



FERRO CORPORATION REPORTS FOURTH QUARTER AND FULL YEAR 2021 RESULTS

Fourth Quarter Continuing Operations*

- Net Sales increased 2.5% to \$266.3M, or 4.4% on a constant currency basis
- Gross Profit decreased 9.9% to \$71.3M, Gross Profit Margin of 26.8%
- Adjusted Gross Profit Margin of 26.9%
- GAAP diluted EPS of \$0.30, Adjusted diluted EPS of \$0.30
- Net Income from continuing operations of \$25.7M, Adjusted EBITDA of \$39.8M
- Adjusted EBITDA Margin of 14.9%

Full Year Continuing Operations*

- Net Sales increased 17.4% to \$1,126.3M, or 15.4% on a constant currency basis
- Gross Profit increased 17.3% to \$344.6M, Gross Profit Margin of 30.6%
- Adjusted Gross Profit Margin of 31.1%
- GAAP diluted EPS of \$0.86, Adjusted diluted EPS of \$1.28
- Net Income from continuing operations of \$73.3M, Adjusted EBITDA increased 30.3% to \$200.3M
- Adjusted EBITDA Margin improved 176 bps to 17.8%

*Comparative information is relative to prior-year fourth quarter and full year for Continuing Operations

Ferro will not host a Fourth Quarter and Full Year 2021 Earnings teleconference call

Key Results from Continuing Operations*

(amounts in thousands, except EPS)

Sales and Gross Profits

	Q4 2021	% Change	2021	% Change
Net Sales	\$ 266,347	2.5%	\$ 1,126,264	17.4%
Net Sales (constant currency)	266,347	4.4%	1,126,264	15.4%
Gross Profit (GAAP)	71,303	-9.9%	344,619	17.3%
Gross Profit Margin	26.8%	(366) bps	30.6%	(3)bps
Adjusted Gross Profit (constant currency)	71,734	-9.3%	350,151	14.4%
Adjusted Gross Profit Margin	26.9%	(408) bps	31.1%	(28)bps

Net Income from Continuing Operations, Adjusted EBITDA and Adjusted EPS

	Q4 2021	% Change	2021	% Change
Net Income from Continuing Operations	\$ 25,678	294.6%	\$ 73,342	144.1%
Adjusted EBITDA	39,781	-12.1%	200,309	30.3%
Adjusted EBITDA Margin	14.9%	(247) bps	17.8%	176 bps
GAAP diluted EPS	\$ 0.30	N.M.	\$ 0.86	145.7%
Adjusted diluted EPS	0.30	18.2%	1.28	56.6%

* Comparative information is relative to prior-year fourth quarter and full year for Continuing Operations

Fourth Quarter and Full Year 2021 Highlights

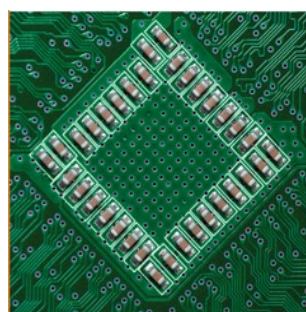
Net sales in the fourth quarter of 2021 increased 2.5% to \$266.3 million and increased 4.4% on a constant currency basis, primarily due to higher demand across all business segments. For the quarter, gross profit decreased 9.9% to \$71.3 million and, on a constant currency basis, decreased 9.3% to \$71.7 million compared to the prior year quarter. Gross Profit Margin in the fourth quarter of 2021 decreased 366 basis points to 26.8% compared to the prior year. The decrease in gross profit was primarily driven by sales volume and mix, and higher raw material costs.

GAAP diluted EPS from continuing operations increased to \$0.30 compared to the prior year quarter of \$0.08 and Adjusted diluted EPS increased by 18.2% to \$0.30. Net Income from continuing operations increased to \$25.7 million compared to \$6.5 million in the prior year quarter. Adjusted EBITDA declined 12.1% to \$39.8 million.

Full-year 2021 net sales increased 17.4% to \$1,126.3 million, an increase of 15.4% on a constant currency basis, primarily due to higher demand across all business segments. Gross profit increased 17.3% to \$344.6 million and, on a constant currency basis, decreased 14.4% to \$350.2 million compared to the prior year. Gross Profit Margin for the year was 30.6%.

The 2021 full-year GAAP Net Income from continuing operations increased 144.1% to \$73.3 million compared to \$30.0 million for the prior year. Adjusted EBITDA from Continuing Operations increased 30.3% to \$200.3 million compared to the prior year. Adjusted EBITDA margins improved 176 basis points in 2021 to 17.8%. Diluted GAAP EPS for Continuing Operations was \$0.86 compared to \$0.35 and Adjusted EPS increased 56.6% to \$1.28 compared to \$0.81 for the prior year.

Segment Results Continuing Operations * (amounts in thousands, except EPS)



Functional Coatings

	Q4 2021	% Change	2021	% Change
Net Sales	\$ 172,764	3.5%	\$ 732,063	20.4%
Net Sales (<i>Constant Currency</i>)	172,764	5.7%	732,063	18.4%
Gross Profit (GAAP)	46,128	-7.3%	218,619	24.5%
Gross Profit Margin	26.7%	(310) bps	29.9%	100 bps
Adjusted Gross Profit (<i>Constant Currency</i>)	46,227	-7.6%	222,150	20.7%
Adj. Gross Profit Margin (<i>Constant Currency</i>)	26.8%	(383) bps	30.3%	60 bps



Color Solutions

	Q4 2021	% Change	2021	% Change
Net Sales	\$ 93,583	0.5%	\$ 394,201	12.4%
Net Sales (<i>Constant Currency</i>)	93,583	2.1%	394,201	10.4%
Gross Profit (GAAP)	25,206	-15.6%	128,356	7.9%
Gross Profit Margin	26.9%	(520) bps	32.6%	(130) bps
Adjusted Gross Profit (<i>Constant Currency</i>)	25,466	-13.7%	129,252	5.7%
Adj. Gross Profit Margin (<i>Constant Currency</i>)	27.2%	(499) bps	32.8%	(146) bps

* Comparative information is relative to prior-year fourth quarter and full year for Continuing Operations

Transaction Update

As previously announced, on May 11, 2021, Ferro Corporation entered into a definitive agreement to be acquired by an affiliate of Prince International Corporation (“Prince”), a portfolio company of American Securities LLC. We anticipate the transaction to close in the first half of the second quarter of 2022, subject to satisfaction of customary closing conditions, including receipt of regulatory approvals.

Due to the pending transaction, Ferro will not host a fourth quarter and full year 2021 earnings teleconference.

Constant currency

Constant currency results reflect the remeasurement of 2020 reported and adjusted local currency results using 2021 exchange rates, which produces constant currency comparatives for 2021 reported and adjusted results. These non-GAAP financial measures should not be considered as a substitute for the measures of financial performance prepared in accordance with GAAP.

About Ferro Corporation

Ferro Corporation (www.ferro.com) is a leading global supplier of technology-based functional coatings and color solutions. Ferro supplies functional coatings for glass, metal, ceramic and other substrates and color solutions in the form of specialty pigments and colorants for a broad range of industries and applications. Ferro products are sold into the building and construction, automotive, electronics, industrial products, household furnishings and appliance markets. The Company’s reportable segments include: Functional Coatings and Color Solutions. Headquartered in Mayfield Heights, Ohio, the Company has approximately 3,600 associates globally and reported 2021 sales of \$1,126 million.

Cautionary Note on Forward-Looking Statements

This communication contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. We intend for these forward-looking statements to be covered by the safe harbor provisions of the federal securities laws relating to forward-looking statements. These forward-looking statements include statements relating to the expected timing, completion and effects of the proposed merger, as well as other statements representing management’s beliefs about, future events, transactions, strategies, operations and financial results, including, without limitation, our expectations with respect to the costs and other anticipated financial impacts of the merger; future financial and operating results of Ferro Corporation (“Ferro”); Ferro’s plans, objectives, expectations and intentions with respect to future operations and services; required approvals to complete the merger by our shareholders and by governmental regulatory authorities, and the timing and conditions for such approvals; the stock price of Ferro prior to the consummation of the transactions; and the satisfaction of the closing conditions to the proposed merger. Such forward-looking statements often contain words such as “assume,” “will,” “anticipate,” “believe,” “predict,” “project,” “potential,” “contemplate,” “plan,” “forecast,” “estimate,” “expect,” “intend,” “is targeting,” “may,” “should,” “would,” “could,” “goal,” “seek,” “hope,” “aim,” “continue” and other similar words or expressions or the negative thereof or other variations thereon. Forward-looking statements are made based upon management’s current expectations and beliefs and are not guarantees of future performance. Such forward-looking statements involve numerous assumptions, risks and uncertainties that may cause actual results to differ materially from those expressed or implied in any such statements. Our actual business, financial condition or results of operations may differ materially from those suggested by forward-looking statements as a result of risks and uncertainties which include, among others, those risks and uncertainties

Cautionary Note on Forward-Looking Statements (Con't)

described in any of our filings with the Securities and Exchange Commission (the "SEC"). Certain other factors which may impact our business, financial condition or results of operations or which may cause actual results to differ from such forward-looking statements are discussed or included in our periodic reports filed with the SEC and are available on our website at www.ferro.com under "Investors." You are urged to carefully consider all such factors. Although it is believed that the expectations reflected in such forward-looking statements are reasonable and are expressed in good faith, such expectations may not prove to be correct and persons reading this communication are therefore cautioned not to place undue reliance on these forward-looking statements which speak only to expectations as of the date of this communication. We do not undertake or plan to update or revise forward-looking statements to reflect actual results, changes in plans, assumptions, estimates or projections, or other circumstances occurring after the date of this communication, even if such results, changes or circumstances make it clear that any forward-looking information will not be realized. If we make any future public statements or disclosures which modify or impact any of the forward-looking statements contained in or accompanying this communication, such statements or disclosures will be deemed to modify or supersede such statements in this communication.

Ferro Corporation

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Table 1
Ferro Corporation and Subsidiaries
Condensed Consolidated Statements of Operations (unaudited)

(In thousands, except per share amounts)

	Three Months Ended December 31, (Unaudited)		Twelve Months Ended December 31,	
	2021	2020	2021	2020
Net sales	\$ 266,347	\$ 259,950	\$ 1,126,264	\$ 958,954
Cost of sales	195,044	180,842	781,645	665,198
Gross profit	71,303	79,108	344,619	293,756
Selling, general and administrative expenses	50,425	48,006	217,809	202,413
Restructuring and impairment charges	6,654	5,194	14,410	17,425
Other expense (income):				
Interest expense	8,287	5,406	28,166	21,880
Interest earned	(101)	(960)	(838)	(1,995)
Foreign currency losses (gains), net	687	2,349	5,480	3,627
Loss on extinguishment of debt	321	—	2,302	—
Miscellaneous income, net	(29,917)	8,109	(35,267)	5,505
Income before income taxes	34,947	11,004	112,557	44,901
Income tax expense	9,269	4,497	39,215	14,861
Income from continuing operations	25,678	6,507	73,342	30,040
Income (loss) from discontinued operations, net of income	(10,285)	11,653	77,199	14,003
Net income	15,393	18,160	150,541	44,043
Less: Net income attributable to noncontrolling interests	409	418	1,710	1,244
Net income attributable to Ferro Corporation common shareholders	\$ 14,984	\$ 17,742	\$ 148,831	\$ 42,799
Earnings (loss) per share attributable to Ferro Corporation common shareholders:				
Basic earnings:				
Continuing operations	\$ 0.30	\$ 0.08	\$ 0.86	\$ 0.35
Discontinued operations	(0.13)	0.14	0.93	0.17
Diluted earnings:				
Continuing operations	\$ 0.30	\$ 0.08	\$ 0.86	\$ 0.35
Discontinued operations	(0.13)	0.14	0.92	0.17
Shares outstanding:				
Weighted-average basic shares	82,963	82,325	82,711	82,232
Weighted-average diluted shares	83,848	82,938	83,597	83,024
End-of-period basic shares	83,623	82,365	83,623	82,365

Table 2
Ferro Corporation and Subsidiaries
Segment Net Sales, Gross Profit and SG&A (unaudited)

(Dollars in thousands)	Three Months Ended December 31, (Unaudited)		Twelve Months Ended December 31,	
	2021	2020	2021	2020
Segment Net Sales				
Functional Coatings	\$ 172,764	\$ 166,867	\$ 732,063	\$ 608,192
Color Solutions	93,583	93,083	394,201	350,762
Total segment net sales	<u>\$ 266,347</u>	<u>\$ 259,950</u>	<u>\$ 1,126,264</u>	<u>\$ 958,954</u>
Segment Gross Profit				
Functional Coatings	\$ 46,128	\$ 49,759	\$ 218,619	\$ 175,601
Color Solutions	25,206	29,849	128,356	119,071
Other costs of sales	(31)	(500)	(2,356)	(916)
Total gross profit	<u>\$ 71,303</u>	<u>\$ 79,108</u>	<u>\$ 344,619</u>	<u>\$ 293,756</u>
Selling, general and administrative expenses				
Strategic services	\$ 30,231	\$ 24,883	\$ 101,847	\$ 94,357
Functional services	18,119	20,405	95,349	92,679
Incentive compensation	3,424	1,270	15,828	7,379
Stock-based compensation	(1,349)	1,448	4,785	7,998
Total selling, general and administrative expenses	<u>\$ 50,425</u>	<u>\$ 48,006</u>	<u>\$ 217,809</u>	<u>\$ 202,413</u>

Table 3
Ferro Corporation and Subsidiaries
Condensed Consolidated Balance Sheets (unaudited)

(Dollars in thousands)	December 31, 2021	December 31, 2020
ASSETS		
Current assets		
Cash and cash equivalents	\$ 71,493	\$ 174,077
Accounts receivable, net	130,954	137,008
Inventories	262,669	260,332
Other receivables	61,188	72,272
Other current assets	13,478	18,261
Current assets held-for-sale	—	307,854
Total current assets	<u>539,782</u>	<u>969,804</u>
Other assets		
Property, plant and equipment, net	321,756	330,045
Goodwill	171,844	175,351
Intangible assets, net	106,677	119,500
Deferred income taxes	98,199	115,962
Operating leased assets	13,186	15,446
Other non-current assets	38,580	80,618
Non-current assets held-for-sale	—	154,207
Total assets	<u>\$ 1,290,024</u>	<u>\$ 1,960,933</u>
LIABILITIES AND EQUITY		
Current liabilities		
Loans payable and current portion of long-term debt	\$ 8,964	\$ 8,839
Accounts payable	136,599	135,296
Accrued payrolls	31,416	27,166
Accrued expenses and other current liabilities	127,170	124,770
Current liabilities held-for-sale	—	107,545
Total current liabilities	<u>304,149</u>	<u>403,616</u>
Other liabilities		
Long-term debt, less current portion	251,310	791,509
Postretirement and pension liabilities	133,116	181,610
Operating leased non-current liabilities	8,849	10,064
Other non-current liabilities	44,497	62,050
Non-current liabilities held-for-sale	—	71,149
Total liabilities	<u>741,921</u>	<u>1,519,998</u>
Equity		
Total Ferro Corporation shareholders' equity	538,384	429,967
Noncontrolling interests	9,719	10,968
Total liabilities and equity	<u>\$ 1,290,024</u>	<u>\$ 1,960,933</u>

Table 4
Ferro Corporation and Subsidiaries
Condensed Consolidated Statements of Cash Flows (unaudited)

(Dollars in thousands)

	Three Months Ended December 31, (Unaudited)		Twelve Months Ended December 31,	
	2021	2020	2021	2020
Cash flows from operating activities				
Net income	\$ 15,393	\$ 18,160	\$ 150,541	\$ 44,043
Loss (gain) on sale of assets	4,772	168	(93,974)	246
Depreciation and amortization	10,116	9,636	40,214	40,289
Interest amortization	489	1,108	2,090	3,974
Restructuring and impairment	2,903	2,843	3,027	9,787
Loss on extinguishment of debt	321	—	2,302	—
Changes in current assets and liabilities:				
Accounts receivable	(4,926)	(33,779)	(127,473)	(141,330)
Inventories	2,981	26,463	(18,076)	36,485
Accounts payable	10,084	51,905	10,859	(26,671)
Other current assets and liabilities, net	(46,789)	7,701	(16,806)	18,451
Other adjustments, net	(3,998)	9,084	(26,307)	1,534
Net cash provided by (used in) operating activities	3,646	93,289	(61,303)	(13,192)
Cash flows from investing activities				
Capital expenditures for property, plant and equipment and other long-lived assets	(4,275)	(10,102)	(29,959)	(31,783)
Collections of financing receivables	27,433	32,670	118,095	129,969
Proceeds from sale of businesses, net	(13,143)	—	402,087	—
Business acquisitions, net of cash acquired	2,200	—	—	—
Other investing activities	—	4	436	807
Net cash provided by investing activities	12,215	22,572	490,659	98,993
Cash flows from financing activities				
Net borrowings (payments) under loans payable	125	(26)	94	(709)
Principal payments on term loan facility - Amended Credit Facility	(102,050)	(2,050)	(543,200)	(8,200)
Proceeds from revolving credit facility - Amended Credit Facility	—	774	50,000	399,110
Principal payments on revolving credit facility - Amended Credit Facility	—	(6,514)	(50,000)	(399,110)
Proceeds from exercise of stock options	11,575	756	11,575	756
Other financing activities	(2,499)	(1,167)	(6,521)	(1,895)
Net cash used in financing activities	(92,849)	(8,227)	(538,052)	(10,048)
Effect of exchange rate changes on cash and cash equivalents	(273)	1,948	(2,088)	2,122
Increase (decrease) in cash and cash equivalents	(77,261)	109,582	(110,784)	77,875
Cash and cash equivalents at beginning of period	148,754	72,695	182,277	104,402
Cash and cash equivalents at end of period	71,493	182,277	71,493	182,277
Less: Cash and cash equivalents of discontinued operations at end of period	—	8,200	—	8,200
Cash and cash equivalents of continuing operations at end of period	\$ 71,493	\$ 174,077	\$ 71,493	\$ 174,077
Cash paid during the period for:				
Interest	\$ 7,313	\$ 11,109	\$ 29,256	\$ 31,285
Income taxes	7,445	6,643	24,082	19,648

Table 5
Ferro Corporation and Subsidiaries
Supplemental Information
Reconciliation of Reported Income to Adjusted Income
For the Three Months Ended December 31 (unaudited)

(Dollars in thousands, except per share amounts)

	Cost of sales	Selling general and administrative expenses	Restructuring and impairment charges	Other expense, net	Income tax expense ⁶	Net income attributable to common shareholders	Diluted earnings per share
2021							
As reported	\$ 195,044	\$ 50,425	\$ 6,654	\$ (20,723)	\$ 9,269	\$ 25,269	\$ 0.30
Adjustments:							
Restructuring	—	—	(6,654)	—	—	6,654	0.08
Pension ¹	—	—	—	25,563	—	(25,563)	(0.31)
Acquisition related costs ²	—	(4,872)	—	1,352	—	3,520	0.04
Costs related to optimization projects ⁴	(428)	(1,820)	—	(7,601)	—	9,849	0.12
Costs related to divested businesses and assets	—	(1,675)	—	(4,000)	—	5,675	0.07
Tax on adjustments	—	—	—	—	(142)	142	—
Total adjustments ⁷	(428)	(8,367)	(6,654)	15,314	(142)	277	—
As adjusted	\$ 194,616	\$ 42,058	\$ —	\$ (5,409)	\$ 9,127	\$ 25,546	\$ 0.30
2020							
As reported	\$ 180,842	\$ 48,006	\$ 5,194	\$ 14,904	\$ 4,497	\$ 6,226	\$ 0.08
Adjustments:							
Restructuring	—	—	(5,194)	—	—	5,194	0.06
Pension ¹	—	—	—	(10,029)	—	10,029	0.12
Acquisition related costs ³	—	(146)	—	653	—	(507)	(0.01)
Costs related to optimization projects ⁵	(1,494)	(2,068)	—	—	—	3,562	0.04
Costs related to divested businesses and assets	—	(799)	—	(172)	—	971	0.01
Tax on adjustments	—	—	—	—	4,583	(4,583)	(0.06)
Total adjustments ⁷	(1,494)	(3,013)	(5,194)	(9,548)	4,583	14,666	0.18
As adjusted	\$ 179,348	\$ 44,993	\$ —	\$ 5,356	\$ 9,080	\$ 20,892	\$ 0.26

(1) The adjustments relate to pension and other postretirement benefit mark-to-market adjustments and settlements.

(2) The adjustments to "Selling general and administrative expenses" primarily include legal, professional and other expenses related to acquisition costs.

(3) The adjustments to "Selling general and administrative expenses" primarily include legal, professional and other expenses related to acquisition costs.

(4) Costs related to Optimization projects of \$9.8 million include costs associated with our Americas manufacturing optimization initiative of \$1.0 million, which is comprised of costs for process development and production testing, professional fees for legal and tax services, supplies and equipment commissioning, and utility setup and testing. The remaining \$8.9 million of costs relate to global optimization projects and discrete projects at our previous acquisitions.

- (5) Costs related to Optimization projects of \$3.6 million include costs associated with our Americas manufacturing optimization initiative of \$2.5 million, which is comprised of costs for process development and production testing, professional fees for legal and tax services, supplies and equipment commissioning, and utility setup and testing. The remaining \$1.1 million of costs relate to global optimization projects and discrete projects at our previous acquisitions.
- (6) Income tax expense reflects the reported expense, adjusted for adjustments being tax effected at the respective statutory rate where the item originated.
- (7) Due to rounding, total earnings per share related to adjustments does not always add to the total adjusted earnings per share.

It should be noted that adjusted net income, earnings per share and other adjusted items 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 by excluding these costs, our adjusted earnings per share better reflect our underlying business performance, as well as being considered in our internal evaluation of financial performance. These costs are ones that we have concluded are not normal, recurring cash operating expenses necessary to operate our business, and we believe it is useful to present this non-GAAP financial measure to provide investors greater comparability of our base business.

Table 6
Ferro Corporation and Subsidiaries
Supplemental Information
Reconciliation of Reported Income to Adjusted Income
For the Twelve Months Ended December 31 (unaudited)

	(Dollars in thousands, except per share amounts)					Net income attributable to common shareholders	Diluted earnings per share
	Cost of sales	Selling general and administrative expenses	Restructuring and impairment charges	Other expense, net	Income tax expense ⁶		
	2021						
As reported	\$ 781,645	\$ 217,809	\$ 14,410	\$ (157)	\$ 39,215	\$ 71,696	\$ 0.86
Adjustments:							
Restructuring	—	—	(14,410)	—	—	14,410	0.17
Pension ¹	—	—	—	25,563	—	(25,563)	(0.31)
Acquisition related costs ²	—	(17,830)	—	(5,623)	—	23,453	0.28
Costs related to optimization projects ⁴	(5,530)	(6,218)	—	(7,601)	—	19,349	0.23
Costs related to divested businesses and assets	—	(3,717)	—	(4,086)	—	7,803	0.09
Tax on adjustments	—	—	—	—	4,728	(4,728)	(0.06)
Total adjustments ⁷	(5,530)	(27,765)	(14,410)	8,253	4,728	34,724	0.42
As adjusted	\$ 776,115	\$ 190,044	\$ —	\$ 8,096	\$ 43,943	\$ 106,420	\$ 1.28
	2020						
As reported	\$ 665,198	\$ 202,413	\$ 17,425	\$ 29,017	\$ 14,861	\$ 28,967	\$ 0.35
Adjustments:							
Restructuring	—	—	(17,425)	—	—	17,425	0.21
Pension ¹	—	—	—	(10,029)	—	10,029	0.12
Acquisition related costs ³	(9)	(1,369)	—	653	—	725	0.01
Costs related to optimization projects ⁵	(6,156)	(9,296)	—	—	—	15,452	0.19
Costs related to divested businesses and assets	—	(4,805)	—	(479)	—	5,284	0.06
Other	(453)	—	—	(1,044)	—	1,497	0.02
Tax on adjustments	—	—	—	—	11,842	(11,842)	(0.14)
Total adjustments ⁷	\$ (6,618)	\$ (15,470)	\$ (17,425)	\$ (10,899)	\$ 11,842	\$ 38,570	\$ 0.46
As adjusted	\$ 658,580	\$ 186,943	\$ —	\$ 18,118	\$ 26,703	\$ 67,537	\$ 0.81

(1) The adjustments relate to pension and other postretirement benefit mark-to-market adjustments and settlements.

(2) The adjustments to "Selling general and administrative expenses" primarily include legal, professional and other expenses related to acquisition costs.

(3) The adjustments to "Selling general and administrative expenses" primarily include legal, professional and other expenses related to acquisition costs.

(4) Cost related to Optimization projects of \$19.3 million includes costs associated with our Americas manufacturing optimization initiative of \$6.5 million, which is comprised of costs for process development and production testing, professional fees for legal and tax services, supplies and equipment commissioning, and utility setup and testing. The remaining \$12.8 million of costs relate to global optimization projects and discrete projects at our previous acquisitions.

- (5) Cost related to Optimization projects of \$15.5 million includes costs associated with our Americas manufacturing optimization initiative of \$9.8 million, which is comprised of costs for process development and production testing, professional fees for legal and tax services, supplies and equipment commissioning, and utility setup and testing. The remaining \$5.7 million of costs relate to global optimization projects and discrete projects at our previous acquisitions.
- (6) Income tax expense reflects the reported expense, adjusted for adjustments being tax effected at the respective statutory rate where the item originated.
- (7) Due to rounding, total earnings per share related to adjustments does not always add to the total adjusted earnings per share.

It should be noted that adjusted net income, earnings per share and other adjusted items 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 by excluding these costs, our adjusted earnings per share better reflect our underlying business performance, as well as being considered in our internal evaluation of financial performance. These costs are ones that we have concluded are not normal, recurring cash operating expenses necessary to operate our business, and we believe it is useful to present this non-GAAP financial measure to provide investors greater comparability of our base business.

Table 7
Ferro Corporation and Subsidiaries
Supplemental Information
Constant Currency Schedule of Adjusted Operating Profit (unaudited)

(Dollars in thousands)

	Three Months Ended December 31,			
	2020	Adjusted 2020 ¹	2021	2021 vs Adjusted 2020
Segment net sales				
Functional Coatings	\$ 166,867	\$ 163,403	\$ 172,764	\$ 9,361
Color Solutions	93,083	91,619	93,583	1,964
Total segment net sales	<u>\$ 259,950</u>	<u>\$ 255,022</u>	<u>\$ 266,347</u>	<u>\$ 11,325</u>
Segment adjusted gross profit				
Functional Coatings	\$ 51,157	\$ 50,014	\$ 46,227	\$ (3,787)
Color Solutions	29,851	29,502	25,466	(4,036)
Other costs of sales	(407)	(398)	41	439
Total adjusted gross profit ²	<u>\$ 80,601</u>	<u>\$ 79,118</u>	<u>\$ 71,734</u>	<u>\$ (7,384)</u>
Adjusted selling, general and administrative expenses				
Strategic services	\$ 22,643	\$ 22,215	\$ 23,310	\$ 1,095
Functional services	19,647	19,406	16,667	(2,739)
Incentive compensation	1,244	1,143	3,424	2,281
Stock-based compensation	1,448	1,448	(1,349)	(2,797)
Total adjusted selling, general and administrative expenses ³	<u>\$ 44,982</u>	<u>\$ 44,212</u>	<u>\$ 42,052</u>	<u>\$ (2,160)</u>
Adjusted operating profit	\$ 35,619	\$ 34,906	\$ 29,682	\$ 26,707
Adjusted operating profit as a % of net sales	13.7 %	13.7 %	11.1 %	

(1) Reflects the remeasurement of 2020 reported and adjusted local currency results using 2021 exchange rates, resulting in constant currency comparative figures to 2021 reported and adjusted results. See Table 5 for Non-GAAP adjustments applicable to the three month period.

(2) Refer to Table 7 for the reconciliation of adjusted gross profit for the three months ended December 31, 2021 and 2020, respectively.

(3) Refer to Table 5 for the reconciliation of adjusted SG&A expenses for the three months ended December 31, 2021 and 2020, respectively.

It should be noted that adjusted net sales, gross profit, SG&A expenses, and operating profit 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 are presented within this table, as well as Table 5 and Table 7. We believe this data provides investors with additional useful information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.

Table 8
Ferro Corporation and Subsidiaries
Supplemental Information
Constant Currency Schedule of Adjusted Operating Profit (unaudited)

(Dollars in thousands)

	Twelve Months Ended December 31,			
	2020	Adjusted 2020 ¹	2021	2021 vs Adjusted 2020
Segment net sales				
Functional Coatings	\$ 608,192	\$ 618,504	\$ 732,063	\$ 113,559
Color Solutions	350,762	357,044	394,201	37,157
Total segment net sales	<u>\$ 958,954</u>	<u>\$ 975,548</u>	<u>\$ 1,126,264</u>	<u>\$ 150,716</u>
Segment adjusted gross profit				
Functional Coatings	\$ 181,059	\$ 183,989	\$ 222,150	\$ 38,161
Color Solutions	119,550	122,267	129,252	6,985
Other costs of sales	(237)	(233)	(1,251)	(1,018)
Total adjusted gross profit ²	<u>\$ 300,372</u>	<u>\$ 306,023</u>	<u>\$ 350,151</u>	<u>\$ 44,128</u>
Adjusted selling, general and administrative expenses				
Strategic services	\$ 91,862	\$ 93,739	\$ 94,359	\$ 620
Functional services	79,699	81,106	75,071	(6,035)
Incentive compensation	7,380	7,303	15,825	8,522
Stock-based compensation	7,998	7,998	4,785	(3,213)
Total adjusted selling, general and administrative ³	<u>\$ 186,939</u>	<u>\$ 190,146</u>	<u>\$ 190,040</u>	<u>\$ (106)</u>
Adjusted operating profit	\$ 113,433	\$ 115,877	\$ 160,111	\$ 44,234
Adjusted operating profit as a % of net sales	11.8%	11.9%	14.2%	

(1) Reflects the remeasurement of 2020 reported and adjusted local currency results using 2021 exchange rates, resulting in constant currency comparative figures to 2021 reported and adjusted results. See Table 6 for Non-GAAP adjustments applicable to the twelve month period.

(2) Refer to Table 7 for the reconciliation of adjusted gross profit for the twelve months ended December 31, 2021 and 2020, respectively.

(3) Refer to Table 6 for the reconciliation of adjusted SG&A expenses for the twelve months ended December 31, 2021 and 2020, respectively.

It should be noted that adjusted net sales, gross profit, SG&A expenses, and operating profit 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 are presented within this table, as well as Table 6 and Table 7. We believe this data provides investors with additional useful information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.

Table 9
Ferro Corporation and Subsidiaries
Supplemental Information
Reconciliation of Net Income Attributable to Ferro Corporation
Common Shareholders to Adjusted EBITDA (unaudited)

(Dollars in thousands)

	Three Months Ended December 31, (Unaudited)		Twelve Months Ended December 31,	
	2021	2020	2021	2020
Net income attributable to Ferro Corporation common shareholders	\$ 25,269	\$ 6,089	\$ 71,632	\$ 28,796
Net income attributable to noncontrolling interests	409	418	1,710	1,244
Restructuring and impairment charges	6,654	5,194	14,410	17,425
Other (income) expense, net	(29,010)	9,498	(28,323)	7,137
Interest expense	8,287	5,406	28,166	21,880
Income tax expense	9,269	4,497	39,215	14,861
Depreciation and amortization	10,597	10,744	42,294	44,263
Less: interest amortization expense and other	(489)	(1,108)	(2,090)	(3,974)
Cost of sales adjustments ¹	428	1,494	5,530	6,618
SG&A adjustments ¹	8,367	3,013	27,765	15,470
Adjusted EBITDA	<u>\$ 39,781</u>	<u>\$ 45,245</u>	<u>\$ 200,309</u>	<u>\$ 153,720</u>
Net sales	\$ 266,347	\$ 259,950	\$ 1,126,264	\$ 958,954
Adjusted EBITDA as a % of net sales	14.9 %	17.4 %	17.8 %	16.0 %

(1) For details of Non-GAAP adjustments, refer to Table 5 and Table 6 for the reconciliation of adjusted cost of sales and adjusted SG&A for the three and twelve months ended December 31, 2021 and 2020, respectively.

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 useful information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.

Table 10
Ferro Corporation and Subsidiaries
Supplemental Information
Change in Net Debt (unaudited)

(Dollars in thousands)	Three Months Ended		Twelve Months Ended	
	December 31, (Unaudited)		December 31,	
	2021	2020	2021	2020
Beginning of period				
Gross debt	\$ 362,825	\$ 811,556	\$ 804,067	\$ 811,450
Cash	148,754	64,495	174,077	96,202
Debt, net of cash	214,071	747,061	629,990	715,248
Unamortized debt issuance costs	1,242	4,017	3,719	3,885
Debt, net of cash and unamortized debt issuance costs	212,829	743,044	626,271	711,363
End of period				
Gross debt	243,146	800,348	243,146	800,348
Cash	71,493	174,077	71,493	174,077
Debt, net of cash	171,653	626,271	171,653	626,271
Unamortized debt issuance costs	800	3,719	800	3,719
Debt, net of cash and unamortized debt issuance costs	170,853	622,552	170,853	622,552
Unamortized debt issuance costs	(442)	(298)	(2,919)	(166)
FX on cash	(273)	1,948	(2,088)	2,122
Period decrease in debt, net of cash, unamortized debt issuance costs and FX	\$ 42,691	\$ 118,842	\$ 460,425	\$ 86,855
Period decrease in debt, net of cash and unamortized debt issuance costs	\$ 41,976	\$ 120,492	\$ 455,418	\$ 88,811

It should be noted that the change in net debt 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 useful information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.

Table 11
Ferro Corporation and Subsidiaries
Supplemental Information
Reconciliation of Net Cash Used in Operating Activities (GAAP) to
Adjusted Free Cash Flow (Non-GAAP) (unaudited)

(Dollars in thousands)

	Three Months Ended		Twelve Months Ended	
	December 31, (Unaudited)		December 31,	
	2021	2020	2021	2020
Cash flows from operating activities				
Net income	\$ 15,393	\$ 18,160	\$ 150,541	\$ 44,043
Loss (gain) on sale of assets	4,772	168	(93,974)	246
Depreciation and amortization	10,116	9,636	40,214	40,289
Interest amortization	489	1,108	2,090	3,974
Restructuring and impairment	2,903	2,843	3,027	9,787
Loss on extinguishment of debt	321	—	2,302	—
Accounts receivable	(4,926)	(33,779)	(127,473)	(141,330)
Inventories	2,981	26,463	(18,076)	36,485
Accounts payable	10,084	51,905	10,859	(26,671)
Other current assets and liabilities, net	(46,789)	7,701	(16,806)	18,451
Other adjustments, net	(3,998)	9,084	(26,307)	1,534
Net cash provided by (used in) operating activities (GAAP)	(8,654)	93,289	(73,603)	(13,192)
Less: Capital Expenditures	(4,275)	(10,102)	(29,959)	(31,783)
Plus: Cash collected for AR securitization	27,433	32,670	118,095	129,969
Adjusted Free Cash Flow (Non-GAAP)	\$ 14,504	\$ 115,857	\$ 14,533	\$ 84,994
Net Income Attributable to Ferro Corporation Common Shareholders	\$ 14,984	\$ 17,742	\$ 148,831	\$ 42,799
Adjusted Free Cash Flow Conversion of Net Income Attributable to Ferro Corporation Common Shareholders	96.8 %	653.0 %	9.8%	198.6%

It should be noted that Adjusted Free Cash Flow is a financial measure not required by, or presented in accordance with, accounting principles generally accepted in the United States (U.S. GAAP). The 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 these financial measures to the most comparable U.S. GAAP financial measures is presented. Adjusted Free Cash Flow (Non-GAAP) is calculated as Cash Flow used in operating activities (GAAP), less capital expenditures and adding cash collected from the Accounts Receivable Securitization program. We believe this data provides investors with additional useful information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.

Table 12
Ferro Corporation and Subsidiaries
Supplemental Information
Reconciliation of Net Sales and Gross Profit
Adjusted Net Sales and Gross Profit (non-GAAP) (unaudited)

	Net Sales	Gross Profit
	2021	
As Reported (GAAP)	\$ 1,126,264	\$ 344,619
Non-GAAP Adjustments ¹	—	5,530
Constant Currency FX Impact ²	—	—
As Adjusted from Continuing Operations (Non-GAAP measure)	<u>\$ 1,126,264</u>	<u>\$ 350,149</u>
	2020	
As Reported (GAAP)	\$ 958,954	\$ 293,756
Non-GAAP Adjustments ¹	—	6,618
Constant Currency FX Impact ²	16,593	5,649
As Adjusted from Continuing Operations (Non-GAAP measure)	<u>\$ 975,547</u>	<u>\$ 306,023</u>
	2019	
As Reported (GAAP)	\$ 1,014,457	\$ 307,976
Non-GAAP Adjustments ¹	—	7,197
Constant Currency FX Impact ²	(15,002)	(4,565)
As Adjusted from Continuing Operations (Non-GAAP measure)	<u>\$ 999,455</u>	<u>\$ 310,608</u>
	2018	
As Reported (GAAP)	\$ 1,074,696	\$ 338,389
Non-GAAP Adjustments ¹	—	6,347
Constant Currency FX Impact ²	13,971	3,910
As Adjusted from Continuing Operations (Non-GAAP measure)	<u>\$ 1,088,667</u>	<u>\$ 348,646</u>
	2017	
As Reported (GAAP)	\$ 996,382	\$ 326,719
Non-GAAP Adjustments ¹	—	8,774
Constant Currency FX Impact ²	2,289	(583)
As Adjusted from Continuing Operations (Non-GAAP measure)	<u>\$ 998,671</u>	<u>\$ 334,910</u>

(1) For 2021 and 2020, refer to Table 6 for a description of the Non-GAAP adjustments that were recorded in "Cost of Sales". For 2019, 2018, and 2017, the Non-GAAP adjustments relate to acquisitions related costs, costs related to certain optimization projects, and costs related to divested businesses and assets.

(2) Reflects the remeasurement of 2020, 2019, 2018 and 2017 reported and adjusted results using 2021 average exchange rates, resulting in a constant currency comparative figures to 2021 reported and adjusted results.

It should be noted that adjusted net sales and adjusted gross profit 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 useful information on the underlying operations and trends of the business and enables period-to-period comparability of financial performance.