FERRO CORP
Form 10-K/A
March 19, 2004

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K/A

(MARK ONE)

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

For the fiscal year ended December 31, 2003
OR

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

For the transition period from ____ to ____

COMMISSION FILE NUMBER 1-584

FERRO CORPORATION

(Exact name of registrant as specified in its charter)

AN OHIO CORPORATION 1000 LAKESIDE AVENUE,
CLEVELAND, OH 44114 I.R.S. NO. 34-0217820
(Address of principal executive offices)

REGISTRANT S TELEPHONE NUMBER, INCLUDING AREA CODE: 216-641-8580
SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Title of Class	Name of Exchange on which Registered
Common Stock, par value $1.00	New York Stock Exchange
Common Stock Purchase Rights	New York Stock Exchange

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:
9 1/8% Senior Notes due January 1, 2009
7 5/8% Debentures due May 1, 2013
7 3/8% Debentures due November 1, 2015
8% Debentures due June 15, 2025
7 1/8% Debentures due April 1, 2028
Series A ESOP Convertible Preferred Stock, without Par Value

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 [X] No [ ]

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

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes [X] No [ ]

On June 30, 2003 there were 40,754,825 shares of Ferro Common Stock, par value $1.00 outstanding. As of the same date, the aggregate market value (based on closing sale price) of Ferro s Common Stock held by non-affiliates was $918,206,207**.**

On January 30, 2004 there were 41,677,903 shares of Ferro Common Stock, par value $1.00 outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of Ferro Corporation s Proxy Statement for the Annual Meeting of Shareholders on April 30, 2004 (incorporated into Part III of this Form 10-K).

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Explanatory Note

This Form 10-K/A for the fiscal year ended December 31, 2003 is being filed solely for the purpose of correcting certain typographical errors in Item 8 to the Form 10-K filed electronically with the U.S. Securities and Exchange Commission on March 12, 2004.

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PART I

Item 1- *Business*

Ferro Corporation (Ferro or the Company), incorporated under the laws of Ohio in 1919, is a leading global producer of a diverse array of performance materials sold to a broad range of manufacturers in approximately 30 markets throughout the world. The Company applies certain core scientific expertise in organic chemistry, inorganic chemistry, polymer science and material science to develop coatings for ceramics and metal; materials for passive electronic components; pigments; enamels, pastes and additives for the glass market; specialty plastic compounds and colors; polymer additives; specialty chemicals for the pharmaceuticals and electronics markets; and active ingredients and high purity carbohydrates for pharmaceutical formulations. Ferro s products are classified as performance materials, rather than commodities, because they are formulated to perform specific and important functions both in the manufacturing processes and in the finished products of our customers. The Company s performance materials require a high degree of technical service on an individual customer basis. The value of these performance materials stems from the results and performance they achieve in actual use.

Ferro s products are traditionally used in markets such as appliances, automotive, building and renovation, electronics, household furnishings, industrial products, pharmaceuticals, telecommunications and transportation. The Company s leading customers include major chemical companies, pharmaceutical companies, producers of multi-layer ceramic capacitors and manufacturers of tile, appliances and automobiles. Many customers, particularly in the appliance and automotive markets, purchase materials from more than one of the Company s business units. Ferro s customer base is also well-diversified both geographically and by end market.

Risk Factors

Certain statements contained here and in future filings with the Securities and Exchange Commission reflect the Company s expectations with respect to future performance and 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, which are difficult to predict and are beyond the control of the Company. 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:

- Current and future economic conditions in the United States and worldwide, including continuing economic uncertainties in some or all of the Company s major product markets;
- Changes in customer requirements, markets or industries Ferro serves;
- Changes in the prices of major raw materials or sources of energy;
- Escalation in the cost of providing employee health care and pension benefits;
- Risks related to fluctuating currency rates, changing legal, tax and regulatory requirements that affect the Company s businesses and changing social and political conditions in the many countries in which the Company operates;
- Political or economic instability as a result of acts of war, terrorism or otherwise; and
- Access to capital, primarily in the United States capital markets, and any restrictions placed on Ferro by current or future financing arrangements.

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 the Company s business, financial condition and results of operations.

Raw Materials

Raw materials widely used in Ferro s operations include resins, thermoplastic polymers, cobalt oxide, zinc oxide, zircon sand, borates, chlorine, silica, stearic acid, tallow and titanium dioxide. Other important raw materials include silver, nickel, copper, gold, palladium, platinum and other precious metals. Raw materials make up a large portion of the product cost in certain of the Company s product lines and fluctuations in the price of raw materials may have a significant impact on the financial performance of those businesses. Precious metal price fluctuations are generally passed through to customers.

The Company has a broad supplier base and, in most instances, alternative sources of raw materials are available if problems arise with a particular supplier. Ferro maintains comprehensive supplier agreements for its strategic and critical raw materials. In addition, the magnitude of the Company s purchases provides for significant leverage in negotiating favorable conditions for supplier contracts. The raw materials essential to Ferro s operations both in the United States and overseas are in most cases obtainable from multiple sources worldwide. Ferro did not encounter raw material shortages in 2003 but is aware of upcoming shortages in the world market in 2004 for commodities like cobalt, nickel and zircon. Ferro does not expect to be affected by such shortages other than price increases for such products.

Patents, Trademarks and Licenses

Ferro owns a substantial number of patents and patent applications relating to its various products and their uses. While these patents are of importance to Ferro, management does not believe that the invalidity or expiration of any single patent or group of patents would have a material adverse effect on its business. Ferro s patents and patents that may issue from pending applications will expire at various dates through the year 2024. Ferro also uses a number of trademarks which are important to its business as a whole or to a particular segment. Ferro believes that these trademarks are adequately protected.

Customers

No material parts of the Company s coatings or performance chemicals businesses are dependent on any single customer or group of customers.

Backlog of Orders; Seasonality

In general, no significant lead-time between order and delivery exists in any of Ferro s business segments. As a result, Ferro does not consider that the dollar amount of backlog orders believed to be firm as of any particular date is material for an understanding of its business. Ferro does not regard any material part of its business to be seasonal.

Competition

In most of its products, Ferro has a substantial number of competitors, none of which is dominant. Due to the diverse nature of Ferro s product lines, no single company competes across all product lines in any of the Company s segments. Competition varies by product and by region and is based primarily on price, product quality and performance, customer service and technical support.

In the coatings segment, the Company is a worldwide leader in the production of glass enamels, porcelain enamel, ceramic glaze coatings and passive electronic materials, and believes it is currently the only merchant manufacturer of all primary components (electrodes, dielectrics, and termination pastes) of multi-layer capacitors. Strong local competition for ceramic glaze and color exists in the markets of Italy and Spain. In the performance chemicals segment, the Company is one of the largest producers of polymer additives in the United States and has several large competitors.

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Research and Development

Ferro is involved worldwide in research and development activities relating to new and existing products, services and techniques required by the ever-changing markets of its customers. The Company s research and development resources are organized into centers of excellence that support its regional and worldwide major business units. These centers are augmented by local laboratories which provide technical service and support to meet customer and market needs of particular geographic areas.

Expenditures for research and development activities relating to the development or significant improvement of new and/or existing products, services and techniques for continuing operations were approximately $36.7 million in 2003, $31.1 million in 2002 and $26.0 million in 2001. Expenditures for individual customer requests for research and development were not material. During 2004, Ferro expects to spend $38.1 million on research and development activities, an increase of 3.8% over 2003.

Environmental Matters

Ferro s manufacturing facilities, like those of its industry generally, are subject to numerous laws and regulations implemented to protect the environment, particularly with respect to plant wastes and emissions. Ferro believes that it is in compliance with the environmental regulations to which its operations are subject and that, to the extent Ferro may not be in compliance with such regulations, non-compliance has not had a materially adverse effect on Ferro s operations.

Ferro spent $9.6 million in capital expenditures for environmental control in 2003, and estimates capital expenditures for environmental control to be $15.0 million and $5.9 million in 2004 and 2005, respectively. The majority of the forecasted increase in 2004 capital expenditures for environmental control is related to improvement of local air quality systems in Europe.

Employees

At December 31, 2003, Ferro, in its continuing business operations, employed 6,847 full-time employees, including 4,364 employees in its foreign subsidiaries and affiliates and 2,483 in the United States. Total employment decreased by 842 full time employees from December 31, 2002, due to cost reduction initiatives, the integration of dmc ^{2} operations and the divestment of certain businesses.

Approximately 22% of the domestic workforce is covered by labor agreements, and approximately 6% is affected by labor agreements that expire in 2004. The Company expects to complete renewals of these agreements with no significant disruption to the related businesses.

Domestic and Foreign Operations

Financial information about Ferro s domestic and foreign operations is included herein in Note 14 to the Consolidated Financial Statements under Item 8 of this Form 10-K.

Ferro s products are produced and distributed in foreign as well as domestic markets. Ferro commenced its international operations in 1927.

Wholly-owned subsidiaries operate manufacturing facilities in Argentina, Australia, Belgium, Brazil, China, France, Germany, Italy, Japan, Mexico, the Netherlands, Portugal, Spain, Thailand and the United Kingdom. Partially-owned subsidiaries manufacture in China, Ecuador, Indonesia, Italy, Japan, Spain, South Korea, Taiwan, Thailand and Venezuela.

Ferro receives technical service fees and/or royalties from many of its foreign subsidiaries. Historically, as a matter of corporate policy, the foreign subsidiaries have been expected to remit a portion of their annual earnings to

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the parent as dividends. To the extent earnings of foreign subsidiaries are not remitted to Ferro, those earnings are indefinitely re-invested in those subsidiaries.

Available Information

The Company s Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments, will be made available free of charge on the Company s web site, www. ferro.com, as soon as reasonably practicable, following the filing of the reports with the Securities and Exchange Commission.

Item 2 *Properties*

The Company s corporate headquarters offices are located at 1000 Lakeside Avenue, Cleveland, Ohio. The Company also owns other corporate facilities, located in Independence, Ohio. The locations of the principal manufacturing plants by business segment owned by Ferro are as follows, listed by segment:

COATINGS - U.S.: Cleveland, Ohio; Washington, Pennsylvania; Toccoa, Georgia; Orrville, Ohio; Penn Yan, New York; South Plainfield, New Jersey; and Niagara Falls, New York. Outside of the U.S.: Argentina, Australia, Brazil, China, France, Germany, Indonesia, Italy, Mexico, the Netherlands, Spain, Taiwan, Thailand, United Kingdom and Venezuela.

PERFORMANCE CHEMICALS U.S.: Walton Hills, Ohio; Cleveland, Ohio; Fort Worth, Texas; Baton Rouge, Louisiana; Waukegan, Illinois; Bridgeport, New Jersey; Plymouth, Indiana; Evansville, Indiana; Stryker, Ohio; and Edison, New Jersey. Outside of the U.S.: Belgium, Indonesia, The Netherlands, Spain, and United Kingdom.

In addition, Ferro leases manufacturing facilities for the coatings segment in Vista, California; Brazil, Germany, Italy, Japan, the Netherlands and Portugal, and for the performance chemicals segment in Carpentersville, Illinois. In some instances, the manufacturing facilities outside the United States are used in both business segments.

Information concerning ownership of the facilities is also contained in Note 3 to the consolidated financial statements included herein under Item 8.

Item 3 *Legal Proceedings*

There are various lawsuits and claims pending against the Company and its consolidated subsidiaries. In the opinion of management, the ultimate liabilities (if any) and expenses resulting from such lawsuits and claims will not materially affect the consolidated financial position, results of operations or liquidity of the Company.

In February 2003, the Company was requested to produce documents in connection with an investigation by the United States Department of Justice into possible antitrust violations in the heat stabilizer industry. Subsequently, the Company received several class action lawsuits alleging civil damages and requesting injunctive relief as a result of this investigation. The Company has no reason to believe that it or any of its employees engaged in any conduct that violated the antitrust laws. The Company is cooperating with the Department of Justice in its investigation and is vigorously defending itself in the class action lawsuits. Management does not expect this investigation to have a material effect on the consolidated financial position, results of operations or liquidity of the Company.

Item 4 *Submission of Matters to a Vote of Security Holders*

No matters were submitted to a vote of Ferro s security holders during the fourth quarter of the fiscal year covered by this report.

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Executive Officers of the Registrant

Below are set forth the name, age and positions held by each individual serving as an executive officer of the Company as of March 12, 2004, as well as their business experience during the past five years. Years indicate the year the individual was named to or held the indicated position. There is no family relationship between any of Ferro s executive officers.

Hector R. Ortino 61

Chairman and Chief Executive Officer, 1999
President and Chief Executive Officer, 1999
President and Chief Operating Officer, 1998

James C. Bays 54

Vice President and General Counsel, 2001
Senior Vice President, General Counsel and Chief Legal Officer, Invensys plc, 1998

Thomas M. Gannon 54

Vice President and Chief Financial Officer, 2003
Chief Operating Officer, Riverwood International Corporation, 2001
Executive Vice President, Commercial Operations, Riverwood International Corporation, 1998

Dale G. Kramer 51

Vice President, Performance Chemicals, 2002
Vice President, Industrial Coatings, 2001
Worldwide Business Director, Powder Coatings, 2000
Worldwide Business Director, Appliance Market, 1999
Global Vice President and General Manager, Estane TPU Division, B.F. Goodrich Company, 1998

Millicent W. Pitts 49

Vice President, Tile Coating Systems, 2002
Vice President, Industrial Coatings, 2001
Vice President, Global Support Operations, 1998

Robert W. Martel 62

Vice President, Color & Glass Performance Materials, 2001
President & CEO of dmc ^{2} North America, Degussa-Huels Corporation, 1999
President & CEO of Cerdec North America, Degussa-Huels Corporation, 1998

M. Craig Benson 55

Vice President, Electronic Material Systems, 2002
MBU Director Electronic Material Systems, 2000
Executive Vice President & General Manager dmc ^{2}., Degussa-Huels Corporation, 1999
Vice President & General Manager, Metal Division Global Head, Electronic Materials, Degussa-Huels Corporation, 1998

PART II

Item 5 ***Market for Registrant s Common Equity and Related Stockholder Matters***

Quarterly Data
Ferro Corporation and subsidiaries.

The quarterly high and low closing stock prices and dividends declared per share for 2003 and 2002 are presented below:

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	2003			2002		
	High	Low	Dividends	High	Low	Dividends
First Quarter	$24.68	19.24	0.145	$29.14	23.76	0.145
Second Quarter	24.75	20.20	0.145	30.50	27.27	0.145
Third Quarter	23.57	20.62	0.145	30.55	22.33	0.145
Fourth Quarter	27.47	20.00	0.145	26.33	21.37	0.145

The common stock of the Company is listed on the New York Stock Exchange under the ticker symbol FOE. At January 30, 2004, the Company had 1,928 shareholders of record for its common stock.

Information concerning dividend restrictions and liquidity is included in Management s Discussion and Analysis of Financial Condition and Results of Operations contained under Item 7 herein.

Item 6 ***Selected Financial Data***

Ferro Corporation and subsidiaries
Years ended December 31, 1999 through 2003
(in millions of dollars except per share data)

	2003	2002	2001	2000	1999
Net Sales	$1,622.4	1,528.5	1,246.5	1,173.0	1,061.0
Income from Continuing Operations	$ 17.4	33.7	30.0	69.5	67.5
Diluted Earnings per Share from Continuing Operations	$ 0.38	0.81	0.79	1.83	1.68
Cash dividends per share	$ 0.58	0.58	0.58	0.58	0.55
At December 31,					
Total Assets	$1,751.2	1,604.5	1,732.6	1,127.0	971.8
Long-Term Debt, including Current Portion	$ 516.8	444.4	831.4	352.5	237.5
Total Debt*	$ 530.1	562.1	939.5	530.6	312.3

* Total Debt includes Long-Term Debt, including Current Portion, Notes and loans payable, borrowings under asset securitization and a leveraged lease program. Reference Item 7, Liquidity and Capital Resources, for discussion on the asset securitization and leveraged lease program.

Quarterly information from continuing operations is set forth below:

					Per common share	
	Quarter	Net Sales	Gross Profit	Net Income	Basic Earnings	Diluted Earnings
2002	1	$ 365.0	93.3	4.9	0.12	0.13
	2	408.4	106.7	11.8	0.30	0.29
	3	388.8	95.2	10.0	0.23	0.23
	4	366.3	89.9	7.0	0.17	0.16
	Total	$1,528.5	385.1	33.7	0.82	0.81
2003	1	$ 401.8	101.1	9.5	0.22	0.22

2	416.2	98.1	5.9	0.13	0.13
3	397.0	89.6	(0.8)	(0.03)	(0.03)
4	407.4	92.5	2.8	0.06	0.06
Total	$1,622.4	$381.3	$17.4	$ 0.38	$ 0.38

The Company adopted Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets (Statement No. 142) for business combinations consummated after June 30, 2001, as of July 1, 2001, and adopted Statement No. 142 in its entirety effective January 1, 2002. Accordingly, all goodwill and other intangible assets having indefinite useful lives are not amortized but instead are subject to impairment testing on at least an annual basis. Before the adoption of any provisions of Statement No. 142, goodwill and intangible assets having indefinite useful lives were amortized ratably over their estimated useful lives.

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In September 2001, the Company acquired from OM Group, Inc. certain businesses previously owned by dmc [2] Degussa Metals Catalysts Cerdec AG (dmc [2]). See further information regarding the transaction in Note 7 to the Company s consolidated financial statements included herein under Item 8.

In September 2002, Ferro completed the sale of its Powder Coatings business unit, previously part of its Coatings segment. On June 30, 2003, the Company completed the sale of its Petroleum Additives business, previously part of its Performance Chemicals segment and its Specialty Ceramics business, previously part of its Coatings segment. For all periods presented, the Powder Coatings, Petroleum Additives and Specialty Ceramics businesses have been reported as discontinued operations. The divestiture of the Powder Coatings, Petroleum Additives and Specialty Ceramics businesses are further discussed in Note 9 to the Company s consolidated financial statements included herein under Item 8. The results of these divested operations are excluded from the information presented in the above table.

Item 7 - ***Management s Discussion and Analysis of Financial Condition and Results of Operations***

Overview

During 2003, Ferro completed the integration of dmc [2], acquired in September 2001, to significantly reposition the Company s portfolio toward higher growth businesses, solidify its leading market position in core businesses and further geographic diversity. The Company is positioned in 2004 to fully realize these benefits and the synergies from integrating the dmc [2] businesses, including the elimination of duplicate facilities, reduced overhead and raw material sourcing leverage.

Net income for the year 2003 declined to $19.6 million from $73.7 million in 2002 due primarily to the $33.8 million gain on the sale of the Powder Coatings business in 2002, higher raw material costs and the impact of reduced volumes in certain markets. With the weak conditions throughout most of the markets that Ferro served during 2003, all of the Company s businesses have continued to concentrate on lowering working capital, reducing costs and maximizing cash flow generation. As a result, the Company generated cash flow from continuing operations of $86.8 million which enabled a further reduction in total debt, including off balance sheet borrowing, of $32.0 million.

Going forward into 2004, the Company will continue to focus on aggressive cost containment measures, strengthening the balance sheet and closely managing working capital. Major emphasis will also be placed on the organic growth of our Electronic Material Systems and Pharmaceuticals and Fine Chemicals businesses and on accelerating growth in the Asia-Pacific region, especially in China. The Company expects that certain costs, including raw materials, wages and benefits will increase in 2004, offsetting, in part, the benefits of cost reduction efforts. Factors that could adversely affect the Company s future financial performance are contained within Risk Factors included herein under Item 1.

In September 2002, the Company completed the sale of its Powder Coatings business unit and in June 2003, the Company completed the sale of its Petroleum Additives and Specialty Ceramics business units, and accordingly for all periods presented, each of these businesses has been reported as a discontinued operation.

Outlook

The fourth quarter showed promising signs of economic recovery in North America and demand for our key end markets in the Asia Pacific region remained robust. While we expect this trend to continue into 2004, the weakness of the European economy remains a concern. A recovery in our European end-market demand will likely lag a recovery in North America.

The company will be challenged in the short term by increasing oil-based raw material costs and costs for other commodities like cobalt, nickel and zircon which will be offset by price increases where appropriate and increased volumes for most of our product lines and cost savings from actions taken in 2003.

Coatings Segment. For Tile Coatings, the European economic environment and the strong Euro have been a challenge during 2003. Production facilities were consolidated in Italy and several other cost reduction initiatives were completed during the year. The consolidation and productivity gains achieved in 2003, combined with modest demand growth over the next several quarters in 2004 and continued cost reduction through lean manufacturing initiatives, should support significant operating margin improvement going forward for Tile Coatings.

The month of December, 2003 provided the strongest sales month of the year for electronic materials, which should continue to benefit from the global rebound in the electronics end markets. We expect electronic materials sales to grow at the pace of semiconductor build rates for the foreseeable future.

Performance Chemicals Segment. Polymer Additives has been faced with a decline in demand, pricing pressure due to industry-wide over capacity, and rising raw materials costs during 2003. During the fourth quarter of 2003, the PVC industry posted a modest recovery from its mid-year low point. Also, while raw material prices remain high, price increases were successfully implemented to offset some of the margin impact. Significant cost reductions have been completed and discretionary spending has been restricted in Polymer Additives and further emphasis has been placed on reducing working capital

For Specialty Plastics, demand improved in the fourth quarter of 2003 for the key North American end markets: consumer packaging, appliances and automotive. Demand for plastic products in Europe continued to lag, partially offsetting the improved demand in North America. As the company moves into 2004, increasing oil prices may result in further raw material cost increases for Specialty Plastics, however, improving market conditions should allow for higher product pricing to help offset the higher costs.

Pharmaceuticals and Fine Chemicals realized double-digit growth in revenue and profits in 2003 compared to the fourth quarter and full year of 2002. Significant progress has been made in implementing the value-added niche strategy for this business, which has expanded the opportunities for growth.

Summary. Overall, we are optimistic given the trends we are seeing, but there is still uncertainty surrounding the impact of the strong Euro and increasing oil prices. In addition, some of the geo-political events that have negatively impacted the economy in the recent past remain unresolved.

The Company expects to meet its liquidity requirements for debt service, working capital, capital investments, post-retirement obligations and dividends during 2004 from a variety of sources, including cash flow from operations and use of its credit facilities. The Company has a $300.0 million revolving credit facility, of which $135.5 million was available as of December 31, 2003, and accounts receivable securitization facility under which the Company may receive advances of up to $150.0 million, subject to the level of qualifying accounts receivable.

The discussions presented below under Results of Operations focus on the Company s results from continuing operations.

Results of Operations
Comparison of the years ended December 31, 2003 and 2002

Sales from continuing operations for the year ended December 31, 2003, of $1,622.4 million were 6.1% higher than the $1,528.5 million of sales for the comparable 2002 period. The impact of strengthening currencies, in particular the Euro, improved revenue by 6.6% during the year ended December 31, 2003. Higher volumes in the Asia Pacific region and North America also contributed to the sales increase for the year 2003 but were partially offset by lower volumes in Europe stemming from continued economic weakness.

Gross margin from continuing operations were 23.5% of sales compared with 25.2% for the prior year period. The reduced gross margins compared with the prior year stemmed from raw material cost increases in the Performance Chemicals segment only partially recovered through price adjustments and lower operating rates for the Coatings segment in Europe.

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Selling, administrative and general expenses from continuing operations were $309.3 million for the year ended December 31, 2003, compared with $282.5 million for the same period in 2002. The $26.8 million increase in selling, administrative and general expenses was caused by the impact of the stronger Euro against the dollar of $18.4 million, increased integration and restructuring costs of $5.0 million and higher pension expense. In addition, research and development spending in our electronics and pharmaceuticals businesses increased by another $2.7 million compared to the same period of 2002. This increase was partially offset by integration savings and other expense reduction initiatives.

Earnings for the year ended December 31, 2003, included pre-tax charges of $16.7 million related primarily to restructuring costs, consisting principally of the costs of terminating employees related to facilities rationalization, overhead reduction and lease buy-out costs. The year ended December 31, 2002 included $9.4 million of similar charges. Of the $16.7 million of charges incurred in 2003, $5.7 million were recorded in cost of sales, $10.5 million in selling, administrative and general expenses, and $0.5 million in miscellaneous expense.

Interest expense from continuing operations was $35.6 million for the year ended December 31, 2003, compared to $41.8 million for the year ended December 31, 2002. This is the result of a debt reduction program that included sale of five million common shares through a public offering in May 2002, the sale of the Company s Powder Coatings business unit in September, 2002, other debt reduction initiatives and lower interest rates. The Company benefited from low variable interest rates during 2003 and, at December 31, 2003, continued to have a significant component of its indebtedness with variable rate instruments.

Net foreign currency loss for the year ended December 31, 2003, was $2.2 million as compared to $0.4 million for the year ended December 31, 2002. The Company has and continues to use certain foreign currency instruments to offset the effect of changing exchange rates on foreign subsidiary earnings. The carrying values of such contracts are adjusted to market value and resulting gains or losses are charged to income or expense in the period.

Miscellaneous expense, net, for the year ended December 31, 2003 was $10.8 million as compared to $12.9 million for the year ended December 31, 2002. The majority of decrease in miscellaneous expense net resulted from reduced expenses related to the accounts receivable securitization facility.

Income tax as a percentage of pre-tax income from continuing operations for the year ended December 31, 2003, was 28.3% compared with 30.5% for the year ended December 31, 2002. Contributing to this decline in the effective tax rate were a higher proportion of earnings in jurisdictions having lower statutory tax rates and tax benefits realized from export sales.

Income from continuing operations for the year ended December 31, 2003, was $17.4 million compared with $33.7 million for the year ended December 31, 2002. Diluted earnings per share from continuing operations totaled $0.38 for the year ended December 31, 2003 compared with $0.81 for the year ended December 31, 2002.

The loss from discontinued operations was $0.9 million for the year ended December 31, 2003, compared with income of $6.2 million for the year ended December 31, 2002. Prior year results included the Company s Powder Coatings business unit, which was divested in September 2002, and full year results for the Petroleum Additives and Specialty Ceramics business units, which were divested in June 2003. A gain on the disposal of the Company s Powder Coatings business of $33.8 million, net of income taxes of $20.2 million, was recorded in the year ended December 31, 2002. The disposal of the Petroleum Additives and Specialty Ceramics business units resulted in a gain of $2.5 million, net of income taxes of $1.7 million, in the year ended December 31, 2003. In addition, certain post-closing matters increased the previously recorded gain on the sale of the Powder Coatings business by $0.6 million, net of income tax benefit of $(0.7) million. Diluted earnings per share from discontinued operations totaled $0.05 for the year ended December 31, 2003, compared to $0.98 for the year ended December 31, 2002.

Net income for the year ended December 31, 2003 totaled $19.6 million compared with net income of $73.7 million for the year ended December 31, 2002. The decline was primarily due to $37.8 million in lower contribution from discontinued operations, including the $33.8 million gain from the sale of Powder Coatings, raw

material cost increases and lower operating rates. Diluted earnings per share were $0.43 for the year ended December 31, 2003 versus diluted earnings of $1.79 for the year ended December 31, 2002.

Coatings Segment Results. Sales in the Coatings segment were $1,071.8 million for the year ended December 31, 2003, compared with sales of $986.6 million for the year ended December 31, 2002. The increase of 8.6% in sales is primarily due to the effect of currency exchange rates and increased end market demand for electronics. Operating income for the segment was $90.7 million for the year ended December 31, 2003, compared with operating income of $95.9 million for the year ended December 31, 2002. The decrease in segment income reflects lower volumes related to key European end markets for color and glass, tile coatings and porcelain enamel. This was partially offset by cost-saving actions taken throughout the year and increased volume in the electronics industry.

Performance Chemicals Segment Results. Sales in the Performance Chemicals segment were $550.6 million for the year ended December 31, 2003, compared with sales of $541.9 million for the year ended December 31, 2002. The year-over-year increase in sales was primarily due to the effect of currency exchange rates, higher prices and improved sales for pharmaceuticals and fine chemicals which more than offset the impact of lower demand for durable goods in the building and renovation end markets. Operating income for the segment was $26.5 million for the year ended December 31, 2003, compared with $34.6 million for the year ended December 31, 2002. The lower segment income was due primarily to the impact of lower sales volume and higher raw material costs in both the polymer additives and specialty plastics businesses.

Geographic Sales. Sales in the United States and Canada were $779.9 million for the year ended December 31, 2003, compared with sales of $758.6 million for the year ended December 31, 2002. The increase was primarily due to higher sales in the electronics business unit. International sales were $842.5 million for the year ended December 31, 2003, compared with sales of $769.9 million for the year ended December 31, 2002. The majority of the international sales increase occurred in Europe due to the strengthening of the Euro against the dollar and in the Asia-Pacific region due to volume growth.

Cash Flows. Net cash provided by operating activities of continuing operations for the year ended December 31, 2003, was $86.8 million, compared with $151.2 million for 2002. The change was driven principally by significant working capital reductions in 2002 as compared to an increase in working capital caused primarily by an increase in accounts and trade notes receivable, in 2003. This increase in accounts and trade notes receivable reflects the impact of the Euro and higher volumes in the Asia Pacific region and North America.

Cash used for investing activities of continuing operations was $68.7 million in 2003 compared with $39.3 million in 2002. The increase in cash used for investing activities in 2003 was primarily due to the $25.0 million buy out of an operating lease agreement and purchase price settlement payments of approximately $8.5 million related to the dmc ^{2} acquisition.

Net cash used for financing activities was $29.9 million in 2003 compared with $262.9 million in 2002. The higher cash used in the prior year reflects the repayment of long-term debt and the capital markets facility offset partially by the net proceeds from the issuance of common stock. Cash used in 2003 reflects primarily dividends paid to the Company s shareholders.

Net cash used for operating activities of discontinued operations was $1.1 million in 2003 compared with net cash provided by operating activities of discontinued operations of $17.4 million in 2002. Net cash provided by investing activities of discontinued operations was $20.4 million in 2003, including the proceeds from the sale of the Company s Specialty Ceramics and Petroleum Additives businesses of $20.8 million, as compared to cash provided by investing activities of discontinued operations in 2002 of $129.8 million, including proceeds from the sale of Powder Coatings of $132.0 million.

Comparison of the years ended December 31, 2002 and 2001

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Consolidated net sales of $1,528.5 million for 2002 represent a 22.6% increase over 2001 sales of $1,246.5 million. Overall volume increased 19.5% during the year ended December 31, 2002, including the effect of acquisitions. The increased volume was primarily due to the full year impact of the September 2001 acquisition of certain businesses of dmc [2] and higher demand levels in the Asia-Pacific region. Sales for 2002 also increased due to the impact of the stronger Euro.

Gross margin as a percent of sales declined slightly to 25.2% in 2002 compared with 25.4% for 2001. Gross margins were adversely impacted by charges of $3.4 million and $4.2 million in 2002 and 2001, respectively, relating to the Company s ongoing cost reduction efforts.

Selling, administrative and general expenses of $282.5 million were 18.5% of sales for 2002, compared with $245.8 million, or 19.7% of sales, for 2001. The increase in selling, administrative and general expenses was primarily due to the addition of dmc [2] operating expenses, offset partially by synergies realized from the integration of dmc [2], the elimination of amortization expense of $6.5 million on goodwill and other intangibles with indefinite lives in accordance with Statement of Financial Accounting Standards No. 142, and other cost reduction initiatives. Charges for cost reduction and integration programs increased selling, general and administrative expenses by $6.0 million and $6.5 million during 2002 and 2001, respectively.

Interest expense for 2002 was higher as compared with 2001 due to the substantial increase in the Company s average level of indebtedness during 2002 as a result of the financing of acquisitions completed in 2001 and 2000. This was partially offset by declines in variable interest rates. The Company benefited from low variable interest rates during 2002 and, at December 31, 2002, continued to have a significant component of its indebtedness with variable rate instruments.

Net foreign currency loss in 2002 was $0.4 million as compared to $20.0 million of gains in 2001. The 2001 gain was primarily the result of the settlement of forward contracts initiated for purposes of mitigating the effects of currency movements on the cash flow requirements of the dmc [2] acquisition purchase price. The Company has and continues to use certain foreign currency instruments to offset the effect of changing exchange rates on foreign subsidiary earnings. The carrying values of such contracts are adjusted to market value and resulting gains or losses are recorded on the income statement for the period.

Miscellaneous expense, net, of $12.9 million in 2002 was substantially unchanged versus 2001 as banking costs and costs associated with the Company s loan and asset securitization facilities were approximately the same in each year.

Income tax expense as a percentage of income in 2002 was 30.5%, compared with 36.8% in 2001. Contributing to the decline in the effective tax rate were tax benefits realized from export sales, utilization of net operating loss carry-forwards that were fully reserved, the impact of equity in earnings of non-consolidated entities reported net of tax and increased earnings in jurisdictions having lower statutory tax rates.

Income from continuing operations for the year ended December 31, 2002, was $33.7 million or $0.81 per diluted share versus $30.0 million or $0.79 per diluted share for the year ended December 31, 2001 ($0.90 per share if FASB Statement No. 142 had been effective as of January 1, 2001).

Income from discontinued operations for 2002 was $6.2 million compared with $9.2 million for 2001. In addition, a gain on the disposal of the Company s Powder Coatings business of $33.8 million, net of tax of $20.2 million, was realized during 2002.

Net income for the year ended December 31, 2002, was $73.7 million or $1.79 per diluted share versus $39.2 million or $1.04 per diluted share for the year ended December 31, 2001.

Segment Results. For the year of 2002, sales in the coatings segment increased 38.1% to $986.6 million from $714.2 million for 2001. The increase in revenue primarily reflects higher volumes related to the dmc [2] acquisition and stronger growth in several key markets, including significant growth in the Asia Pacific region. Segment income increased 53.9% to $95.9 million for 2002 compared with $62.3 million in 2001. The improvement in income was largely the result of higher volumes due to the dmc [2] acquisition, internal cost reductions and synergies realized from the integration of dmc [2].

Sales in the performance chemicals segment increased 1.8% to $541.9 million for 2002, compared to $532.3 million for 2001. The sales increase was caused primarily by increases in the building and renovation, durable goods, automotive and consumer packaging markets, offset partially by changes in product mix and lower prices in certain businesses as compared to last year. Income from the segment declined 5.2% to $34.6 million for

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2002 versus 2001 levels of $36.5 million. The lower income was due primarily to higher raw material costs and lower production rates stemming from the segment s inventory reduction program.

Geographic Sales. Sales in the United States and Canada were $758.6 million for 2002, compared with $676.3 million for 2001, an increase of 12.2%. International sales were $769.9 million for 2002, compared with $570.2 million for 2001, an increase of 35.0%. Growth in both areas was driven primarily by the dmc ^{2} acquisition. International sales were also higher due to improved demand levels in the Asia Pacific region and the impact of a stronger Euro.

Cash Flows. Net cash provided by operating activities of continuing operations for the year ended December 31, 2002, was $151.2 million, compared with $186.5 million for 2001. The change was principally driven by higher working capital reductions in 2001 than in 2002. Cash used for investing activities of continuing operations was $39.3 million in 2002, excluding the proceeds from the sale of the Company s Powder Coatings business of $132.0 million. Cash used for investing activities in 2001 of $550.7 million includes $513.1 million used for acquisitions. Net cash used for financing activities was $262.9 million for 2002 and reflects the repayment of long-term debt and the capital markets facility offset by the net proceeds from the issuance of common stock. Net cash provided by financing activities of $357.3 million in 2001 was primarily for borrowings necessary to fund the acquisition of certain businesses of dmc ^{2}.

Net cash provided by operating activities of discontinued operations was $17.4 million in 2002 compared with $32.9 million in 2001. Net cash provided by investing activities of discontinued operations was $129.8 million in 2002, including the proceeds of $132.0 million from the sale of the Company s Powder Coatings business, as compared to cash used by investing activities of discontinued operations in 2001 of $9.7 million for capital expenditures.

Liquidity and Capital Resources

The Company s liquidity requirements include primarily debt service, working capital requirements, capital investments, post-retirement obligations and dividend payments. Capital expenditures were $36.1 million and $40.6 million for the years ended December 31, 2003 and 2002, respectively. The Company expects to be able to meet its liquidity requirements from a variety of sources, including cash flow from operations and use of its credit facilities. The Company has a $300.0 million revolving credit facility, of which $135.5 million was available as of December 31, 2003. See further information regarding the Company s credit facilities included in Note 3 to the Company s consolidated financial statements under Item 8 herein. The Company also has an accounts receivable securitization facility under which the Company may receive advances of up to $150.0 million, subject to the level of qualifying accounts receivable.

Off Balance Sheet Financing. In 2000, the Company initiated a $150.0 million five-year program to sell (securitize), on an ongoing basis, a pool of its trade accounts receivable. This program serves to accelerate cash collections of the Company s trade accounts receivable at favorable financing costs and supplements the Company s liquidity requirements. The decrease in the amounts outstanding during 2003 has reduced the programs importance for liquidity and capital resources. Under this program, certain of the receivables of the Company are sold to a wholly-owned unconsolidated qualified special purpose entity, Ferro Finance Corporation (FFC). FFC can sell, under certain conditions, an undivided fractional ownership interest in the pool of receivables to a multi-seller receivables securitization Company (Conduit). Additionally, under this program, receivables of certain European subsidiaries are sold directly to other conduits. At December 31, 2002, $85.7 million had been advanced to the Company, net of repayments, under this program. During the twelve months ended December 31, 2003, $1,050.2 million of accounts receivable were sold under this program and $1,134.4 million of receivables were collected and remitted to the conduits, resulting in a net reduction in borrowings of $84.2 million and total advances outstanding at December 31, 2003 of $1.5 million.

The Company and certain European subsidiaries on behalf of FFC and the Conduits provide service, administration and collection of the receivables. FFC and the Conduits have no recourse to the Company s other assets for failure of debtors to pay when due. Under FASB Statement No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities - a replacement of FASB Statement No. 125, neither the amounts advanced nor the corresponding receivables sold are reflected in the Company s consolidated

balance sheet. The accounts receivable securitization facility contains a provision under which the agent can terminate the facility if the Company s senior credit rating is downgraded below BB by Standard & Poor s Rating Group (S&P) or Ba2 by Moody s Investor Service, Inc. (Moody s). (See discussion under Revolving Credit Facility about factors considered by the Ratings Agencies when evaluating a change in the rating.) The Company at December 31, 2003 had a senior credit rating of BBB- by S&P and Baa3 by Moody s. Ferro does not believe that the termination of this facility would reasonably be expected to have a material adverse effect on the Company s liquidity or the Company s capital resource requirements. The termination of this program at December 31, 2003, would have reduced the Company s liquidity to the extent that the total program of $150.0 million exceeded advances outstanding of $1.5 million. The liquidity from the Company s revolving credit facility of $300.0 million under which $135.5 million was available at December 31, 2003, and the available cash flows from operations, should allow the Company to meet its funding requirements and other commitments if this program was terminated.

The Company retains interest in the receivables transferred to FFC and Conduits in the form of a note receivable to the extent that receivables transferred exceed advances. The note receivable balance was $91.8 million as of December 31, 2003, and $23.8 million as of December 31, 2002. The Company and certain European subsidiaries, on a monthly basis, measure the fair value of the retained interests at management s best estimate of the undiscounted expected future cash collections on the transferred receivables. Actual cash collections may differ from these estimates and would directly affect the fair value of the retained interests.

In June 2003, the Company bought out its $25.0 million leveraged lease program under which the Company leased certain land, buildings, machinery and equipment. The assets had an appraised value of $22.6 million which was recorded on the balance sheet. A loss of $1.4 million was recognized in cost of sales in 2003 as a result of the buyout. The program had been accounted for as an operating lease.

Revolving Credit Facility. Obligations under the revolving credit facility are unsecured; however, if the Company s senior credit rating is downgraded below Ba2 by Moody s or BB by S&P, the Company and its material subsidiaries would be required to grant security interests in its principal manufacturing properties, pledge 100% of the stock of material domestic subsidiaries and pledge 65% of the stock of material foreign subsidiaries, in each case, in favor of the Company s lenders under the facility. In that event, liens on principal domestic manufacturing properties and the stock of domestic subsidiaries would be shared with the holders of the Company s senior notes and debentures and trust notes and trust certificates issued under a leveraged lease program. The rating agencies may, at any time, based on various factors including changing market, political or socio-economic conditions, reconsider the current rating of the Company s outstanding debt. Based on rating agency disclosures, Ferro understands that ratings changes within the general industrial sector are evaluated based on quantitative, qualitative and legal analyses. Factors considered by the rating agencies include: industry characteristics, competitive position, management, financial policy, profitability, capital structure, cash flow production and financial flexibility. S&P and Moody s have disclosed that the Company s ability to improve earnings, reduce the Company s level of indebtedness and strengthen cash flow protection measures, whether through asset sales, increased free cash flows from acquisitions or otherwise, will be factors in their ratings determinations going forward. The Company s credit facility contains customary operating covenants that limit its ability to engage in certain activities, including significant acquisitions. See further information regarding these covenants in Note 3 to the Company s consolidated financial statements under Item 8 herein. The Company s ability to meet these covenants in the future may be affected by events beyond its control, including prevailing economic, financial and market conditions and their effect on the Company s financial position and results of operations. The Company does have several options available to mitigate these circumstances, including selected asset sales and the issuance of additional capital. In September, 2003, the Company renegotiated these financial covenants to provide greater flexibility to restructure and make acquisitions and to strengthen the Company s liquidity profile.

The Company enters into precious metal leases (primarily gold, silver, platinum and palladium), which are arrangements under which banks provide the Company with precious metals for a specified period for which the Company pays a lease fee. The lease terms are generally less than one year, and the Company maintains sufficient quantities of precious metals to cover the lease obligations at all times. The leases are treated as operating leases, and lease expenses were approximately $1.6 million for the year ended December 31, 2003. As of December 31, 2003, the fair value of precious metals under leasing arrangements was $93.6 million. Management believes it will continue to have sufficient availability under these leasing arrangements so that it will not be required to purchase or find alternative leasing or sourcing arrangements for its precious metal inventory requirements. However, factors beyond the control of the Company including prevailing economic, financial and market conditions and their effect

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on the Company s financial position and results of operations, or those that management currently believes are unlikely, such as the termination of the Company s revolving credit facility, could result in non-renewal of the leases. This would impact the liquidity of the Company to the extent of the fair value of the precious metals leased.

Ferro s level of debt and debt service requirements could have important consequences to its business operations and uses of cash flow. In addition, a reduction in overall demand for the Company s products could adversely affect cash flows from operations. However, the Company has a $300.0 million revolving credit facility of which approximately $135.5 million was available as of December 31, 2003. This liquidity, along with the liquidity from the Company s asset securitization program of which $148.5 was available as of December 31, 2003, and available cash flows from operations, should allow the Company to meet its funding requirements and other commitments.

The Company s aggregate amount of obligations for the next five years and thereafter is set forth below:

(dollars in thousands)	2004	2005	2006	2007	2008	Thereafter	Totals
Principal repayments of long-term debt	$ 565	411	411	51	51	350,862	352,351
Revolving credit facility			164,450				164,450
Obligations under non-cancelable operating leases	10,938	8,371	5,512	3,996	2,975	16,541	48,333
Accounts receivable securitization facility		1,460					1,460
Purchase obligations							
Supplemental retirement plan obligations	400	400	1,400	1,400	1,400	7,500	12,500
Post retirement obligations	4,000	4,200	4,400	4,500	4,600	34,583	56,283
Pension funding *	7,900	38,100	29,000	24,100	19,000	23,023	141,123
	$23,803	52,942	205,173	34,047	28,026	432,509	776,500

* Pension funding includes projected contributions for the six largest global defined benefit plans for years 2004 through 2008. Amounts included for pension funding in the United States are the ERISA minimum qualified pension plan contributions assuming the extension of funding relief by Congress. Pension funding subsequent to 2008 reflects the total projected benefit obligation less the fair value of plan assets and the funding contributions for the years 2004 through 2008.

Total pension expense, excluding supplemental plans, was $22.5 million in 2003 compared with $13.6 million in 2002. The increase was primarily due to a $4.0 million increase in net amortization and deferral costs along with a net curtailment effect of $3.0 million and $1.6 million in higher interest costs in 2003. Contributions to the plans increased to $30.1 million in 2003, of which $19.7 million were made in cash and $10.4 million in Ferro Corporation stock, from $11.0 million in 2002, all which were made in cash. The unrecognized losses related to the plans were $107.3 million at December 31, 2003, up from $88.9 million at December 31, 2002.

The weighted average discount rate was 5.93% and the weighted average expected return on plan assets was 7.83% as of December 31, 2003. Pension expense, excluding supplemental plans, for 2004 is expected to increase to $24.0 million and pension contributions are expected to decrease to $7.9 million. A 1% increase in the actual return on plan assets would decrease the unrecognized plan losses at the end of the year by $2.9 million. A 1% decrease in the actual return on plan assets would increase the unrecognized plan losses at the end of the year by $2.9 million. The amount of any increase/(decrease) in unrecognized plan losses would eventually be recognized in the Company s pension expense in future years. The Company does not believe that the current funding status of the plan will cause significant business, liquidity or capital funding issues.

Impact of Recently Issued Accounting Pronouncements

In December 2003, the FASB published Interpretation No. 46R, Consolidation of Variable Interest Entities , (Interpretation No. 46R), to clarify some of the provisions of FASB Interpretation No. 46 of the same name (Interpretation No. 46) and to exempt certain entities from its requirements. Interpretation No. 46 addresses consolidation by business enterprises of variable interest entities and requires existing unconsolidated variable interest entities to be consolidated by their primary beneficiaries if the entities do not effectively disperse risk among parties involved. It is based on the concept that companies that control another entity through interests other than voting interests should consolidate the controlled entity. Under the transition provisions of Interpretation No. 46R, special effective date provisions apply to enterprises that have fully or partially applied Interpretation No. 46 prior to issuance of Interpretation No. 46R. Otherwise, application of Interpretation No. 46 is required in financial statements of public entities that have interests in structures that are commonly referred to as special-purpose entities for periods ending after December 15, 2003; application by public entities, other than small business issuers, for all other types of

variable interest entities is required in financial statements for periods ending after March 15, 2004. The Company adopted Interpretation No. 46 as of October 1, 2003. The adoption of Interpretation No. 46 did not have a material impact on the results of operations or financial position of the Company. In June 2003, the Company bought out its asset defeasance program that would have required consolidation on adoption of Interpretation No. 46.

Critical Accounting Policies

The Company has identified the critical accounting policies that are most important to the portrayal of its financial condition and results of operations. The policies set forth below require management s most subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain.

Litigation and Environmental Reserves

The Company is involved in litigation in the ordinary course of business, including personal injury, property damage and environmental matters. The Company also expends funds for environmental remediations for both Company-owned and third-party locations. In accordance with FASB Statement No. 5 Accounting for Contingencies , and Statement of Position 96-1, Environmental Remediation Liabilities , the Company records a loss and establishes a reserve for litigation or remediation when it is probable that an asset has been impaired or a liability exists and the amount of the liability can be reasonably estimated. Reasonable estimates involve judgments made by management after considering a broad range of information including: notifications, demand or settlements which have been received from a regulatory authority or private party, settlement of similar claims or third parties, estimates performed by independent engineering companies and outside counsel, available facts, existing and proposed technology, the identification of other potentially responsible parties and their ability to contribute and prior experience. These judgments are reviewed quarterly as more information is received and the amounts reserved are updated as necessary. However, the reserves may materially differ from ultimate actual liabilities if management s judgments regarding litigation settlements or environmental remediation are ultimately inaccurate.

Income Taxes

Deferred income taxes are provided to recognize the effect of temporary differences between financial and tax reporting. Deferred income taxes are not provided for undistributed earnings of foreign consolidated subsidiaries, to the extent such earnings are reinvested for an indefinite period of time. The Company has significant operations outside the United States, where substantial pre-tax earnings are derived, and in jurisdictions where the statutory tax rate is lower than in the United States. The Company also has significant cash requirements in the United States to pay interest and principal on borrowings. As a result, significant tax and treasury planning and analysis of future operations are necessary to determine the proper amount of tax assets, liabilities and tax expense. The Company s tax assets, liabilities and tax expense are supported by its best estimates and assumptions of its global cash requirements, planned dividend repatriations and expectations of future earnings. However, the amounts recorded may materially differ from the amounts that are ultimately payable if management s estimates of future earnings and cash flow are ultimately inaccurate.

Pension and Other Employee Benefits

Certain assumptions are used in the calculation of the actuarial valuations of the Company-sponsored defined benefit pension and post-retirement benefit plans. These assumptions include the weighted average discount rate, rates of increase in compensation levels, expected long-term rates of return on assets and increases or trends in health care costs. If actual results are less favorable than those projected by management, lower levels of benefit credit or other additional expenses may be required; however, if actual results are more favorable than those projected by management, higher levels of benefit credit or lower levels of expense may result. A 1% increase in the actual return on plan assets would decrease the unrecognized plan losses at the end of the year by $2.9 million. A

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1% decrease in the actual return on plan assets would increase the unrecognized plan losses at the end of the year by $2.9 million. The amount of any increase/(decrease) in unrecognized plan losses would eventually be recognized in the Company s pension expense over five years.

Inventory

The Company periodically evaluates its inventory valuation based upon the age of the inventory and assumptions of future demand and market conditions. As a result of the evaluation, the inventory may be written down to the lower of cost or realizable value. If actual valuations are less favorable than those projected by management, additional write downs may be required.

Allowance for Doubtful Accounts

The Company provides for uncollectible accounts receivable based upon estimates of unrealizable amounts due from specific customers. These estimates are based upon analysis of account agings and the financial condition of the customers. If the actual future cash collections are less favorable than those projected by management, additional allowances for doubtful accounts could be required; however, if actual future cash collections are more favorable than those projected by management, established allowances for doubtful accounts could prove to be unnecessary, and would be released into income. If it is determined, based on the Company s assessment, that it is unlikely that a customer will be able to pay, the accounts receivable is charged off.

Restructuring and Cost Reduction Programs

In July 2002, the FASB issued Statement No. 146, Accounting for Costs Associated with Exit or Disposal Activities. Statement No. 146 applies to costs from activities such as eliminating or reducing product lines, terminating employees and contracts, and relocating plant facilities or personnel. The Company adopted FASB Statement No. 146 as of January 1, 2003, and accordingly, records exit or disposal costs when they are incurred and can be measured at fair value. The adoption of FASB Statement No. 146 did not have an impact on the financial statements because the Company recorded restructuring and integration charges as summarized in Note 8 of the consolidated Company s financial statements using the guidance under FASB Statement No. 88, Employers Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits and FASB Statement No. 112, Employers Accounting for Postemployment Benefits.

The Company continued actions during 2003 associated with its cost reduction and integration programs. The programs affect all businesses across the Company, and generally will take no longer than twelve months to complete from the date of commencement unless certain legal or contractual restrictions on the Company s ability to complete the program exist. The Company recorded $15.3 million of charges during 2003, which included $13.1 million of severance benefits for employees affected by plant closings or capacity reduction, as well as various personnel in corporate, administrative or shared service functions. Termination benefits were based on various factors including length of service, contract provisions, local legal requirements and salary levels. Management estimated the charges based on these factors as well as projected final service dates. Certain changes in the original estimates may occur causing the Company to adjust the amounts reflected in the consolidated financial statements.

Off Balance Sheet Indebtedness

In 2000, the Company initiated a $150.0 million five-year program to sell (securitize), on an ongoing basis, a pool of its trade accounts receivable. This program serves to accelerate cash collections of the Company s trade accounts receivable at favorable financing costs. Under the program, certain of the receivables of the Company are sold to a wholly owned unconsolidated special purpose entity, Ferro Finance Corporation (FFC). FFC can sell, under certain conditions, an undivided fractional ownership interest in the pool of receivables to a multi-seller receivables securitization company (conduit). Additionally, under this program, receivables of certain European subsidiaries are sold directly to other conduits. The Company and certain European subsidiaries on behalf of FFC and the conduits provide service, administration and collection of the receivables. FFC and the conduits have no recourse to the Company s other assets for failure of debtors to pay when due, and in accordance with FASB Statement No. 140 Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities , no liability is reflected on the Company s balance sheet.

The Company retains interests in the receivables transferred to FFC and Conduits in the form of a note receivable to the extent that receivables transferred exceed advances. The note receivable balance is included in other current assets in the Company s consolidated balance sheet. The Company and certain European subsidiaries on a monthly basis measure the fair value of the retained interests at management s best estimate of the undiscounted

expected future cash collections on the transferred receivables. Actual cash collections may differ from these estimates and would directly affect the fair value of the retained interests causing the Company to adjust the amounts reflected in the consolidated financial statements.

Valuation of Long-Lived Assets

The Company s long-lived assets include property, plant, equipment, goodwill and other intangible assets. Property, plant and equipment are depreciated on a straight-line basis over their estimated useful lives. The Company adopted FASB Statement No. 142 Goodwill and Other Intangible Assets (Statement No. 142) for goodwill and intangible assets acquired after June 30, 2001 as of July 1, 2001. Statement No. 142 was adopted in its entirety as of January 1, 2002 and accordingly, the Company s goodwill and intangible assets with indefinite useful lives are no longer being amortized. Goodwill and other intangibles with indefinite useful lives are subject to periodic impairment testing, on at least an annual basis, to determine if their carrying value exceeds fair value. Fair value is estimated using the discounted cash flow method and impairment loss is recognized for the excess of the carrying value over its implied fair value. Other identifiable intangibles include patents, trademarks, customer lists, and other items. Intangible assets with finite lives are amortized on a straight-line basis over the estimated useful lives of the assets. The Company tested its intangible assets with indefinite lives for impairments under the provisions of Statement No. 142 and determined that during 2003, no impairment had occurred.

Derivative Financial Instruments

The Company uses derivative financial instruments to manage the price risk for a portion of its forecasted requirements for natural gas. These are termed as cash flow hedges in accordance with FASB Statement No. 133, Accounting for Derivative Instruments and Hedging Activities. The Company records these contracts on its balance sheet at fair market value. Unrealized gains or losses on the effective portion of such hedges are accounted for as a component of other comprehensive income in accordance with FASB 133.

Item 7A - *Quantitative and Qualitative Disclosures about Market Risk*

The Company s exposure to market risks is primarily limited to interest rate and foreign currency fluctuation risks. Ferro s exposure to interest rate risk relates primarily to its debt portfolio including off balance sheet obligations under the accounts receivable securitization program. The Company s interest rate risk management objective is to limit the effect of interest rate changes on earnings, cash flows and overall borrowing costs. To limit interest rate risk on borrowings, the Company maintains a portfolio of fixed and variable debt within defined parameters. In managing the percentage of fixed versus variable rate debt, consideration is given to the interest rate environment and forecasted cash flows. This policy limits exposure from rising interest rates and allows the Company to benefit during periods of falling rates. The Company s interest rate exposure is generally limited to the amounts outstanding under the revolving credit facility and amounts outstanding under its asset securitization program. Based on the amount of variable-rate indebtedness outstanding at December 31, 2003 and 2002, a 1% change in interest rates would have resulted in a $1.8 million and a $2.1 million increase in expense, respectively.

At December 31, 2003, the Company had $350.7 million of fixed rate debt outstanding with an average interest rate of 8.5%, all maturing after 2008. The fair market value of these debt securities was approximately $388.3 million at December 31, 2003.

The Company is also subject to price changes to its raw materials and natural gas. The Company attempts to mitigate raw materials price increases with price increases to the Company s customers and natural gas fluctuations are managed using derivative financial instruments.

Ferro manages its currency risks principally through the purchase of put options and by entering into forward contracts. Put options are purchased to protect the value of Euro-denominated earnings against a depreciation of the Euro versus the U.S. dollar. Forward contracts are entered into to mitigate the impact of currency fluctuations on transaction and other exposures.

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At December 31, 2003, the Company held forward contracts to manage its foreign currency transaction exposures, which had a notional amount of $72.3 million. The Company also held put options to sell Euros for U.S. dollars with a notional amount of $19.0 million and an average strike price of $1.089/Euro. At December 31, 2003, these forward contracts and options had an aggregate fair value of $(0.8) million. A 10% appreciation of the U.S. dollar would have resulted in a $0.1 million and $1.6 million increase in the fair value of these contracts in the aggregate at December 31, 2003, and December 31, 2002, respectively. A 10% depreciation of the U.S. dollar would have resulted in a $0.2 million increase and a $1.5 million decrease in the fair value of these contracts in the aggregate at December 31, 2003, and December 31, 2002, respectively.

The Company uses derivative financial instruments to manage the price risk for a portion of its forecasted requirements for natural gas. In compliance with FASB Statement No. 133, the Company records these contracts on its balance sheet at fair market value. Unrealized gains or losses on the effective portion of such hedges are accounted for as a component of other comprehensive income in accordance with FASB Statement No. 133. These instruments, that have maturity dates that coincide with the Company s expected purchases of the natural gas, allow the Company to effectively establish its cost for gas at the time the Company enters into the instrument. To the extent the Company has not entered into derivative financial instruments, our cost of natural gas will increase or decrease as the market prices for the commodity rises and falls. The fair value of the contracts for natural gas was a gain of approximately $0.3 million at December 31, 2003. A 10% increase or decrease in the forward prices of natural gas from the December 31, 2003, level would have resulted in a $0.6 million corresponding change in the fair market value of the contracts as of December 31, 2003.

The Company enters into precious metal leases (primarily gold, silver, platinum and palladium), which are arrangements under which banks provide the Company with precious metals for a specified period for which the Company pays a lease fee. As of December 31, 2003, the fair value of precious metals under leasing arrangements was $93.6 million. A 10% increase or decrease in the lease rate of precious metals from the December 31, 2003, level would have resulted in a $0.2 million corresponding change in lease expense for the year 2003.

Item 8 ***Financial Statements and Supplementary Data***

Report of Independent Public Accountants

To the Shareholders and Board of Directors
of Ferro Corporation:

We have audited the accompanying consolidated balance sheets of Ferro Corporation and subsidiaries (the Company) as of December 31, 2003 and 2002, and the related consolidated statements of income, shareholders equity, and cash flows for each of the years in the three-year period ended December 31, 2003. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We have conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Ferro Corporation and subsidiaries as of December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2003, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 1 to the consolidated financial statements, effective July 1, 2001, the Company adopted the provisions of Statement of Financial Accounting Standards (SFAS) No.141, Business Combinations , and certain provisions of SFAS No. 142, Goodwill and Other Intangible Assets , as required for goodwill and intangible assets resulting from business combinations consummated after June 30, 2001. The Company adopted the remaining provisions of SFAS No. 142, as well as SFAS No.144, Accounting for the Impairment or Disposal of Long-Lived Assets , effective January 1, 2002.

/s/ KPMG LLP

Cleveland, Ohio
February 4, 2004

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Consolidated Statements of Income
Ferro Corporation and subsidiaries

Years ended December 31,	2003	2002	2001
	(dollars in thousands, except per share data)		
Net sales	$1,622,370	$1,528,454	$1,246,503
Cost of sales	1,241,096	1,143,324	929,612
Selling, administrative and general expenses	309,279	282,459	245,844
Other charges (income):			
Interest expense	35,647	41,847	33,240
Interest earned	(892)	(1,036)	(2,572)
Foreign currency transactions, net	2,239	402	(19,953)
Miscellaneous expense, net	10,758	12,878	12,859
Income before taxes	24,243	48,580	47,473
Income tax expense	6,863	14,833	17,461
Income from continuing operations	17,380	33,747	30,012
Discontinued operations:			
Income (loss) from discontinued operations, net of tax	(923)	6,172	9,185
Gain on disposal of discontinued operations, net of tax	3,094	33,804	
Net income	19,551	73,723	39,197
Dividends on preferred stock	2,088	2,447	3,078
Net income available to common shareholders	$ 17,463	$ 71,276	$ 36,119
Per common share data			
Basic earnings			
From continuing operations	$ 0.38	$ 0.82	$ 0.79
From discontinued operations	0.05	1.04	0.26
	$ 0.43	$ 1.86	$ 1.05
Diluted earnings			
From continuing operations	$ 0.38	$ 0.81	$ 0.79
From discontinued operations	0.05	0.98	0.25
	$ 0.43	$ 1.79	$ 1.04

See accompanying notes to consolidated financial statements.

Consolidated Balance Sheets
Ferro Corporation and subsidiaries

December 31,	(dollars in thousands, except for number of shares and per share amounts) 2003	2002
Assets		
Current assets		
Cash and cash equivalents	$ 23,419	$ 14,942
Accounts and trade notes receivable	195,729	154,533
Notes receivable	97,466	23,997
Inventories	181,604	183,055
Assets of businesses held for sale		27,046
Deferred tax assets	39,942	33,001
Other current assets	43,883	49,011
Total current assets	582,043	485,585
Net property, plant and equipment	608,484	577,754
Other assets		
Unamortized intangibles	421,313	421,274
Deferred tax assets	62,986	53,517
Miscellaneous other assets	76,400	66,343
Total assets	$1,751,226	$1,604,473
Liabilities and Shareholders Equity		
Current liabilities		
Notes and loans payable	$ 12,404	$ 7,835
Accounts payable	231,652	207,873
Income taxes	15,058	15,645
Accrued payrolls	28,050	33,826
Liabilities of businesses held for sale		12,518
Accrued expenses/other current liabilities	125,931	126,470
Total current liabilities	413,095	404,167
Other liabilities		
Long-term liabilities, less current portion	516,236	443,552
Post-retirement and pension liabilities	224,439	220,905
Other non-current liabilities	71,535	63,353
Shareholders equity		
Serial convertible preferred stock, without par value Authorized 2,000,000 shares; 1,520,215 shares issued	70,500	70,500

Common stock, par value $1 per share Authorized 300,000,000 shares; 52,323,053 shares issued	52,323	52,323
Paid-in capital	157,221	153,115
Retained earnings	612,976	619,006
Accumulated other comprehensive loss	(85,790)	(130,929)
Other	(6,516)	(6,118)
	800,714	757,897
Less: Cost of treasury stock:		
Common 10,865,691 and 11,807,021 shares for 2003 and 2002, respectively	232,235	247,530
Preferred 916,773 and 815,713 shares for 2003 and 2002, respectively	42,558	37,871
Total shareholders equity	525,921	472,496
Commitments and contingencies		
Total liabilities and shareholders equity	$1,751,226	$1,604,473

See accompanying notes to consolidated financial statements.

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Consolidated Statements of Shareholders Equity
Ferro Corporation and subsidiaries

(dollars in thousands)

	Preferred stock	Common stock	Paid-in capital	Retained earnings	Accumulated other comprehensive income (loss) (a)	Common stock held in treasury	Preferred stock held in treasury	Other	Total shareholders equity (b)
Balances at December 31, 2000	**$70,500**	**47,323**	**21,606**	**552,980**	**(85,678)**	**(266,858)**	**(22,983)**	**(7,732)**	**309,158**
Comprehensive income									
Net income				39,197					39,197
Other comprehensive income (loss), net of tax(a)									
Foreign currency translation adj.					(17,330)				(17,330)
Minimum pension liability adj.					(4,667)				(4,667)
Other comprehensive income (loss)					(21,997)				(21,997)
Comprehensive income				39,197	(21,997)				17,200
Cash dividends(c):									
Common				(19,855)					(19,855)
Preferred				(3,078)					(3,078)
Federal tax benefits				78					78
Transactions involving benefit plans			780			9,668	(5,014)	(641)	4,793
Purchase of treasury stock						(7,910)			(7,910)

Balances at December 31, 2001	**$70,500**	**47,323**	**22,386**	**569,322**	**(107,675)**	**(265,100)**	**(27,997)**	**(8,373)**	**300,386**
Comprehensive income									
Net income				73,723					73,723
Other comprehensive income (loss), net of tax(a)									
Foreign currency translation adj.					20,364				20,364
Minimum pension liability adj.					(43,618)				(43,618)
Other comprehensive income (loss)					(23,254)				(23,254)
Comprehensive income				73,723	(23,254)				50,469
Issuance of common stock		5,000	126,540						131,540
Cash dividends(c):									
Common				(21,651)					(21,651)
Preferred				(2,447)					(2,447)
Federal tax benefits				59					59
Transactions involving benefit plans			4,189			17,994	(9,874)	2,255	14,564
Purchase of treasury stock						(424)			(424)
Balances at December 31, 2002	**$70,500**	**52,323**	**153,115**	**619,006**	**(130,929)**	**(247,530)**	**(37,871)**	**(6,118)**	**472,496**
Comprehensive income									
Net income				19,551					19,551
Other comprehensive income (loss), net of tax(a)									
Foreign currency translation adj.					54,560				54,560

Natural gas contracts & Other adj.	227	227
Minimum pension liability adj.	(9,648)	(9,648)