

# First-Quarter 2018 Earnings

 **FERRO**  
Where innovation  
delivers performance™

# Regulatory Statements

*Certain statements in this presentation may constitute “forward-looking statements” within the meaning of federal securities laws. These statements are subject to a variety of uncertainties, unknown risks, and other factors concerning the Company’s operations and business environment. Important factors that could cause actual results to differ materially from those suggested by these forward-looking statements and that could adversely affect the Company’s future financial performance include the following: demand in the industries into which Ferro sells its products may be unpredictable, cyclical, or heavily influenced by consumer spending; Ferro’s ability to successfully implement and/or administer its optimization initiatives, including its restructuring programs, and to produce the desired results; currency conversion rates and economic, social, political, and regulatory conditions in the U.S. and around the world; Ferro’s ability to identify suitable acquisition candidates, complete acquisitions, effectively integrate the businesses and achieve the expected synergies as well as the acquisitions being accretive and Ferro achieving the expected returns on invested capital; the effectiveness of the Company’s efforts to improve operating margins through sales growth, price increases, productivity gains, and improved purchasing techniques; Ferro’s ability to successfully introduce new products or enter into new growth markets; the impact of interruption, damage to, failure, or compromise of the Company’s information systems; restrictive covenants in the Company’s credit facilities could affect its strategic initiatives and liquidity; Ferro’s ability to access capital markets, borrowings, or financial transactions; the availability of reliable sources of energy and raw materials at a reasonable cost; increasingly aggressive domestic and foreign governmental regulations on hazardous materials and regulations affecting health, safety and the environment; competitive factors, including intense price competition; Ferro’s ability to protect its intellectual property, including trade secrets, or to successfully resolve claims of infringement brought against it; sale of products and materials into highly regulated industries; the impact of operating hazards and investments made in order to meet stringent environmental, health and safety regulations; limited or no redundancy for certain of the Company’s manufacturing facilities and possible interruption of operations at those facilities; management of Ferro’s general and administrative expenses; Ferro’s multi-jurisdictional tax structure and its ability to reduce its effective tax rate, including the impact of the Company’s performance on its ability to utilize significant deferred tax assets; the effectiveness of strategies to increase Ferro’s return on invested capital, and the short-term impact that acquisitions may have on return on invested capital; stringent labor and employment laws and relationships with the Company’s employees; the impact of requirements to fund employee benefit costs, especially post-retirement costs; implementation of business processes and information systems, including the outsourcing of functions to third parties; risks associated with the manufacture and sale of material into industries making products for sensitive applications; exposure to lawsuits in the normal course of business; risks and uncertainties associated with intangible assets; Ferro’s borrowing costs could be affected adversely by interest rate increases; liens on the Company’s assets by its lenders affect its ability to dispose of property and businesses; amount and timing of any repurchase of Ferro’s common stock; and other factors affecting the Company’s business that are beyond its control, including disasters, accidents and governmental actions.*

*The risks and uncertainties identified above are not the only risks the Company faces. Additional risks and uncertainties not presently known to the Company or that it currently believes to be immaterial also may adversely affect the Company. Should any known or unknown risks and uncertainties develop into actual events, these developments could have material adverse effects on our business, financial condition and results of operations.*

*This presentation contains time-sensitive information that reflects management’s best analysis only as of the date of this presentation. The Company does not undertake any obligation to publicly update or revise any forward-looking statements to reflect future events information or circumstances that arise after the date of this presentation. Additional information regarding these risks can be found in our Annual Report on Form 10-K for the year ended December 31, 2017.*

*Also, this presentation includes certain financial measures that were not prepared in accordance with generally accepted accounting principles. Reconciliations of the historical non-GAAP financial measures to the most directly comparable GAAP financial measures can be found in the Appendices included in this presentation. This presentation includes adjusted EBITDA, adjusted EPS and adjusted cash flow conversion guidance. It is not possible, without unreasonable effort, for the Company to identify the amount or significance of future charges that would be excluded from adjusted EBITDA, adjusted EPS and adjusted free cash flow from operations conversion or the potential for other transactions that may impact such guidance. Accordingly, the Company is unable to reconcile, without unreasonable effort, the Company’s forecasted range of these adjusted non-GAAP financial measures to their most directly comparable GAAP financial measures.*

# Summary Highlights

## FIRST QUARTER

- ✓ GAAP EPS improved to \$0.27 versus \$0.26
- ✓ Adjusted EPS increased 16.1% to \$0.36 versus \$0.31<sup>1</sup>
- ✓ Net Sales increased 26.5% to \$405.5 million versus \$320.6 million
- ✓ Organic sales grew 4.6% on constant currency
- ✓ Net Income<sup>2</sup> increased 6.8% to \$23.4 million; Adjusted EBITDA grew 14.5% to \$64.0<sup>1</sup> million
- ✓ Capital structure refinanced, enhancing financial flexibility and reducing interest rates
- ✓ Full-year 2018 non-GAAP guidance for Adjusted EPS, Adjusted EBITDA and Adjusted Free Cash Flow from Operations conversion maintained.

<sup>1</sup> Note: Non-GAAP measures, see reconciliations in the appendix

<sup>2</sup> Note: Net Income attributable to Ferro Corporation common shareholders

Note: Comparative information is relative to prior-year first quarter

# First Quarter Financial Results

Dollars in Millions, except for EPS



GAAP	Total Net Sales	Gross Profit	Net Income <sup>2</sup> (GAAP)	EPS (GAAP)
<b>Q1 2018</b>	<b>\$405.5M</b>	<b>\$118.7M</b>	<b>\$23.4M</b>	<b>\$0.27</b>
% Δ	26.5%	20.1%	6.8%	3.8%

Adjusted	Total Net Sales	Adjusted Gross Profit	Adjusted EBITDA	Adjusted EPS (Non-GAAP)
<b>Q1 2018</b>	<b>\$405.5M</b>	<b>\$119.7M</b>	<b>\$64.0M</b>	<b>\$0.36</b>
% Δ <sup>cc</sup>	18.1%	9.9%	14.5% <sup>1</sup>	16.1% <sup>1</sup>

<sup>1</sup> Comparison in nominal currency

<sup>2</sup> Net Income attributable to Ferro Corporation common shareholders

<sup>cc</sup> Constant Currency




*Note: Comparative information is relative to prior-year first quarter*

*Note: Non-GAAP measures, see reconciliations in the appendix*



# First Quarter 2018 Segment Results

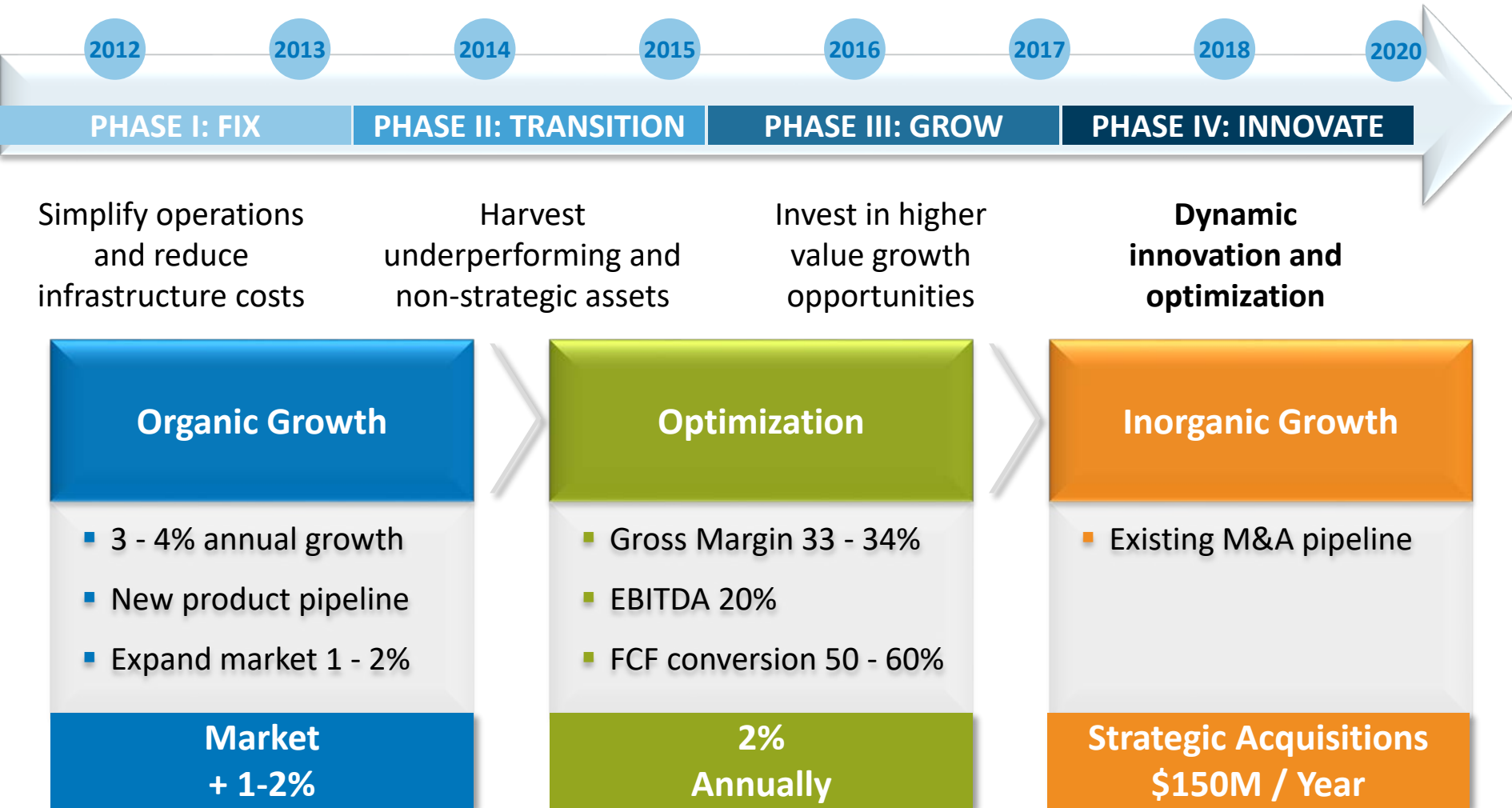
Dollars in Millions

	Segment	Net Sales	Adjusted Gross Profit
	<b>Performance Coatings</b>	<b>\$184.6M</b> Up 35.5% <sup>1</sup> <i>Organic up 6.1%<sup>1</sup></i> <i>Volume 15.1%</i>	<b>\$43.7M</b> 23.7% GPM
	<b>Performance Colors &amp; Glass</b>	<b>\$120.5M</b> Up 8.5% <sup>1</sup> <i>Organic up 2.9%<sup>1</sup></i> <i>Volume 6.5%</i>	<b>\$43.3M</b> 36.0% GPM
	<b>Color Solutions</b>	<b>\$100.4M</b> Up 4.4% <sup>1</sup> <i>Organic up 4.4%<sup>1</sup></i> <i>Volume -15.2%</i>	<b>\$32.7M</b> 32.6% GPM

<sup>1</sup> – Adjusted comparison of prior year quarter at constant currency

Note: Non-GAAP measures, see reconciliations in the appendix

# Ferro's 2020 Vision



Note: Inorganic growth excluded from 2020 vision metrics

# Additional Financials

Dollars in Millions



GAAP	Q1 Total SG&A	Q1 Operating Cash Flow <sup>1</sup>
<b>2018</b>	<b>\$73.1M</b>	<b>\$(34.3)M</b>
% Δ	23.0%	NM

Adjusted	Q1 Adjusted SG&A	Q1 Adjusted Free Cash Flow <sup>2</sup>
<b>2018</b>	<b>\$69.0M</b>	<b>\$(41.1)M</b>
% Δ	14.1% <sup>3</sup>	NM

## Refinancing Capital Structure

Closed on a new  
\$820 million senior-  
secured term loan  
facility  
and  
Increased senior-  
secured revolving  
credit facility to \$500  
million

- \$355 million term loan, maturing 2024 LIBOR + 225bps
- \$235 million term loan, maturing 2024 LIBOR + 225 bps
- \$230 million term loan, maturing 2024 LIBOR + 225 bps
- \$500 million revolving credit line, maturing 2023 LIBOR + 200 bps

<sup>1</sup> – Cash Flows from operating activities




<sup>2</sup> – Adjusted Free Cash Flow from Continuing Operations

<sup>3</sup> – Comparison of prior year at constant currency

Note: Non-GAAP measures, see reconciliations in the appendix

# Full-Year 2018 Guidance

Values in Millions except for EPS

			
	Adjusted EBITDA	Adjusted EPS	Adjusted Free Cash Flow from Operations Conversion
2018 Guidance	\$270M - \$275M	\$1.55 - \$1.60	40% - 45%

Ferro is providing adjusted EBITDA, adjusted diluted EPS and adjusted free cash flow from operations conversion guidance on a continuing operations basis. While it is likely that Ferro could incur charges for items excluded from adjusted EBITDA, adjusted diluted EPS and adjusted cash flow from operations conversion from continuing operations such as mark-to-market adjustments of pension and other postretirement benefit obligations, restructuring and impairment charges, and legal and professional expenses related to certain business development activities, it is not possible, without unreasonable effort, to identify the amount or significance of these items or the potential for other transactions that may impact future GAAP net income and cash flow from operating activities. Management does not believe these items to be representative of underlying business performance. Management is unable to reconcile, without unreasonable effort, the Company's forecasted range of these adjusted non-GAAP financial measures to their most directly comparable GAAP financial measures.

Note: Ferro is providing full-year guidance. Consistent with prior practice, 2018 guidance uses foreign exchange rates as of December 31, 2017, which includes a USD/EUR exchange rate at 1.20.





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# Appendix

# Reconciliation of Q1 Reported to Adjusted Financials

## Ferro Corporation and Subsidiaries Reconciliation of Reported to Adjusted Financials For the Three Months Ended March 31 (Unaudited)

(Dollars in millions)	Net Sales				Gross Profit					Total SG&A	Operating Income	
	PCG	CS	PC	Ferro Total	PCG	CS	PC	Other	Ferro Total	Ferro Total	Ferro Total	
	<b>Q1 2018</b>											
<b>As Reported from Continuing Operations (GAAP)</b>	\$ 120.5	\$ 100.4	\$ 184.6	\$ 405.5	\$ 43.3	\$ 32.1	\$ 43.8	\$ (0.6)	\$ 118.7	\$ 73.1	\$ 45.6	
Special Items:												
Non-GAAP Adjustments <sup>1</sup>					-	0.6	(0.0)	0.4	1.0	(4.1)	5.0	
<b>Total Special Items</b>	-	-	-	-	-	0.6	(0.0)	0.4	1.0	(4.1)	5.0	
Constant Currency FX Impact <sup>2</sup>												
<b>As Adjusted from Continuing Operations (Non-GAAP measure)</b>	\$ 120.5	\$ 100.4	\$ 184.6	\$ 405.5	\$ 43.3	\$ 32.7	\$ 43.7	\$ (0.1)	\$ 119.7	\$ 69.0	\$ 50.6	
	<b>Q1 2017</b>											
<b>As Reported from Continuing Operations (GAAP)</b>	\$ 103.5	\$ 90.5	\$ 126.6	\$ 320.6	\$ 37.4	\$ 28.2	\$ 33.5	\$ (0.3)	\$ 98.8	\$ 59.4	\$ 39.3	
Special Items:												
Non-GAAP Adjustments <sup>1</sup>					0.5	2.1	-	0.1	2.6	(2.6)	5.2	
<b>Total Special Items</b>	-	-	-	-	0.5	2.1	-	0.1	2.6	(2.6)	5.2	
Constant Currency FX Impact <sup>2</sup>	7.6	5.6	9.7	22.9	2.7	1.6	3.1	0.1	7.4	3.6	3.8	
<b>As Adjusted from Continuing Operations (Non-GAAP measure)</b>	\$ 111.1	\$ 96.1	\$ 136.3	\$ 343.5	\$ 40.6	\$ 31.9	\$ 36.5	\$ (0.2)	\$ 108.9	\$ 60.5	\$ 48.3	

1. Non-GAAP adjustments are associated with several different types of non-recurring items that were recorded in "Cost of Sales" and "Selling, general and administrative expenses" during the two periods covered in the table above. For 2018, the adjustments to "Cost of Sales" primarily include costs associated with an acquisition. The adjustments to "Selling, general and administrative expenses" primarily include legal, professional and other expenses related to certain business development activities, as well as fees associated with certain reorganization projects and other legal fees. For 2017, the adjustments to "Cost of Sales" primarily include the amortization of purchase accounting adjustments related to our recent acquisitions. The adjustments to "Selling, general and administrative expenses" primarily include legal, professional and other expenses related to certain business development activities.

2. Reflects the remeasurement of 2017 reported and adjusted results using 2018 average exchange rates, resulting in a constant currency comparative figures to 2018 reported and adjusted results.

It should be noted that adjusted net sales, gross profit, selling, general and administrative expenses and operating income referred to above are financial measures not required by, or presented in accordance with, accounting principles generally accepted in the United States (U.S. GAAP). These non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, the financial measures prepared in accordance with U.S. GAAP and a reconciliation of these financial measures to the most comparable U.S. GAAP financial measures is presented. We believe this data provides investors with additional information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.

# Reconciliation of Q1 Adjusted EBITDA

## Ferro Corporation and Subsidiaries

### Reconciliation of Net income attributable to Ferro Corporation common shareholders to Adjusted EBITDA For the Three Months Ended March 31, 2018 and 2017

(Dollars in millions)	2018	2017
Net income attributable to Ferro Corporation common shareholders (GAAP)	\$ 23.4	\$ 21.9
Less: Net income attributable to noncontrolling interests	0.2	0.2
Restructuring and impairment charges	4.1	3.0
Other expense, net	2.4	0.8
Interest expense	8.0	6.2
Income tax expense	7.5	7.1
Depreciation and amortization	14.3	11.9
Less: interest amortization expense and other	(0.9)	(0.5)
Cost of sales Non-GAAP adjustments	1.0	2.6
SG&A Non-GAAP adjustments	4.1	2.6
<b>Adjusted EBITDA (Non-GAAP measure) <sup>1</sup></b>	<b>64.0</b>	<b>55.9</b>

1. Adjusted EBITDA is net income attributable to Ferro Corporation common shareholders before the effects of income attributable to noncontrolling interest, restructuring and impairment charges, other expense net, interest expense, income tax expense, depreciation and amortization, non-GAAP adjustments to cost of sales and non-GAAP adjustments to SG&A.

It should be noted that adjusted EBITDA is a financial measure not required by, or presented in accordance with, accounting principles generally accepted in the United States (U.S. GAAP). This non-GAAP financial measure should be considered as a supplement to, and not as a substitute for, the financial measures prepared in accordance with U.S. GAAP and a reconciliation of this financial measure to the most comparable U.S. GAAP financial measure is presented. We believe this data provides investors with additional information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.

# Reconciliation of Q1 Adjusted Free Cash Flow

**Ferro Corporation and Subsidiaries**  
**Reconciliation of Net Income attributable to Ferro Corporation common**  
**shareholders to Adjusted Free Cash Flow from Continuing Operations**  
**For the Three Months Ended March 31, 2018 and 2017**

(Dollars in millions)	2018	2017
Net income attributable to Ferro Corporation common shareholders (GAAP)	\$ 23.4	\$ 21.9
Less: Net income attributable to noncontrolling interests	0.2	0.2
Restructuring and impairment charges	4.1	3.0
Other expense, net	2.4	0.8
Interest expense	8.0	6.2
Income tax expense	7.5	7.1
Depreciation and amortization	14.3	11.9
Less: interest amortization expense and other	(0.9)	(0.5)
Cost of sales Non-GAAP adjustments	1.0	2.6
SG&A Non-GAAP adjustments	4.1	2.6
<b>Adjusted EBITDA (Non-GAAP measure)</b>	<b>64.0</b>	<b>55.9</b>
Capital expenditures	(14.5)	(6.8)
Working capital	(67.0)	(35.5)
Cash income taxes	(4.6)	(4.1)
Cash interest	(7.3)	(6.5)
Pension	(0.6)	(0.6)
Incentive compensation	(16.2)	(12.2)
Other	5.0	7.7
<b>Adjusted Free Cash Flow from Continuing Operations (Non-GAAP measure) <sup>2</sup></b>	<b>\$ (41.1)</b>	<b>\$ (2.2)</b>

1. Appendix 2 also provides the reconciliation of net income attributable to Ferro Corporation common shareholders to Adjusted EBITDA.
2. Adjusted free cash flow from continuing operations is adjusted EBITDA less capital expenditures, working capital, cash income taxes, cash interest, pension contributions, incentive compensation payments and other continuing operating cash items.

It should be noted that adjusted free cash flow from continuing operations is a financial measure not required by, or presented in accordance with, accounting principles generally accepted in the United States (U.S. GAAP). This non-GAAP financial measure should be considered as a supplement to, and not as a substitute for, the financial measures prepared in accordance with U.S. GAAP, and a reconciliation of this financial measure to the most comparable U.S. GAAP financial measure is presented. We believe this data provides investors with additional information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.

# Reconciliation of Adjusted Diluted Earnings Per Share

## Ferro Corporation and Subsidiaries

### Reconciliation of Reported to Adjusted Diluted Earnings per Share

For the Three Months Ended March 31, 2018 and 2017

	Q1 2018	Q1 2017
<b>Diluted earnings per share (GAAP)</b>	\$ 0.27	\$ 0.26
Special items:		
Restructuring	0.04	0.02
Other <sup>1</sup>	0.05	0.03
<b>Total special items<sup>2</sup></b>	<b>0.09</b>	<b>0.05</b>
<b>Adjusted diluted earnings per share (Non GAAP measure)</b>	<b>\$ 0.36</b>	<b>\$ 0.31</b>

1. For 2018, the adjustments to “Cost of Sales” primarily include costs associated with an acquisition. The adjustments to “Selling, general and administrative expenses” primarily include legal, professional and other expenses related to certain business development activities, as well as fees associated with certain reorganization projects and other legal fees. The adjustments to “Other expense, net” primarily relate earn out adjustments for acquisitions and other acquisition costs. For 2017, the adjustments to “Cost of Sales” primarily include the amortization of purchase accounting adjustments related to our recent acquisitions. The adjustments to “Selling, general and administrative expenses” primarily include legal, professional and other expenses related to certain business development activities. The adjustments to “Other expense, net” primarily relates to debt extinguishment costs and a reduction of a contingent liability in Argentina.

2. Due to rounding, total earnings per share related to special items does not always add to the total adjusted earnings per share.

It should be noted that adjusted diluted earnings per share items is a financial measure not required by, or presented in accordance with, accounting principles generally accepted in the United States (U.S. GAAP). This non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, the financial measure prepared in accordance with U.S. GAAP, and a reconciliation of this financial measure to the most comparable U.S. GAAP financial measure is presented. We believe this data provides investors with additional information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.