 2015, partially mitigated by \$18.2 million in sales from Al Salomi. The decrease in net sales was impacted by unfavorable foreign currency impacts of \$24.3 million and lower product pricing of \$15.9 million, partially offset by increased sales volume of \$33.0 million and favorable mix of \$1.4 million. Gross profit increased \$8.9 million from the prior-year same period, primarily driven by lower manufacturing costs of \$11.6 million, higher sales volumes and mix of \$10.8 million, and lower raw material costs of \$7.5 million, partially offset by unfavorable product pricing impacts of \$15.9 million and unfavorable foreign currency impacts of \$5.1 million.

Nine Months Ended September 30,

	2016	2015	\$ Change	% Change
	(Dollars in	thousands)		
Segment net sales by Region				
Europe	\$ 221,422	\$ 210,582	\$ 10,840	5.1 %
Latin America	75,933	94,515	(18,582)	(19.7)%
Asia Pacific	66,784	64,459	2,325	3.6 %
United States	35,027	35,435	(408)	(1.2) %
Total	\$ 399,166	\$ 404,991	\$ (5,825)	(1.4) %

The net sales decrease of \$5.8 million was driven by declines in Latin America and the United States, partially mitigated by an increase in Europe and Asia Pacific. The sales decline in Latin America included lower sales in frits and glazes of \$20.1 million and

Table of Contents

lower sales from Venezuela of \$6.8 million, which was sold in the fourth quarter of 2015, partially mitigated by increased sales in digital inks and Vetriceramici products of \$4.1 million and \$3.9 million, respectively. The sales decline in the United States was fully attributable to lower sales in porcelain enamel of \$0.4 million. The increase in sales in Europe was primary attributable to \$18.2 million in sales from Al Salomi and \$1.6 million in frits and glazes (excluding Al Salomi), partially offset by decreased sales in digital inks and Vetriceramici products of \$4.7 million and \$3.9 million, respectively. The increase in Asia Pacific was primarily due to increased sales in digital inks and frits and glazes of \$2.4 million and \$1.9 million, partially offset by decreased sales in porcelain enamel of \$1.7 million.

Performance Colors and Glass

	Nine Months Ended September 30,									
	2016	2	2015		\$ Change	% Change	Price	Mix	Currency	Other
	(Dollars in	ands)								
Segment net sales	\$ 276,896	\$	3 290,361	l	\$ (13,465)	(4.6) %	\$ 919	\$ (10,498)	\$ (3,886)	\$ —
Segment gross										
profit	100,825	i I	99,540		1,285	1.3 %	919	(8,369)	(1,268)	10,003
Gross profit as a %										
of segment net										
sales	36.4	%	34.3	%						

Net sales decreased compared with the prior-year same period, primarily driven by lower sales of our electronics and decoration products (excluding acquisitions acquired within the last year) of \$11.1 million and \$8.2 million, respectively, partially mitigated by increased sales attributable from Ferer of \$3.3 million and Pinturas of \$2.6 million. Net sales were impacted by unfavorable volume and mix of \$10.5 million and unfavorable foreign currency impacts of \$3.9 million, partially mitigated by higher product pricing of \$0.9 million. Gross profit increased from the prior-year same period, primarily due to lower raw material costs of \$8.6 million, lower manufacturing costs of \$1.4 million and higher product pricing of \$0.9 million, partially offset by lower sales volumes and mix of \$8.4 million and unfavorable foreign currency impacts of \$1.3 million.

Nine Months Ended September 30,

Edgar Filing: FERRO CORP - Form 10-Q

	2016	2015	\$ Change	% Change
	(Dollars in	thousands)		
Segment net sales by Region				
Europe	\$ 121,206	\$ 121,894	\$ (688)	(0.6) %
United States	96,833	111,741	(14,908)	(13.3)%
Asia Pacific	44,102	41,780	2,322	5.6 %
Latin America	14,755	14,946	(191)	(1.3) %
Total	\$ 276,896	\$ 290,361	\$ (13,465)	(4.6) %

The net sales decline of \$13.5 million was driven by lower sales in the United States, Europe, and Latin America, partially mitigated by increased sales in Asia Pacific. The decrease in sales in the United States was attributable to lower sales across all product lines, and the decline in sales in Europe and Latin America was primarily due to lower sales of decoration products (excluding acquisitions acquired within the last year) of \$6.2 million and \$0.3 million, respectively. The decreased sales in Europe was partially mitigated by increased sales attributable to Ferer of \$3.3 million and Pinturas of \$2.6 million. The increase in sales in Asia Pacific was primarily due to higher sales of automotive products of \$3.0 million, partially offset by lower sales in decoration products of \$0.7 million.

Table of Contents

Pigments, Powders and Oxides

	Nine Months Ended September 30,									
	2016		2015		\$ Change	% Change	Price	Mix	Currency	Other
	(Dollars i	n tho	usands)							
Segment net sales	\$ 187,89	3	\$ 114,999)	\$ 72,894	63.4 %	\$ 517	\$ 72,867	\$ (490)	\$ —
Segment gross profit	65,868		30,325		35,543	117.2 %	517	26,853	(100)	8,273
Gross profit as a % of										
segment net sales	35.1	%	26.4	%						

Net sales increased compared with the prior-year same period, primarily due to higher sales from Nubiola products of \$66.9 million, which was acquired in the third quarter of 2015, and an increase in sales of pigments and surface technology products of \$4.2 million and \$1.6 million, respectively. Net sales were positively impacted by higher volumes and mix of \$72.9 million and favorable product pricing of \$0.5 million, partially offset by unfavorable foreign currency impacts of \$0.5 million. Gross profit increased from the prior-year same period, primarily due to higher sales volumes and mix of \$26.9 million, favorable raw material costs of \$4.6 million, lower manufacturing costs of \$3.6 million and favorable product pricing of \$0.5 million, partially offset by unfavorable foreign currency impacts of \$0.1 million.

Nine Months Ended September 30,

				%
	2016	2015	\$ Change	Change
	(Dollars in	thousands)		
Segment net sales by Region				
United States	\$ 92,374	\$ 68,471	\$ 23,903	34.9 %
Europe	49,764	25,218	24,546	97.3 %
Asia Pacific	23,584	12,913	10,671	82.6 %
Latin America	22,171	8,397	13,774	164.0 %
Total	\$ 187,893	\$ 114,999	\$ 72,894	63.4 %

Net sales increased \$72.9 million, primarily driven by increased sales from Nubiola products of \$66.9 million, which was acquired in the third quarter of 2015, and contributed to the increased sales in all regions.

Summary of Cash Flows for the nine months ended September 2016 and 2015

	Nine Month	ns Ended	
	September	30,	
	2016	2015	\$ Change
	(Dollars in	thousands)	
Net cash provided by operating activities	\$ 6,742	\$ 31,498	\$ (24,756)
Net cash (used in) investing activities	(26,036)	(203,104)	177,068
Net cash provided by financing activities	1,892	107,419	(105,527)
Effect of exchange rate changes on cash and cash equivalents	(422)	(6,820)	6,398
(Decrease) in cash and cash equivalents	\$ (17,824)	\$ (71,007)	\$ 53,183

Table of Contents

Details of net cash provided by operating activities follows:

	Nine Month September 2 2016 (Dollars in	30, 2015	\$ Change
Cash flows from operating activities:			
Net income	\$ 708	\$ 12,239	\$ (11,531)
(Gain) loss on sale of assets and business	(3,459)	1,288	(4,747)
Depreciation and amortization	33,599	32,002	1,597
Interest amortization	991	875	116
Restructuring and impairment	37,173	11,282	25,891
Devaluation of Venezuela	_	3,343	(3,343)
Accounts receivable	(44,370)	(3,022)	(41,348)
Inventories	(20,453)	(1,226)	(19,227)
Accounts payable	(3,209)	(9,645)	6,436
Other current assets and liabilities, net	9,479	(5,757)	15,236
Other adjustments, net	(3,717)	(9,881)	6,164
Net cash provided by operating activities	\$ 6,742	\$ 31,498	\$ (24,756)

Cash flows from operating activities. Cash flows provided by operating activities decreased \$24.8 million in the first nine months of 2016 compared with the prior-year same period. The decrease was due to higher cash outflows for working capital of \$54.1 million, partially mitigated by lower cash outflows for other assets and liabilities and higher earnings after consideration of non-cash items.

Cash flows from investing activities. Cash flows used in investing activities decreased \$177.1 million in the first nine months of 2016 compared with the prior-year same period. The decrease was primarily due to lower cash outflows for business combinations of \$155.6 million and lower capital expenditures of \$18.0 million that was driven by lower spend for the Antwerp, Belgium facility, which was substantially completed in the fourth quarter of 2015.

Cash flows from financing activities. Cash flows provided by financing activities decreased \$105.6 million in the first nine months of 2016 compared with the prior-year same period, driven by the \$50.0 million prepayment on the term loan facility that was made in January 2016, a net borrowing decrease on the revolving credit facility of \$52.8 million, and the additional purchase of treasury stock of \$4.4 million.

Capital Resources and Liquidity

Credit Facility

On July 31, 2014, the Company entered into a credit facility (the "Credit Facility") with a group of lenders to refinance the majority of its then outstanding debt. The Credit Facility consisted of a \$200 million secured revolving line of credit with a term of five years and a \$300 million secured term loan facility with a term of seven years. On January 25, 2016, the Company amended the Credit Facility by entering into the Incremental Assumption Agreement (the "Incremental Agreement") to increase the revolving line of credit commitment amount from \$200 million to \$300 million. The Company then used a portion of the increase in the revolving line of credit to repay \$50 million of the term loan facility. The Credit Facility was amended and a portion of the outstanding term loan was repaid to increase the amount of total liquidity available under the Credit Facility and reduce the total cost of borrowings. On August 29, 2016, the Company amended the Credit Facility by entering into the Second Incremental Assumption Agreement (the "Second Incremental Agreement") to increase the revolving line of credit commitment amount to \$400 million. The increase in the revolving line of credit commitment will be used for general corporate purposes, including acquisitions.

Principal payments on the term loan facility of \$0.75 million quarterly, are payable commencing December 31, 2014, with the remaining balance due on the maturity date. At September 30, 2016, the Company had borrowed \$244.0 million under the term loan facility, taking into account all prior quarterly payments and the \$50 million prepayment that was made in January 2016, at an annual rate of 4.0%. There are no additional borrowings available under the term loan facility.

Table of Contents

Certain of the Company's U.S. subsidiaries have guaranteed the Company's obligations under the Credit Facility and such obligations are secured by (a) substantially all of the personal property of the Company and the U.S. subsidiary guarantors and (b) a pledge of 100% of the stock of most of the Company's U.S. subsidiaries and 65% of most of the stock of the Company's first tier foreign subsidiaries.

Interest Rate – Term Loan: The interest rates applicable to the term loans will be, at the Company's option, equal to either a base rate or a London Interbank Offered Rate ("LIBOR") rate plus, in both cases, an applicable margin.

- The base rate will be the highest of (i) the federal funds rate plus 0.50%, (ii) syndication agent's prime rate or (iii) the daily LIBOR rate plus 1.00%.
- The applicable margin for base rate loans is 2.25%.
- The LIBOR rate will be set as quoted by Bloomberg and shall not be less than 0.75%.
- The applicable margin for LIBOR rate loans is 3.25%.
- · For LIBOR rate loans, the Company may choose to set the duration on individual borrowings for periods of one, two, three or six months, with the interest rate based on the applicable LIBOR rate for the corresponding duration.

Interest Rate – Revolving Credit Line: The interest rates applicable to loans under the revolving credit line will be, at the Company's option, equal to either a base rate or a LIBOR rate plus an applicable variable margin. The variable margin will be based on the ratio of (a) the Company's total consolidated debt outstanding at such time to (b) the Company's consolidated EBITDA computed for the period of four consecutive fiscal quarters most recently ended.

- The base rate will be the highest of (i) the federal funds rate plus 0.50%, (ii) syndication agent's prime rate or (iii) the daily LIBOR rate plus 1.00%.
- The applicable margin for base rate loans will vary between 1.50% and 2.00%.
- · The LIBOR rate will be set as quoted by Bloomberg for U.S. Dollars.
- The applicable margin for LIBOR Rate Loans will vary between 2.50% and 3.00%.
- · For LIBOR rate loans, the Company may choose to set the duration on individual borrowings for periods of one, two, three or six months, with the interest rate based on the applicable LIBOR rate for the corresponding duration.

At September 30, 2016, the Company had borrowed \$233.2 million under the revolving credit facilities at an annual weighted average interest rate of 3.5%. The borrowing on the revolving credit facilities was used to fund the acquisitions, the share repurchase programs, and for other general business purposes. After reductions for outstanding letters of credit secured by these facilities, we had \$162.4 million of additional borrowings available under the revolving credit facilities at September 30, 2016.

The Credit Facility contains customary restrictive covenants including, but not limited to, limitations on use of loan proceeds, limitations on the Company's ability to pay dividends and repurchase stock, limitations on acquisitions and dispositions and limitations on certain types of investments. The Credit Facility also contains standard provisions relating to conditions of borrowing and customary events of default, including the non-payment of obligations by the Company and the bankruptcy of the Company.

Specific to the revolving credit facility, the Company is subject to financial covenants regarding the Company's outstanding net indebtedness and interest coverage ratios.

If an event of default occurs, all amounts outstanding under the Credit Facility may be accelerated and become immediately due and payable. At September 30, 2016, we were in compliance with the covenants of the Credit Facility.

Table of Contents

Off Balance Sheet Arrangements

Consignment and Customer Arrangements for Precious Metals. We use precious metals, primarily silver, in the production of some of our products. We obtain most precious metals from financial institutions under consignment agreements (generally referred to as our precious metals consignment program). The financial institutions retain ownership of the precious metals and charge us fees based on the amounts we consign and the period of consignment. These fees were \$0.2 million for the three months ended September 30, 2016 and 2015, and were \$0.6 million for the nine months ended September 30, 2016 and 2015. We had on hand precious metals owned by participants in our precious metals program of \$26.8 million at September 30, 2016, and \$20.5 million at December 31, 2015, measured at fair value based on market prices for identical assets and net of credits.

The consignment agreements under our precious metals program involve short-term commitments that typically mature within 30 to 90 days of each transaction and are typically renewed on an ongoing basis. As a result, the Company relies on the continued willingness of financial institutions to participate in these arrangements to maintain this source of liquidity. On occasion, we have been required to deliver cash collateral. While no deposits were outstanding at September 30, 2016, or December 31, 2015, we may be required to furnish cash collateral in the future based on the quantity and market value of the precious metals under consignment and the amount of collateral-free lines provided by the financial institutions. The amount of cash collateral required is subject to review by the financial institutions and can be changed at any time at their discretion, based in part on their assessment of our creditworthiness.

Bank Guarantees and Standby Letters of Credit.

At September 30, 2016, the Company and its subsidiaries had bank guarantees and standby letters of credit issued by financial institutions that totaled \$6.3 million. These agreements primarily relate to Ferro's insurance programs, foreign energy purchase contracts and foreign tax payments.

Other Financing Arrangements

We maintain other lines of credit to provide global flexibility for Ferro's short-term liquidity requirements. These facilities are uncommitted lines for our international operations and totaled \$32.9 million and \$8.0 million at September 30, 2016 and December 31, 2015, respectively. We had \$28.8 million and \$7.3 million of additional borrowings available under these lines at September 30, 2016 and December 31, 2015, respectively.

Liquidity Requirements

Our primary sources of liquidity are available cash and cash equivalents, available lines of credit under the revolving credit facility, and cash flows from operating activities. As of September 30, 2016 we had \$40.6 million of cash and cash equivalents. Substantially all of our cash and cash equivalents were held by foreign subsidiaries. Cash generated in the U.S. is generally used to pay down amounts outstanding under our revolving credit facility and for general corporate purposes, including acquisitions. If needed, we could repatriate the majority of cash held by foreign subsidiaries without the need to accrue and pay U.S. income taxes. We do not anticipate a liquidity need requiring such repatriation of these funds to the U.S.

Our liquidity requirements primarily include debt service, purchase commitments, labor costs, working capital requirements, restructuring expenditures, capital investments, precious metals cash collateral requirements, and postretirement obligations. We expect to meet these requirements in the long term through cash provided by operating activities and availability under existing credit facilities or other financing arrangements. Cash flows from operating activities are primarily driven by earnings before non-cash charges and changes in working capital needs. We had

additional borrowing capacity of \$191.3 million at September 30, 2016, and \$32.9 million at December 31, 2015, available under our various credit facilities, primarily our revolving credit facility.

Our revolving credit facility subjects us to customary financial covenants, including a leverage ratio and an interest coverage ratio. These covenants under our credit facility restrict the amount of our borrowings, reducing our flexibility to fund ongoing operations and strategic initiatives.

The most critical of these ratios is the leverage ratio for the revolving credit facility. As of September 30, 2016, we were in compliance with our maximum leverage ratio covenant of 3.75x as our actual ratio was 2.58x, providing \$59.3 million of EBITDA cushion on the leverage ratio, as defined within the Credit Facility. To the extent that economic conditions in key markets deteriorate or we are unable to meet our business projections and EBITDA falls below approximately \$130 million for rolling four quarters, based on reasonably consistent debt levels with those as of December 31, 2015, we could become unable to maintain compliance with our

Table of Contents

leverage ratio covenant. In such case, our lenders could demand immediate payment of outstanding amounts and we would need to seek alternate financing sources to pay off such debts and to fund our ongoing operations. Such financing may not be available on favorable terms, if at all.

Difficulties experienced in global capital markets could affect the ability or willingness of counterparties to perform under our various lines of credit, forward contracts, and precious metals program. These counterparties are major, reputable, multinational institutions, all having investment-grade credit ratings, except for one, which is not rated. Accordingly, we do not anticipate counterparty default. However, an interruption in access to external financing could adversely affect our business prospects and financial condition.

We assess on an ongoing basis our portfolio of businesses, as well as our financial and capital structure, to ensure that we have sufficient capital and liquidity to meet our strategic objectives. As part of this process, from time to time we evaluate the possible divestiture of businesses that are not critical to our core strategic objectives and, where appropriate, pursue the sale of such businesses and assets. We also evaluate and pursue acquisition opportunities that we believe will enhance our strategic position. Generally, we publicly announce divestiture and acquisition transactions only when we have closed on those transactions.

Critical Accounting Policies and Their Application

There were no material changes to our critical accounting policies described in "Critical Accounting Policies" within Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2015.

Impact of Newly Issued Accounting Pronouncements

Refer to Note 2 to the condensed consolidated financial statements under Item 1 of this Quarterly Report on Form 10-Q for a discussion of accounting standards we recently adopted or will be required to adopt.

Risk Factors

Certain statements contained here and in future filings with the SEC reflect the Company's expectations with respect to future performance and constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements are subject to a variety of uncertainties, unknown risks and other factors concerning the Company's operations and business environment, which are difficult to predict and are beyond the control of the Company. Factors that could adversely affect our future financial performance include those described under the heading "Risk Factors" in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2015.

Table of Contents

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The primary objective of the following information is to provide forward-looking quantitative and qualitative information about our exposure to instruments that are sensitive to fluctuations in interest rates, foreign currency exchange rates, and costs of raw materials and energy.

Our exposure to interest rate risk arises from our debt portfolio. We manage this risk by controlling the mix of fixed versus variable-rate debt after considering the interest rate environment and expected future cash flows. Our objective is to limit variability in earnings, cash flows and overall borrowing costs caused by changes in interest rates, while preserving operating flexibility.

We operate internationally and enter into transactions denominated in foreign currencies. These transactions expose us to gains and losses arising from exchange rate movements between the dates foreign currencies are recorded and the dates they are settled. We manage this risk by entering into forward currency contracts that substantially offset these gains and losses.

The notional amounts, carrying amounts of assets (liabilities), and fair values associated with our exposure to these market risks and sensitivity analysis about potential gains (losses) resulting from hypothetical changes in market rates are presented below:

	September 30, 2016	December 31, 2015
	(Dollars in	thousands)
Variable-rate debt:		
Carrying amount	\$ 473,288	\$ 461,717
Fair value	485,080	466,571
Change in annual interest expense from 1% change in interest rates	4,840	4,690
Fixed-rate debt:		
Carrying amount	4,161	4,610
Fair value	3,571	3,956
Change in fair value from 1% increase in interest rates	NM	NM
Change in fair value from 1% decrease in interest rates	NM	NM
Foreign currency forward contracts:		
Notional amount	243,315	338,418
Carrying amount and fair value	468	(1,207)
Change in fair value from 10% appreciation of U.S. dollar	14,122	19,814
Change in fair value from 10% depreciation of U.S. dollar	(17,260)	(24,217)

Table of Contents

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Ferro is committed to maintaining disclosure controls and procedures that are designed to ensure that information required to be disclosed in its Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to its management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

As required by Rule 13a-15(b) of the Exchange Act, Ferro has carried out an evaluation, under the supervision and with the participation of its management, including its Chief Executive Officer and its Chief Financial Officer, of the effectiveness of the design and operation of its disclosure controls and procedures. The evaluation examined those disclosure controls and procedures as of September 30, 2016, the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that the disclosure controls and procedures were effective as of September 30, 2016.

Changes in Internal Control over Financial Reporting

During the third quarter of 2016, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Table of Contents

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

There are various lawsuits and claims pending against the Company and its consolidated subsidiaries. We do not currently expect the resolution of such matters to materially affect the consolidated financial position, results of operations, or cash flows of the Company.

Item 1A. Risk Factors

There were no material changes to the risk factors disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2015.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Our ability to pay common stock dividends is limited by certain covenants in our Credit Facility other than dividends payable solely in Capital Securities, as defined in the agreement.

The following table summarizes purchases of our common stock by the Company and affiliated purchasers during the three months ended September 30, 2016:

				Total Number of		Maximum Dollar Amount
				Shares Purchased		that May
						Yet Be
	Total Number			as Part of Publicly		Purchased
		Aver	age			Under the
	of Shares	Price	:	Announced Plans		Plans
		Paid	per			
	Purchased (1)	Share	e	or Programs		or Programs
	(Dollars in thous	sands,	excep	ot for per share amou	ints	s)
July 1, 2016 to July 31, 2016	_	\$	_		\$	50,000,000
August 1, 2016 to August 31, 2016	_	\$	—	_	\$	50,000,000
September 1, 2016 to September 30, 2016	_	\$	—	_	\$	50,000,000
Total	_			_		

(1) During the third quarter of 2016, the Company's Board of Directors approved a new share repurchase program, under which the Company is authorized to repurchase up to an additional \$25 million of the Company's outstanding shares of Common Stock on the open market, including through a Rule 10b5-1 plan, or in privately

negotiated transactions. This new program is in addition to the \$75 million of authorization previously approved and announced.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

The exhibits listed in the attached Exhibit Index are the exhibits required by Item 601 of Regulation S-K.

Table of Contents

SIGNATURES

Pursuant to the requirements 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.

FERRO CORPORATION

(Registrant)

Date: November 2, 2016

/s/ Peter T. Thomas Peter T. Thomas

Chairman, President and Chief Executive Officer

(Principal Executive Officer)

Date: November 2, 2016

/s/ Benjamin J. Schlater Benjamin J. Schlater

Vice President and Chief Financial Officer

(Principal Financial Officer)

Table of Contents

EXHIBIT INDEX

The following exhibits are filed with this report or are incorporated here by reference to a prior filing in accordance with Rule 12b-32 under the Securities and Exchange Act of 1934.

Exhibit:

- 2 Plan of acquisition, reorganization, arrangement, liquidation or succession
- 2.1 Sale and Purchase Agreement, dated April 29, 2015, by and among Ferro Corporation, the sellers party thereto, Corporación Química Vhem, S.L. and Dibon USA, LLC. (incorporated by reference to Exhibit 2.1 to Ferro Corporation's Current Report on Form 8-K, filed July 9, 2015)**
- 3 Articles of incorporation and by-laws:
- 3.1 Eleventh Amended Articles of Incorporation of Ferro Corporation (incorporated by reference to Exhibit 4.1 to Ferro Corporation's Registration Statement on Form S 3, filed March 5, 2008).
- 3.2 Certificate of Amendment to the Eleventh Amended Articles of Incorporation of Ferro Corporation filed December 29, 1994 (incorporated by reference to Exhibit 4.2 to Ferro Corporation's Registration Statement on Form S 3, filed March 5, 2008).
- 3.3 Certificate of Amendment to the Eleventh Amended Articles of Incorporation of Ferro Corporation filed on June 23, 1998 (incorporated by reference to Exhibit 4.3 to Ferro Corporation's Registration Statement on Form S 3, filed March 5, 2008).
- 3.4 Certificate of Amendment to the Eleventh Amended Articles of Incorporation of Ferro Corporation filed on October 14, 2011 (incorporated by reference to Exhibit 3.1 to Ferro Corporation's Current Report on Form 8-K, filed October 17, 2011).
- 3.5 Certificate of Amendment to the Eleventh Amended Articles of Incorporation of Ferro Corporation filed on April 25, 2014 (incorporated by reference to Exhibit 3.5 to Ferro's Quarterly Report on Form 10-Q, for the quarter ended June 30, 2014).
- 3.6 Ferro Corporation Amended and Restated Code of Regulations (incorporated by reference to Exhibit 3.1 to Ferro Corporation's current Report on Form 8-K filed April 28, 2015.)
- 4 Instruments defining rights of security holders, including indentures:
- 4.1 Senior Indenture, dated as of March 5, 2008, by and between Ferro Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.5 to Ferro Corporation's Registration Statement on Form S 3, filed March 5, 2008).
- 4.2 First Supplemental Indenture, dated August 19, 2008, by and between Ferro Corporation and U.S. Bank National Association (with Form of 6.50% Convertible Senior Note due 2013) (incorporated by reference to Exhibit 4.2 to Ferro Corporation's Current Report on Form 8 K, filed August 19, 2008).
- 4.3 Form of Indenture, by and between Ferro Corporation and Wilmington Trust FSB (incorporated by reference to Exhibit 4.1 to Ferro Corporation's Registration Statement on Form S 3ASR, filed July 27, 2010).
- 4.4 First Supplemental Indenture, dated August 24, 2010, by and between Ferro Corporation and Wilmington Trust FSB (with Form of 7.875% Senior Notes due 2018) (incorporated by reference to Exhibit 4.1 to Ferro Corporation's Current Report on Form 8 K, filed August 24, 2010).
- 4.5 Second Supplemental Indenture, dated July 31, 2014, by and between Ferro Corporation and Wilmington Trust, National Association (incorporated by reference to Exhibit 10.1 to Ferro Corporation's current Report on Form 8-K, filed August 5, 2014).
 - The Company agrees, upon request, to furnish to the U.S. Securities and Exchange Commission a copy of any instrument authorizing long-term debt that does not authorize debt in excess of 10% of the total assets of the Company and its subsidiaries on a consolidated basis.

- 10.1 Second Incremental Assumption Agreement, dated August 29, 2016, by and among Ferro Corporation, PNC Bank, National Association, as the administrative agent, the collateral agent and as an issuer, JPMorgan Chase Bank, N.A., as an issuer, and various financial institutions as lenders. (incorporated by reference to Exhibit 4.1 to Ferro Corporation's current Report on Form 8K, filed August 30, 2016).
- 10.2 Retention Agreement, dated September 1, 2016, by and between Jeffrey L. Rutherford and Ferro Corporation.*
- 31 Certifications:
- 31.1 Certification of Principal Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a).
- 31.2 Certification of Principal Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a).
- 32.1 Certification of Principal Executive Officer Pursuant to 18 U.S.C. 1350.
- 32.2 Certification of Principal Financial Officer Pursuant to 18 U.S.C. 1350.

— 1 1			~	
Tabl	Р	α t	Cont	ents

Exhibit:

101 XBRL Documents:
101.INS XBRL Instance Document
101.SCH XBRL Schema Document
101.CAL XBRL Calculation Linkbase Document
101.LAB XBRL Labels Linkbase Document
101.PRE XBRL Presentation Linkbase Document
101.DEF XBRL Definition Linkbase Document

^{*}Indicates management contract or compensatory plan, contract or arrangement in which one or more Directors and/or executives of Ferro Corporation may be participants.

^{**} Certain exhibits and schedules have been omitted and the registrant agrees to furnish a copy of any omitted exhibits and schedules to the Securities and Exchange