BRUSH ENGINEERED MATERIALS INC
Form S-3/A
May 14, 2004

As Filed with the Securities and Exchange Commission on May 14, 2004

Registration No. 333-114147

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

AMENDMENT NO. 1
TO
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Brush Engineered Materials Inc.

(Exact Name of Registrant as Specified in Its Charter)

Ohio	**34-1919973**
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification Number)*

17876 St. Clair Avenue
Cleveland, Ohio 44110
Telephone: (216) 486-4200
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant s Principal Executive Offices)

John J. Pallam
Vice President, General Counsel
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Vice President, Treasurer and Secretary
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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. o

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. o

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We and the selling shareholders may not sell these securities until the registration statement that is filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MAY 14, 2004

PROSPECTUS

1,815,000 Shares

Brush Engineered Materials Inc.

Common Stock

We are offering 1,700,000 common shares and the selling shareholders are offering 115,000 common shares through a syndicate of underwriters. We will not receive any of the proceeds from the sale of common shares by the selling shareholders.

Our common shares are traded on the New York Stock Exchange under the symbol BW. The last reported sale price of our common shares on the New York Stock Exchange on May 13, 2004 was $16.05 per share.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Investing in our common shares involves risks. See Risk Factors beginning on page 7.

	Per Share	Total
Public offering price	$	$
Underwriting discount and commission	$	$
Proceeds to us (before expenses)	$	$
Proceeds to selling shareholders (before expenses)	$	$

We have granted the underwriters an option to purchase up to 272,250 additional common shares to cover over-allotments.

We expect that the common shares will be ready for delivery on or about , 2004.

KEYBANC CAPITAL MARKETS

JEFFERIES & COMPANY, INC.

BB&T CAPITAL MARKETS

WM SMITH SECURITIES, INC.

The date of this prospectus is , 2004.

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You should rely only on the information contained in or incorporated by reference into this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front of this prospectus or the date of any document incorporated by reference.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. We urge you to read this entire prospectus and the documents incorporated by reference into this prospectus carefully, including the Risk Factors section and our consolidated financial statements and the related notes included elsewhere in this prospectus. Unless the context otherwise requires, references to we, us or our refer collectively to Brush Engineered Materials Inc. and its subsidiaries. The term common shares means our shares of common stock, no par value, unless the context indicates a different meaning. Unless otherwise specified, all information assumes the underwriters do not exercise their over-allotment option.

Brush Engineered Materials Inc.

We are a leading global provider of high-performance engineered materials for a growing variety of commercial and industrial applications where superior performance and reliability are essential. Our engineered materials are critical components of many high-technology or high-performance products and enable those products to be made stronger, smaller and lighter, with improved performance characteristics. We produce and distribute high-performance beryllium products, alloy products, electronic products, precious metal products and engineered material systems. Our engineered materials have product applications in a variety of end-use markets, including telecommunications and computer, automotive electronics, optical media, industrial components, appliance, aerospace and defense.

Beryllium is a key raw material in many of our products. Beryllium is a naturally occurring element number four on the periodic table of elements, with the symbol Be and is the lightest structural metal on Earth. It is stiffer than steel, lighter than aluminum and possesses other unique mechanical and thermal properties. Beryllium is extracted from bertrandite and beryl ores. We operate the only active bertrandite ore mine in the developed world, located on 7,500 acres in Juab County, Utah. Through our subsidiaries Brush Wellman Inc., Brush Resources Inc. and Brush Ceramic Products Inc., we are the world s only fully integrated provider of beryllium, beryllium-containing alloys and beryllia ceramics.

We were organized as a holding company for our various businesses in 2000. Our subsidiary Brush Wellman Inc. was founded in 1931 as The Brush Beryllium Company. We currently operate 16 manufacturing facilities located in the United States, Singapore and the Philippines. We also have global service and distribution centers in Germany, Japan, Singapore, England and the United States, and sales offices throughout the United States, China and Taiwan.

We have two business segments: Metal Systems Group and Microelectronics Group. Our Metal Systems Group accounted for approximately 60% of our sales during 2003, and our Microelectronics Group accounted for approximately 39% of our sales during 2003. The balance of our sales during 2003 were from our bertrandite ore milling operations.

Metal Systems Group

Our Metal Systems Group includes Alloy Products, Beryllium Products and Technical Materials Inc., or TMI.

Alloy Products, our largest business, manufactures and sells copper and nickel-based alloy systems, most of which incorporate beryllium. These beryllium alloys exhibit high strength and hardness, good formability and excellent resistance to corrosion, wear and fatigue, while retaining good thermal and electrical conductivity. They often are the material of choice for critical components in cell phones and wireless communications equipment, notebook and network computers and web servers, personal digital assistants, or PDAs, automotive electronics and industrial products. Alloy Products also manufactures non-beryllium-containing alloys including ToughMet®, a copper-nickel-tin alloy which are corrosion and wear resistant, have excellent lubricity properties and are used in plastic mold tooling, aerospace, oil and gas and heavy equipment product applications.

Beryllium Products manufactures pure beryllium and aluminum-beryllium composites that are used in many high-performance applications, primarily for the defense and aerospace industries. Beryllium s unique properties stiffness, strength, lightweight, temperature resistance and reflectivity are critical to a number of NASA programs. For example, in September 2003, beryllium was chosen by Northrop Grumman Space Technology as the material for the 18 segment, 6.5-meter primary mirror of NASA s James Webb Space Telescope. We expect this application to add approximately $15 million in sales of optical grade beryllium over the next two to three years.

TMI produces engineered material systems that are produced by combining precious and non-precious metals in continuous strip form, which provide a variety of thermal, electrical or mechanical properties over a surface area or particular section of the material. TMI s products are used in complex electrical components in telecommunications systems, automotive electronics, semi-conductors and computers, as well as other high-technology applications.

Microelectronics Group

Our Microelectronics Group includes Williams Advanced Materials Inc., or WAM, and Electronic Products, which consists of Brush Ceramic Products and Zentrix Technologies Inc.

WAM manufactures precious metal and specialty alloy products specifically fabricated to meet the exacting standards required in high reliability applications for the microelectronics, semi-conductor, optical media (including DVDs), electron tube, magnetic head, aerospace and performance film industries.

Brush Ceramic Products produces beryllia ceramic materials used in wireless telecommunications, laser, medical and defense applications. Zentrix manufactures electronic packaging and circuitry used in wireless telecommunications, automotive, medical, aerospace and defense applications.

Our Financial and Operational Initiatives

After generating record sales of $147.2 million during the fourth quarter of 2000 and strong sales of $145.5 million during the first quarter of 2001, we experienced a dramatic and sustained decline in sales. Our quarterly revenue has ranged between approximately $89 million and $106 million since the second quarter of 2001. This drop in sales levels was primarily due to the collapse of the global telecommunications and computer market, which accounted for approximately 50% of our sales in 2000 and approximately 35% of sales in 2003. As a result, we recorded significant operating losses in 2001, 2002 and 2003.

In 2001, we implemented several financial and operational initiatives designed to return us to consistent profitability. These initiatives are focused on five key areas: reducing debt, reducing overhead, improving margins, broadening our revenue base and positioning ourselves to capitalize on a general economic recovery, including a recovery in the telecommunications and computer market.

Through these initiatives, we have reduced total debt, off-balance sheet financing and precious metal consignment obligations by more than $80 million since the end of 2000. See Management s Discussion and Analysis of Financial Condition and Results of Operations Financial Position Debt and Off-Balance Sheet Obligations. In December 2003, we completed a five-year, $147.5 million debt refinancing that lowered costs compared to an existing credit and lease facility. We used the proceeds from the transaction to retire existing debt and terminate an existing key off-balance sheet obligation through the purchase of certain leased assets. The refinancing also provides increased liquidity to support working capital requirements for future growth. We achieved targeted overhead cost reductions through, among other things, improved efficiencies, a 27% reduction in headcount from 2000 year-end levels, a wage freeze and fringe benefit reductions. Despite a decline in revenue, our gross margins have improved as a percent of sales approximately 3.8 percentage points since 2001. In 2003, Alloy Products reduced manufacturing cycle times for our alloy products by 18%, improved manufacturing inventory turns by 48%, raised yields by 11% and shipped 23% more pounds per manufacturing employee. We also broadened our revenue base through the introduction of several new products for existing and new markets and positioned ourselves to capitalize on growth in Asia by developing sales, marketing and distribution capabilities in a number of markets in the region.

Our Competitive Strengths

We believe that we maintain the following competitive strengths:

Unique Status as a Fully Integrated Provider of Beryllium-Containing Products. Our status as the world s only fully integrated provider of beryllium, beryllium-containing alloys and beryllia ceramics allows us to offer our customers the convenience and security of a single supply chain source for critical engineered materials.

High Barriers to Entry. Our vertical integration, access to beryllium resources, know-how and expertise in refining and processing beryllium and beryllium-containing materials, and the capital investment required for our business establish high barriers to entry for potential competitors.

Product Breadth Within Existing Markets. Our extensive product offerings are important for many customers and distributors and provide an advantage in developing and maintaining relationships with original equipment manufacturers, or OEMs, and in establishing partnerships with distributors.

Global Distribution Network. Our global distribution network allows us to actively market our products and effectively respond to our customers needs throughout the world.

Strategic Customer Relationships. Our long-term relationships with customers in key growth end markets allow us to collaborate in our customers product development efforts, which often results in our products being included in design specifications for a customer s new product.

Technological Capabilities and Product Quality. We believe that our metal engineering technologies, customized machinery and processes and attention to quality are competitive advantages. We believe that our products superior characteristics and performance tolerances provide an important competitive advantage, particularly in the sophisticated alloys required for the most demanding end user applications.

Capacity to Support Profitable Market Growth. As the market s demand for engineered materials increases, we are well-positioned to expand our manufacturing output without significant incremental cash investment. In addition to manufacturing capacity, our operational initiatives have significantly improved our manufacturing efficiency and have positioned us to improve our profitability.

Significant Operating Expertise. We believe that our management team is successfully implementing our financial and operational initiatives to return us to profitability and that our team s extensive industry experience positions us to identify and capitalize on emerging growth opportunities.

Our Growth Strategy

Our objective is to grow our business profitably while strengthening our position as a leading global provider of high-performance engineered materials. Key elements of our growth strategy are to:

Capture Improved Demand in the Telecommunications and Computer Market. We are positioned to benefit from an increase in equipment spending and a general improvement in the conditions of the telecommunications and computer market. During 2003, demand for telecommunications and computer products began to improve as commercial and industrial users began to make more significant expenditures on information and communication systems, augmented by increasing consumer demand for communication products. We are well positioned in these markets and expect to benefit from improvements in market conditions.

Capitalize on the Trend Towards Higher Performance and Miniaturization of Electronic Components. We seek to capitalize on our ability to provide our customers with engineered materials that are well suited to meet the demanding standards associated with the trend towards higher performance and miniaturization of electronic components. As manufacturers continue to miniaturize their products, more high-performance engineered materials capable of meeting stringent performance and reliability standards need to be included in those products.

Expand and Diversify Our Revenue Base. We seek to build on existing customer relationships and our core manufacturing competencies to increase the breadth of our product offerings in existing markets and diversify into additional markets with the goal of reducing our susceptibility to economic cycles and increasing our prospects for profitable growth.

Increase Our Global Presence. We intend to continue to expand our sales, marketing and service capabilities into international markets in response to our existing customers needs and new business opportunities, including new potential markets and customers resulting from the trend toward high-performance materials and miniaturization. Our presence in the local markets of our customers allows us to quickly respond to their needs and requests, which we believe provides us with a key competitive advantage.

Increase Operational Efficiency. We intend to build upon the success of our existing cost reduction and manufacturing efficiency initiatives to improve margins and position ourselves for profitable growth in both strong and weak economic environments.

Pursue Selective Acquisitions in Our Strategic Markets. We intend to selectively pursue acquisitions that can extend our geographic reach, expand and diversify our customer base or increase the breadth of our product and service offerings.

Our Uncertainties

The competitive strengths that we maintain, the implementation of our growth strategy and our future operating results and financial condition are subject to a number of uncertainties. The factors that could adversely affect our performance and actual results, as well as the successful implementation of our growth strategy, are discussed under Risk Factors beginning on page 7.

Corporate Information

Brush Engineered Materials Inc. is an Ohio corporation. Our principal executive offices are located at 17876 St. Clair Avenue, Cleveland, Ohio 44110. Our telephone number is (216) 486-4200. Our website is www.beminc.com. The information on our website is not part of this prospectus.

The Offering

Common shares offered by us	1,700,000 shares
Common shares offered by the selling shareholders	115,000 shares
Common shares to be outstanding immediately after this offering	18,578,229 shares
Use of proceeds	We intend to use the net proceeds of approximately $ million, based on an offering price of $ per share, from our offering to repay a portion of the amounts outstanding under credit facilities and for working capital and general corporate purposes, including capital expenditures, acquisitions of businesses or assets and investments. We will not receive any of the proceeds from the sale of common shares by the selling shareholders. See Use of Proceeds on page 19.
Over-allotment option	We have granted to the underwriters an option to purchase up to an additional 272,250 common shares solely to cover over-allotments.
NYSE symbol	BW

The number of common shares to be outstanding after the offering is based on the number of common shares outstanding as of May 7, 2004. Unless we specifically state otherwise, the information contained in this prospectus excludes 1,562,728 common shares reserved for issuance upon the exercise of options granted under our equity compensation plans as of May 7, 2004.

Summary Consolidated Financial Data

(Dollars in thousands, except per share data)

The tables below set forth our summary consolidated financial data for the periods presented. We derived the financial data for the years ended December 31, 2003, 2002 and 2001 from our audited financial statements included in this prospectus. We derived the financial data for the years ended December 31, 2000 and 1999 from our audited financial statements not included herein. The financial data for the quarters ended April 2, 2004 and March 28, 2003 and as of April 2, 2004 are derived from our unaudited consolidated financial statements included elsewhere in this prospectus. The interim unaudited consolidated financial statements have been prepared on the same basis as the annual audited financial statements and include, in the opinion of management, all adjustments, consisting of normal and recurring adjustments, necessary to present fairly the data for such periods and may not necessarily be indicative of full year results. Prospective investors should read the summary consolidated financial data in conjunction with Selected Consolidated Financial Data, Management s Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the related notes included elsewhere in this prospectus.

The As Adjusted column in the consolidated balance sheet data below gives effect to the sale of the 1,700,000 common shares offered by us at an assumed public offering price of $ per share, the last reported sale price of our common shares on , 2004, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

	Year Ended December 31,					First Quarter Ended	
	2003	2002	2001	2000	1999	April 2, 2004	March 28, 2003
						(unaudited)	
Statement of Operations Data:							
Net sales	$401,046	$372,829	$472,569	$563,690	$455,707	$125,862	$99,518
Cost of sales	328,008	324,932	404,574	444,951	363,773	96,285	82,405
Gross profit	73,038	47,897	67,995	118,739	91,934	29,577	17,113
Operating profit (loss)	(9,340)	(22,845)	(14,069)	22,986	10,558	6,071	(2,039)
Interest expense	3,355	3,010	3,327	4,652	4,173	2,218	772
Income (loss) from continuing operations before income taxes	(12,695)	(25,855)	(17,396)	18,334	6,385	3,853	(2,811)
Net income (loss)	$ (13,226)	$ (35,604)	$ (10,274)	$ 14,165	$ 6,439	$ 3,754	$ (3,016)
Net income (loss) per common share:							
Basic	$ (0.80)	$ (2.15)	$ (0.62)	$ 0.87	$ 0.40	$ 0.23	$ (0.18)
Diluted	$ (0.80)	$ (2.15)	$ (0.62)	$ 0.86	$ 0.40	$ 0.22	$ (0.18)
Dividends per common share			$ 0.24	$ 0.48	$ 0.48		
Depreciation and amortization	$ 20,731	$ 20,640	$ 21,609	$ 22,664	$ 27,037	$ 5,758	$ 5,184
Capital expenditures	$ 6,162	$ 5,248	$ 23,130	$ 21,306	$ 16,758	$ 1,356	$ 1,587
Mine development expenditures	$ 157	$ 166	$ 154	$ 332	$ 288	$ 90	$ 101

	At December 31,					At April 2, 2004
	2003	2002	2001	2000	1999	Actual

							As Adjusted
						(unaudited)	
Balance Sheet Data:							
Working capital	$ 85,141	$ 82,645	$110,894	$143,387	$124,831	$ 94,727	
Property and equipment							
At cost	$535,421	$476,283	$469,663	$449,697	$440,234	$536,440	
Cost less depreciation and amortization	$190,846	$152,544	$171,296	$170,460	$170,939	$186,906	
Total assets	$371,616	$334,879	$403,653	$452,506	$428,406	$387,505	
Other long-term liabilities	$ 64,097	$ 65,977	$ 62,473	$ 55,454	$ 53,837	$ 63,785	
Long-term debt	$ 85,756	$ 36,219	$ 47,251	$ 43,305	$ 42,305	$ 84,292	
Shareholders equity	$153,573	$159,094	$214,350	$229,907	$220,638	$160,274	

RISK FACTORS

You should carefully consider the risks described below and all other information contained in or incorporated by reference into this prospectus before purchasing our common shares. Some of the following risks relate principally to the industry in which we operate and to our business. Other risks relate principally to the securities markets and ownership of our common shares. Additional risks and uncertainties not presently known to us, or risks that we currently do not consider to be material, may also impair our operations or results. If any of the following risks actually occurs, we may not be able to conduct our business as currently planned, and our financial condition and sales, margins and profitability could be seriously harmed. In that case, the market price of our common shares could decline, and you could lose all or part of your investment.

Risks Relating to Our Business

Health issues and litigation relating to machining and manufacturing of beryllium-containing products could have a material adverse effect on our business.

If exposed to respirable beryllium fumes, dusts or powder, some individuals may demonstrate an allergic reaction to beryllium and may later develop a chronic lung disease known as chronic beryllium disease, or CBD. Some people who are diagnosed with CBD do not develop clinical symptoms at all. In others, the disease can lead to scarring and damage of lung tissue, causing clinical symptoms that include shortness of breath, wheezing and coughing. Severe cases of CBD can cause disability or death.

Further, some scientists claim there is evidence of an association between beryllium exposure and lung cancer, and certain standard-setting organizations have classified beryllium and beryllium compounds as human carcinogens.

The health risks relating to exposure to beryllium have been, and will continue to be, a significant issue confronting the beryllium-containing products industry. The health risks associated with beryllium have resulted in product liability claims, employee and third-party lawsuits and increased levels of scrutiny by federal, state, foreign and international regulatory authorities of us and our customers. Concerns over CBD and other potential adverse health effects relating to beryllium, as well as concerns regarding potential liability from the use of beryllium, may discourage our customers use of our beryllium-containing products and reduce demand for our products.

One of our subsidiaries, Brush Wellman, is a defendant in proceedings in various state and federal courts brought by plaintiffs alleging that they have contracted CBD or other lung conditions as a result of exposure to beryllium. Plaintiffs include persons employed by Brush Wellman, contractors at Brush Wellman s facilities and its customers and users of beryllium-containing products, and their family members. As of March 31, 2004, there were 14 beryllium-related claims pending in which Brush Wellman is a defendant, three of which are putative class actions. Many of the plaintiffs in these suits do not currently have any symptoms of CBD, though we cannot assure you they will not exhibit symptoms in the future. All but one of these actions are currently covered under varying levels of pre-existing insurance coverage through third-party carriers, although we may not be able to collect fully on our insurance coverage. A substantial portion of our insurance coverage is provided through various syndicates of Lloyd s of London (now reinsured through Equitas Holdings Limited) and other London insurance market companies, some of whose names are or may become insolvent.

Our profitability could be affected adversely by unfavorable results in one or more of those cases. In addition, continued or increased adverse media coverage relating to our beryllium-containing products could damage our reputation or cause a decrease in demand for beryllium-containing products, which could adversely affect our profitability. Further, an unfavorable outcome or settlement of a pending beryllium case or additional adverse media coverage could encourage the commencement of additional similar litigation.

We are currently self-insured for product liability claims based on exposure to beryllium after July 2001, and material losses from those claims could adversely affect our profitability.

Although we have varying levels of insurance coverage from insurance carriers for product liability claims based on exposure to beryllium for most periods prior to July 2001, we are self-insured for product liability claims based on exposure to beryllium after July 2001 and for a short period in the 1980s. We may not be able to provide adequate coverage against all potential liabilities. Significant losses from any of the claims for which we are self-insured could adversely affect our profitability.

Our bertrandite ore mining and our manufacturing operations and our customers businesses are subject to extensive health and safety regulations that impose, and will continue to impose, significant costs and liabilities, and future regulation could increase those costs and liabilities or effectively prohibit production or use of beryllium-containing products.

We and our customers are subject to laws regulating worker exposure to beryllium. Standards for exposure to beryllium are under review by various governmental and private standard-setting organizations. One such review is being conducted by the United States Occupational Safety and Health Administration, which has commenced a rulemaking process to decide whether to revise its current standards for workers exposed to beryllium. Those reviews may result in more stringent worker safety standards, which may significantly increase our costs of production. More stringent worker safety standards may also cause users of beryllium-containing products to choose alternative materials or otherwise reduce demand for beryllium-containing products. Reduction in demand for our products or an increase in our production costs could adversely affect our sales. Further, production or use of beryllium may be effectively prohibited, at least for some applications, if worker safety standards were increased significantly, which would cause us to shut down a portion or all of our operations relating to beryllium-containing materials. Present and future environmental regulations could also impair our customers ability and willingness to use our beryllium-containing products.

Our bertrandite ore mining and our manufacturing operations are subject to extensive environmental regulations that impose, and will continue to impose, significant costs and liabilities on us, and future regulation could increase these costs and liabilities or prevent production of beryllium-containing products.

We are subject to a variety of governmental regulations relating to the environment, including those relating to our handling of hazardous materials and air and wastewater emissions. Some environmental laws impose substantial penalties for noncompliance. Others, such as the federal Comprehensive Environmental Response, Compensation, and Liability Act, impose strict, retroactive and joint and several liability upon entities responsible for releases of hazardous substances. Bertrandite ore mining is also subject to extensive governmental regulation on matters such as permitting and licensing requirements, plant and wildlife protection, reclamation and restoration of mining properties, the discharge of materials into the environment and the effects that mining has on groundwater quality and availability. If we fail to comply with present and future environmental laws and regulations, we could be subject to liabilities or our operations could be interrupted. In addition, future environmental laws and regulations could restrict our ability to expand our facilities or extract our bertrandite ore deposits. They could also require us to acquire costly equipment or to incur other significant expenses in connection with our business, and those increased costs could adversely affect our margins and profitability.

We have recently incurred significant losses, and we may not be able to sustain profitability if we attain it.

We have not generated an annual operating profit since 2000. Our operating losses for 2003, 2002 and 2001 were approximately $9.3 million, $22.8 million and $14.1 million, respectively. Although we have taken steps under our business strategy to improve our operating performance, those measures may not result in profitability, or, if they do result in profitability, that trend may not continue. If we fail to establish profitable operations and continue to incur losses, the price of our common shares may fall.

We have implemented strategic initiatives designed to improve our operating performance. We may not be able to successfully implement or realize the expected benefits of any of those initiatives or sustain improvements made to date. If we fail to achieve the goals of those initiatives, our profitability may be adversely affected.

Our customers are subject to significant fluctuations as a result of the cyclical nature of their industries and their sensitivity to general economic conditions, which could adversely affect their demand for our products and could, in turn, adversely affect our sales.

A substantial number of our customers are in the telecommunications and computer, and automotive electronics industries. Each of those industries is cyclical in nature, influenced by a combination of factors, including, among other things, periods of economic growth or recession, strength or weakness of the United States dollar, the strength of the automotive electronics and computer industries and the rate of construction of telecommunications infrastructure equipment.

The demand for our products is generally affected by macroeconomic fluctuations in the global economies in which we sell our products. The United States and other world markets have experienced an economic downturn in recent years, which had a significant negative impact on our customers financial performance, which in turn has had a significant negative impact on our financial performance. The severity and duration of this downturn could cause additional adverse impacts on our financial performance. Future economic downturns, stagnant economies or global currency fluctuations could significantly affect our financial performance.

In addition, a disruption or downturn in the telecommunications and computer or automotive electronic industries could negatively impact demand for our products and adversely affect our sales. For instance, bulk product sales into the undersea telecommunications market, which was our largest market segment for bulk products as recently as 2000, began to decline in the second half of 2001 and were minimal in 2002 due to the severe reduction in the number of new undersea fiber optic line installation projects throughout the world.

Our business is dependent on continued capital spending by the telecommunications and computer industries, and a decrease in capital spending for infrastructure and equipment could affect our revenue more than we currently expect. Our business could be exposed to unexpected or extended downturns in capital spending, which could adversely affect our sales. In addition, a decrease in military, aerospace or defense-related spending could adversely affect our sales.

The availability of competitive substitute materials for beryllium-containing products may reduce our customers demand for these products and adversely affect our sales and margins.

In certain product applications, we compete with manufacturers of non-beryllium-containing products, including organic composites, metal alloys or composites, titanium and aluminum. Our customers may choose to use substitutes for beryllium-containing products in their products for a variety of reasons, including, among other things, the lower costs of those substitutes, the health and safety concerns relating to these products and the risk of litigation relating to beryllium-containing products. If our customers use substitutes for beryllium-containing products in their products, the demand for our products may decrease, which could adversely affect our sales and margins.

We may not be able to complete our acquisition strategy or successfully integrate acquired businesses.

Although we have not been an active acquiror in the past, we intend to pursue further growth through the acquisition of assets or companies involved in the engineered materials industry and routinely review acquisition opportunities. While we believe that there are available a number of potential acquisition candidates that would complement our businesses, we currently have no agreements, understandings or arrangements to acquire any specific business or material assets. We cannot predict whether we will be successful in pursuing any acquisition opportunities or what the consequences of any acquisition would be. Future acquisitions may involve the expenditure of significant funds and management time. Depending upon the nature, size and timing of future acquisitions, we may be required to raise additional financing, which may not be available to us on acceptable terms. Further, we may not be able to successfully integrate any

acquired business with our existing businesses or recognize any expected advantages from any completed acquisition.

We conduct our sales and distribution operations on a worldwide basis and are subject to the risks associated with doing business outside the United States.

We sell to customers outside of the United States from our United States and international operations. Shipments to customers outside of the United States accounted for approximately 31% of our sales in 2003, 28% in 2002 and 28% in 2001. We anticipate that international shipments will account for a significant portion of our sales for the foreseeable future. Revenue from non-United States operations (principally Europe and the Pacific Rim) amounted to approximately 22% of our sales in 2003, 19% in 2002 and 18% in 2001. There are a number of risks associated with international business activities, including:

- burdens to comply with multiple and potentially conflicting foreign laws and regulations, including export requirements, tariffs and other barriers, environmental health and safety requirements and unexpected changes in any of these factors;
- difficulty in obtaining export licenses from the United States government;
- political and economic instability and disruptions;
- potentially adverse tax consequences due to overlapping or differing tax structures; and
- fluctuations in currency exchange rates.

Fluctuations in currency exchange rates, particularly for the euro and the yen, have impacted our sales, margins and profitability in the past, though not materially. The fair value of our liability relating to outstanding foreign currency contracts was $2.9 million at December 31, 2003, indicating that the average hedge rates were unfavorable compared to the actual year-end market exchange rates. Additionally, foreign and international regulations have also impacted our sales, margins and profitability in the past, though not materially. See also Health issues and litigation relating to machining and manufacturing of beryllium-containing products could have a material adverse effect on our business and Our bertrandite ore mining and our manufacturing operations and our customers businesses are subject to extensive health and safety regulations that impose, and will continue to impose, significant costs and liabilities, and future regulation could increase those costs and liabilities or effectively prohibit production or use of beryllium-containing products. Further, any of these risks could adversely affect our margins and profitability in the future.

The availability and prices of some raw materials we use in our manufacturing operations fluctuate, which can adversely affect our margins and profitability.

We manufacture engineered materials using various precious and non-precious metals, including gold, silver, palladium, platinum, copper and nickel. The availability of and prices for these raw materials are subject to volatility and are influenced by worldwide economic conditions, speculative action, world supply and demand balances, inventory levels, availability of substitute metals, the United States dollar exchange rate, production costs of United States and foreign competitors, anticipated or perceived shortages and other factors. Decreased availability and fluctuating prices of precious and non-precious metals that we use in our manufacturing may adversely affect our margins and profitability. For example, prices for copper have recently reached eight-year highs due to, among other things, increased Chinese demand. Should the market price for precious metals increase by more than 15% from the prices on December 31, 2003, the additional pre-tax cost to us on an annual basis would be approximately $0.2 million. Further, we maintain some precious metals on a consigned inventory basis. The owners of the precious metals charge a fee that fluctuates based on the market price of those metals and other factors. A significant increase in the market price of precious metals or the consignment fee could increase our financing costs, which could adversely affect our profitability.

Because we experience seasonal fluctuations in our sales, our quarterly results will fluctuate, and our annual performance will be affected by those fluctuations.

Because many of our European and automotive electronics customers slow or cease operations during the summer months, we have generally had weaker demand in the quarters ending in September compared to the quarters ending in March, June and December. We expect this seasonal pattern to continue, which causes our quarterly results to fluctuate. If our revenue during any quarter were to fall below the expectations of investors or securities analysts, our share price could decline, perhaps significantly. Unfavorable economic conditions, lower than normal levels of demand and other occurrences in any of the other quarters could also adversely affect our operating results.

Natural disasters, equipment failures, work stoppages and other unexpected events may lead our customers to curtail production or shut down their operations.

Our customers manufacturing operations are subject to conditions beyond their control, including raw material shortages, natural disasters, interruptions in electrical power or other energy services, equipment failures, work stoppages due to strikes or lockouts, particularly those affecting the automotive industry, and other unexpected events. Any of those events could also affect other suppliers to our customers. In either case, those events could cause our customers to curtail production or to shut down a portion or all of their operations, which could reduce their demand for our products. Decreased demand for our products could adversely affect our sales and profitability.

Unexpected events and natural disasters at our mine could increase the cost of operating our business.

A portion of our production costs at our mine are fixed regardless of current operating levels. Our operating levels are subject to conditions beyond our control that may increase the cost of mining for varying lengths of time. These conditions include, among other things, fire, natural disasters, pit wall failures and ore processing changes. Our mining operations also involve the handling and production of potentially explosive materials. It is possible that an explosion could result in death and injuries to employees and others and material property damage to us and third parties. Any explosion could expose us to adverse publicity or liability for damages and materially adversely affect our operations. These conditions could adversely affect our sales and profitability.

Equipment failures and other unexpected events at our facilities may lead to manufacturing curtailments or shutdowns.

The manufacturing processes that take place in our mining operation, as well as in our manufacturing facilities, depend on critical pieces of equipment. This equipment may, on occasion, be out of service because of unanticipated failure, and some equipment is not readily available or replaceable. In addition to equipment failures, our facilities are also subject to the risk of loss due to unanticipated events such as fires, explosions or other disasters. For example, in 1997 a key piece of equipment for Alloy Products was temporarily out of service due to equipment failure, resulting in a slight reduction in productivity for a short period of time before the equipment could be repaired. Material plant shutdowns or reductions in operations could adversely affect our sales and profitability. Further, remediation of any interruption in production capability may require us to make large capital expenditures that may have a negative effect on our profitability and cash flows. Our business interruption insurance may not cover all of the lost revenues associated with interruptions in our manufacturing capabilities. Further, longer-term business disruptions could result in a loss of customers, which could adversely affect our future sales.

Many of our manufacturing facilities are dependent on single source energy suppliers, and interruption in energy services may adversely affect our profitability.

Many of our manufacturing facilities depend on one source for electric power and for natural gas. For example, Utah Power is the sole supplier of electric power to the processing facility for our mining operations in Utah. A significant interruption in service from our energy suppliers due to equipment failures, terrorism or any other cause may result in substantial losses that are not fully covered by our business interruption insurance. While we have some long-term contracts with energy suppliers, supplies of energy

may be curtailed during periods of peak usage. Any substantial unmitigated interruption of our operations due to these conditions could adversely affect our profitability.

If the price of electrical power, fuel or other energy sources increases, our operating expenses could increase significantly.

We have 16 milling and manufacturing facilities and a mining operation, which depend on electrical power, fuel or other energy sources. See Business Properties. Our operating expenses are sensitive to changes in electricity prices and fuel prices, including natural gas prices. Prices for electricity and natural gas can fluctuate widely with availability and demand levels from other users. During periods of peak usage, supplies of energy may be curtailed, and we may not be able to purchase energy at historical market rates. While we have some long-term contracts with energy suppliers, we are exposed to fluctuations in energy costs that can affect our production costs. Although we enter into forward fixed price supply contracts for natural gas and electricity for use in our operations, those contracts are of limited duration and do not cover all of our fuel or electricity needs. Price increases in fuel and electricity costs could cause our profitability to decrease significantly.

We have a limited number of manufacturing facilities, and damage to those facilities could interrupt our operations, increase our costs of doing business and adversely affect our ability to deliver our products on a timely basis.

Some of our facilities are interdependent. For instance, our manufacturing facility in Elmore, Ohio relies on our mining operation for its supply of beryllium hydroxide used in production of most of its beryllium-containing materials. Additionally, our Shoemakersville, Pennsylvania, Fremont, California and Tucson, Arizona manufacturing facilities are dependent on materials produced by our Elmore, Ohio manufacturing facility, and our Wheatfield, New York manufacturing facility is dependent on our Buffalo, New York manufacturing facility. See Business Properties. The destruction or closure of any of our manufacturing facilities or our mine for a significant period of time as a result of fire, explosion, act of war or terrorism or other natural disaster or unexpected event may interrupt our manufacturing capabilities, increase our capital expenditures and our costs of doing business and impair our ability to deliver our products on a timely basis. In such an event, we may need to resort to an alternative source of manufacturing or to delay production, which could increase our costs of doing business. Our property damage and business interruption insurance may not cover all of our potential losses and may not continue to be available to us on acceptable terms, if at all. Any such delays or increased costs could adversely affect our margins and profitability.

The markets for our beryllium-containing and non-beryllium-containing products are experiencing rapid changes in technology.

We operate in markets characterized by rapidly changing technology and evolving customer specifications and industry standards. New products may quickly render an existing product obsolete and unmarketable. For example, we used to produce beryllium-copper alloys that were used in the production of some golf club heads; however, these beryllium-copper alloy club heads are no longer produced by any of our customers. Our growth and future results of operations depend in part upon our ability to enhance existing products and introduce newly developed products on a timely basis that conform to prevailing and evolving industry standards, meet or exceed technological advances in the marketplace, meet changing customer specifications, achieve market acceptance and respond to our competitors products.

The process of developing new products can be technologically challenging and requires the accurate anticipation of technological and market trends. We may not be able to introduce new products successfully or do so on a timely basis. If we fail to develop new products that are appealing to our customers or fail to develop products on time and within budgeted amounts, we may be unable to recover our significant research and development costs, which could adversely affect our margins and profitability.

If we cannot deliver products that meet our customer-defined specifications in a profitable and timely manner, our sales may be adversely affected.

Our ability to generate future sales depends upon our ability to manufacture and supply highly engineered materials that meet customer-defined specifications on a timely basis. If we incur higher costs than anticipated when we price our products, our gross margins on those products will decrease, and they may not be as profitable as expected. In addition, if we are unable to deliver our products as required by the terms of our product sales contracts, our customers may cancel those contracts. In that event, we might not recover costs that we incurred for research and development, production and otherwise, and we may incur additional costs as contractual penalties. In the year 2000, demand for our alloy strip products exceeded our production capabilities, and, as a result, some of our customers were forced to obtain materials from alternative suppliers. If we fail to meet a delivery deadline, or a customer determines that the products we deliver do not meet its specifications, we may have to reduce the price we can charge for our products, or we may be liable to pay damages to the customer. Failing to successfully manage these risks could adversely affect our sales.

Our lengthy and variable sales and development cycle makes it difficult for us to predict if and when a sale can be made and may adversely affect our margins and profitability.

Our sales and development cycle, which is the period from the generation of a sales lead or new product idea through the development of the product and the recording of sales, may typically take up to two or three years, making it very difficult to forecast sales and results of operations. Our inability to accurately predict the timing and magnitude of sales of our products could affect our ability to meet our customers product delivery requirements or cause our results of operations to suffer if we incur expenses in a particular period that do not translate into sales during that period, or at all. In addition, these failures would make it difficult to plan future capital expenditure needs and could cause us to fail to meet our cash flow requirements. These problems could adversely affect our margins and profitability.

Our beryllium-containing and non-beryllium-containing products are deployed in complex applications and may have errors or defects that we find only after deployment.

Our products are highly complex, designed to be deployed in complicated applications and may contain undetected defects, errors or failures. Although our products are generally tested during manufacturing, prior to deployment, they can only be fully tested when deployed in specific applications. For example, we sell beryllium-copper alloy strip products in a coil form to some customers, who then stamp the alloy for its specific purpose. On occasion, it is not until such customer stamps the alloy that a defect in the alloy is detected. Consequently, our customers may discover errors after the products have been deployed. The occurrence of any defects, errors or failures could result in installation delays, product returns, termination of contracts with our customers, diversion of our resources, increased service and warranty costs and other losses to us or to our customers or end users. Any of these occurrences could also result in the loss of or delay in market acceptance of our products and could damage our reputation, which could adversely affect our sales and profitability.

Future terrorist attacks and other acts of violence or war may directly impact our sales and profitability.

Future terrorist attacks or other acts of violence or war may directly impact our physical facilities. For example, our Elmore, Ohio facility is located near and derives power from a nuclear power plant, which could be a target for a terrorist attack. In addition, future terrorist attacks, related armed conflicts or prolonged or increased tensions in the Middle East or other regions of the world could cause consumer confidence and spending to decrease, thereby decreasing demand for consumer goods that contain our products. Further, when United States forces are involved in active hostilities or large-scale deployments, defense spending tends to focus more on meeting the physical needs of the troops, and planned expenditures on weapons and other systems incorporating our products may be reduced or deferred. Any of these occurrences could also increase volatility in the United States and worldwide financial markets, which could adversely affect our sales and profitability.

Our expenditures for post-retirement pension obligations could be materially higher than we have predicted if our underlying assumptions prove to be incorrect.

We provide defined benefit pension plans to eligible employees. Our pension expense and our required contributions to our pension plans are directly affected by the value of plan assets, the projected rate of return on plan assets, the actual rate of return on plan assets and the actuarial assumptions we use to measure our defined benefit pension plan obligations, including the rate at which future obligations are discounted to a present value, or the discount rate. For pension accounting purposes, we assumed a 9.0% rate of return on pension plan assets. We decreased the discount rate to 6.375% at December 31, 2003 from 6.75% at December 31, 2002, 7.125% at December 31, 2001 and 8.0% at December 31, 2000.

Lower investment performance of our pension plan assets resulting from a decline in the stock market could significantly increase the deficit position of our plans. Should the assets earn an average return less than 9.0% over time, it is likely that future pension expenses would increase. Investment earnings in excess of 9.0% may reduce future pension expenses. The actual return on our plan assets was 19.7% in 2003 and the ten-year average return as of year-end 2003 was 7.9%.

We establish the discount rate used to determine the present value of the projected and accumulated benefit obligation at the end of each year based upon the available market rates for high quality, fixed income investments. An increase to the discount rate would reduce the future pension expense and conversely, a lower discount rate would raise the future pension expense. We estimate that the change in the discount rate and other actuarial assumptions and valuations combined with the amortization of prior differences between actual and expected results will result in a $1.0 million increase in the net expense from our pension plan in 2004 over 2003 with the 2005 expense estimated to be an additional $1.1 million higher than the 2004 expense. If the expected rate of return assumption was changed by 50 basis points (0.50%) and all other pension assumptions remained the same, the 2004 projected expense would change by approximately $0.5 million. If the December 31, 2003 discount rate were reduced by 25 basis points (0.25%) and all other pension assumptions remained the same, the 2004 pension expense would increase by approximately an additional $0.3 million.

Based on current guidelines, assumptions and estimates, including stock market prices and interest rates, we anticipate that we may be required to make a cash contribution of approximately $1.7 million to our pension plan in 2004. If our current assumptions and estimates are not correct, a contribution in years beyond 2004 may be greater than the projected 2004 contribution.

In addition, we cannot predict whether changing market or economic conditions, regulatory changes or other factors will increase our pension expenses or our funding obligations, diverting funds we would otherwise apply to other uses.

Our expenditures for post-retirement health benefits could be materially higher than we have predicted if our underlying assumptions prove to be incorrect.

We also provide post-retirement health benefits to eligible employees. Our retiree health expense is directly affected by the assumptions we use to measure our retiree health plan obligations, including the assumed rate at which health care costs will increase and the discount rate used to calculate future obligations. For retiree health accounting purposes, we decreased the assumed rate at which health care costs will increase for the next year to 8.0% at December 31, 2003 from 9.0% at December 31, 2002. In addition, we have assumed that this health care cost increase trend rate will decline to 6.0% by 2008. We have used the same discount rates for our retiree health plans that we use for our pension plan accounting.

Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. A 1.0% increase in assumed health care cost trend rates would have increased the post-employment benefits included among the liabilities in our balance sheet by $2.4 million at December 31, 2003, while a 1.0% decrease in assumed health care cost trend rates would have decreased those benefits by $2.1 million at December 31, 2003.

In addition, we cannot predict whether changing market or economic conditions, regulatory changes or other factors will further increase our retiree health care expenses or obligations, diverting funds we would otherwise apply to other uses.

Our tax position may create volatility in our net income, and our ability to use our net operating loss carryforwards and alternative minimum tax credits may be impaired.

At December 31, 2003, we had a tax deferred asset of approximately $10.6 million relating to alternative minimum tax credits and approximately $32.2 million of net operating loss carryforwards. We recently evaluated all of our deferred tax assets for impairment due to our recent operating losses and recorded valuation allowances of $7.2 million in 2003, with $5.3 million charged to expense and $1.9 million charged to other comprehensive income, and $27.2 million in 2002, with $19.9 million charged to expense and $7.3 million charged to other comprehensive income. If we generate a domestic pre-tax profit in subsequent periods, the valuation allowance will be reversed against the federal tax expense in the current period, resulting in higher net income and net income per share for that period. If we achieve and sustain profitability, significant portions or all of the remaining valuation allowance may be reversed back to income. If we generate domestic pre-tax losses in subsequent periods, a federal tax benefit will not be recorded and the valuation allowance recorded against the net deferred tax assets will increase. This would result in a larger net loss and net loss per share for the period versus a comparable period when a favorable tax benefit was recorded. If these factors were to occur and our operating results were affected, it would impair our ability to use our net operating loss carryforwards and alternative minimum tax credits.

A major portion of our bank debt consists of variable-rate obligations, which subjects us to interest rate fluctuations.

Our credit facilities are secured by our working capital, and we have other term loans secured by plant, property and equipment, and, in one instance, some export accounts receivable. Our working capital line-of-credit and term loans are variable-rate obligations, which expose us to interest rate risks. If interest rates increase, our debt service obligations on our variable-rate indebtedness would increase even if the amount borrowed remained the same, resulting in a decrease in our net income. We have developed a hedging program to manage the risks associated with interest rate fluctuations, but our program may not effectively eliminate all of the financial exposure associated with interest rate fluctuations. We currently have instruments in place that have the effect of fixing the interest rate on a portion of our outstanding debt for various time periods up to five years. See Management s Discussion and Analysis of Financial Condition and Results of Operations Market Risk Disclosures and Note G to our audited consolidated financial statements included elsewhere in this prospectus.

Should we be unable to access the financial markets on favorable terms, our liquidity and results of operations could be adversely affected.

The inability to raise capital on favorable terms, particularly during times of uncertainty in the financial markets, could impact our ability to sustain and grow our business and would increase our capital costs. We rely on access to financial markets as a significant source of liquidity for capital requirements not satisfied by cash on hand or operating cash flows. Our access to the financial markets could be adversely impacted by various factors, including:

changes in credit markets that reduce available credit or the ability to renew existing liquidity facilities on acceptable terms;

a deterioration of our credit;

extreme volatility in our markets that increases margin or credit requirements;

a material breakdown in our risk management procedures;

the collateral pledge of substantially all of our assets in connection with our existing indebtedness, which limits our flexibility in raising additional capital; and

the occurrence of material adverse changes in our business that restrict our ability to access our liquidity facilities.

All of these factors except a material breakdown in our risk management procedures have impacted our access to the financial markets over the past five years. A lack of necessary capital and cash reserves could adversely impact our access to the financial markets. During 2001, our credit ratings from Standard & Poor s and Moody s Investor Service dropped from BBB and Baa3 to BB-and Ba3, respectively. In consultation with these rating organizations, in July 2002, we requested that our rating be discontinued. While the lack of a credit rating has not impacted our access to the financial markets to date, it may do so in the future.

The terms of our indebtedness may restrict our ability to pursue our growth and acquisition strategies.

The terms of our credit facilities restrict our ability to, among other things, borrow and make investments, acquire other businesses, make capital expenditures and declare dividends on our common shares. In addition, the terms of our indebtedness require us to satisfy specified financial covenants. Our ability to comply with these provisions depends, in part, on factors over which we may have no control. These restrictions could adversely affect our ability to pursue our growth and acquisition strategies. If we breach any of our financial covenants or fail to make scheduled payments, our creditors could declare all amounts owed to them to be immediately due and payable, and we may not have sufficient available funds to repay the amounts due, in which case we may be required to seek legal protection from our creditors.

We are subject to fluctuations in currency exchange rates, which can adversely impact our sales and margins.

A significant portion of our sales is conducted in international markets and priced in currencies other than the United States dollar. Revenue from non-United States operations (principally Europe and the Pacific Rim) amount to approximately 22% of our sales in 2003, 19% in 2002 and 18% in 2001. Significant fluctuations in currency values relative to the United States dollar may affect our financial performance and adversely affect our sales and margins. While we may hedge our currency transactions to mitigate the impact of currency price volatility on our earnings, any hedging activities may not be successful.

Our holding company structure causes us to rely on funds from our subsidiaries.

We are a holding company and conduct substantially all our operations through our subsidiaries. As a holding company, we are dependent upon dividends or other intercompany transfers of funds from our subsidiaries. The payment of dividends and other payments to us by our subsidiaries may be restricted by, among other things, applicable corporate and other laws and regulations, agreements of the subsidiaries and the terms of our current and future indebtedness.

Risks Related to This Offering

Our share price is volatile, and you may not be able to resell your common shares at or above the offering price.

The market price and trading volume of our common shares has been subject to volatility, and this trend may continue. In particular, trading volume historically has been low, and the market price of our common shares has increased significantly in recent months. The value of our common shares may decline regardless of our operating performance or prospects. Factors affecting our market price include:

our perceived prospects;

variations in our operating results and whether we have achieved our key business targets;

the limited number of our common shares available for purchase or sale in the public markets;

sales or purchases of large blocks of our common shares;

changes in, or our failure to meet, our earnings estimates;

changes in securities analysts ratings and recommendations;

differences between our reported results and those expected by investors and securities analysts;

announcements of new contracts by us or our competitors;

market reaction to any acquisitions, joint ventures or strategic investments announced by us or our competitors;

developments in the financial markets; and

general economic, political or stock market conditions.

The general economic, political and stock market conditions that may affect the market price of our common shares are beyond our control. The market price of our common shares at any particular time may not remain the market price in the future.

Our ability to issue preferred stock in the future could adversely affect the rights of holders of our common shares.

Our board of directors is authorized, without shareholder approval, to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions granted to or imposed upon the preferred stock, including voting rights, dividend rights, conversion rights, terms of redemption, liquidation preference, sinking fund terms and the number of shares constituting any series or the designation of a series. Our board of directors can, without shareholder approval, issue preferred stock with voting and conversion rights that could adversely affect the voting power of the holders of our common shares. Any preferred stock issued would also rank senior to our common shares as to rights upon liquidation, winding-up or dissolution.

We do not anticipate declaring any cash dividends on our common shares.

Under our credit facilities, we may not declare or pay any dividends or make any other distributions with respect to our common shares, except that we are permitted to declare and pay dividends that are payable solely in common shares. We also may not redeem or repurchase our common shares. If we were to declare or pay a prohibited dividend or redeem or repurchase our common shares, our creditors could declare a default and accelerate our indebtedness under our credit facilities, as well as foreclose on the assets securing those facilities. Accordingly, we do not intend to declare or pay dividends or redeem or repurchase any common shares while our current credit facilities remain outstanding. Our current policy is to retain all funds and earnings for use in the operation and expansion of our business.

The Ohio takeover statutes, our constituent documents and rights plan could deter, delay or prevent a third party from acquiring us, which could deprive you of an opportunity to obtain a takeover premium for our common shares.

We are subject to the Ohio statutes relating to control share acquisitions, which restrict the ability of an acquiror to acquire a significant amount of our outstanding common shares without shareholder approval, as well as Ohio s merger moratorium statute, which restricts the ability of certain interested shareholders to effect transactions involving us or our assets. Our articles of incorporation provide that our board of directors, without shareholder approval, may issue up to 5,000,000 shares of preferred stock, which, if convertible in common shares, could have the effect of delaying, deferring or preventing a change in control of our company. Our articles of incorporation also restrict some transactions with related parties, which could also have the affect of delaying, deferring or preventing a change in control of our company. In addition, we have a shareholder rights plan that under certain circumstances would significantly impair the ability of third parties to acquire control of us without prior approval of our board of directors. Together, these provisions may discourage transactions that otherwise could provide for the payment of a premium over prevailing market prices for our common shares and could also limit the price that investor may be willing to pay in the future for our common shares.

FORWARD-LOOKING STATEMENTS

All statements set forth or incorporated by reference in this prospectus that are not historical in nature are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. We have attempted to identify forward-looking statements by using such words as anticipates, believes, can, continue, could, estimates, expects, intends, may, plans, potential, should or will These forward-looking statements, which are subject to risks and uncertainties, and assumptions about us, may include, among other things, projections of our future financial performance, our anticipated growth strategies and anticipated trends in our industry, including potential growth opportunities, and the effects of litigation and future regulation. These statements are only predictions based on our current expectations and projections about future events. Because these forward-looking statements involve risks and uncertainties, you should be aware that there are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by these forward-looking statements, including, but not limited to:

health issues, litigation and regulation relating to mining bertrandite ore and producing and using beryllium-containing materials;

our ability to achieve and sustain profitability;

significant cyclical fluctuations in our customers businesses;

the availability of competitive substitute materials for beryllium-containing materials;

our ability to complete and integrate acquisitions successfully;

risks associated with our international operations;

the availability and prices of raw materials;

seasonal fluctuations in our net sales;

natural disasters, equipment failures, interruptions in energy supplies and other unexpected events that may affect our business or our customers businesses;

increases in energy costs;

rapid changes in technology, which may make our existing products obsolete;

our ability to deliver products that are free of defects and meet our customers specifications;

risks associated with our lengthy sales and development cycle;

risks associated with terrorists attacks;

risks associated with our pension and retiree health obligations;

risks associated with our tax position;

risks associated with our indebtedness and our ability to access the financial markets on favorable terms;

fluctuations in currency exchange rates; and

our reliance on funds from our subsidiaries.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee our future results, level of activity, performance or achievement. We disclaim any obligation to update any of the forward-looking statements after the date of this prospectus or to conform these statements to actual results. You should not place undue reliance on forward-looking statements contained in or incorporated by reference into this prospectus.

USE OF PROCEEDS

We estimate the net proceeds to us of our offering to be approximately $ million, based upon the last reported sale price of our common shares on , 2004 of $ per share, after deducting the estimated expenses related to our offering and the portion of the underwriting discount payable by us. We will not receive any proceeds from the sale of common shares by the selling shareholders in this offering.

We intend to use the net proceeds from our offering to repay a portion of the amounts outstanding under the credit facilities that are part of the refinancing we completed in December 2003. Any remaining net proceeds will be used for working capital and general corporate purposes, including capital expenditures, acquisitions of businesses or assets and investments. We used the proceeds from the refinancing to retire existing debt and terminate an existing key off-balance sheet obligation through the purchase of certain leased assets. Pending final use, we may invest the net proceeds of our offering in short-term, investment grade, interest-bearing securities or guaranteed obligations of the United States or its agencies. Although we intend to use a substantial portion of the net proceeds of our offering to repay a portion of the amounts outstanding under the credit facilities, we expect to maintain sufficient liquidity for potential acquisitions or investments because the paydown of these credit facilities from the net proceeds will provide more borrowing availability.

Our current credit facilities will mature in 2008 and are described in the notes to the consolidated financial statements included elsewhere in this document. We have not yet determined which credit facilities or combination of credit facilities we will repay with a portion of the net proceeds of our offering. These facilities are variable rate obligations, and as of May 7, 2004, we had $86.1 million outstanding under these facilities with a weighted average interest rate of 8.5%. After the application of a portion of the net proceeds to repay amounts outstanding under our credit facilities, the weighted average interest rate on those facilities will be 5.53%.

CAPITALIZATION

The following table sets forth our consolidated capitalization as of April 2, 2004 on an actual basis and on an As Adjusted basis. The As Adjusted basis reflects our sale of 1,700,000 common shares at an assumed offering price of $ per share, the last reported sale price of our common shares on , 2004, after deducting underwriting discounts and commissions and the estimated offering expenses payable by us. The common shares to be outstanding after this offering exclude 272,250 common shares we will issue if the underwriters exercise their over-allotment option and 1,562,728 common shares reserved for issuance upon the exercise of options granted under our equity compensation plans as of May 7, 2004.

You should read this table together with Selected Consolidated Financial Data, Management s Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and related notes included elsewhere in this prospectus.

	April 2, 2004	
	Actual	As Adjusted
	(Dollars in thousands, except per share data) (unaudited)	
Cash	$ 5,338	$
Debt		
Short-term debt(1)	23,808	
Long-term debt(1)	84,292	
Total debt	$ 108,100	$
Shareholders equity		
Preferred stock, no par value; 5,000,000 shares authorized; none issued or outstanding		
Common shares, no par value; 60,000,000 shares authorized; 23,170,333 shares issued, as adjusted	96,807	
Retained income	184,910	
Common shares held in treasury, 6,303,079; as adjusted	(105,840)	
Other comprehensive income (loss)	(15,641)	
Other equity transactions	38	
Total shareholders equity	160,274	
Total Capitalization	$ 268,374	$

(1) As described in Use of Proceeds, we intend to use a portion of the net proceeds from this offering to repay a portion of the amounts outstanding under our credit facilities.

MARKET PRICE OF COMMON SHARES AND DIVIDENDS

Our common shares are traded on the New York Stock Exchange under the symbol BW. The following table shows for the periods indicated the range of the high and low intra-day sales prices per common share as reported by the New York Stock Exchange.

	Price Range of Common Shares	
	High	**Low**
Year Ended December 31, 2002		
First Quarter	$14.25	$10.00
Second Quarter	13.61	10.90
Third Quarter	12.40	6.75
Fourth Quarter	8.08	4.09
Year Ended December 31, 2003		
First Quarter	$ 6.20	$ 4.72
Second Quarter	8.95	4.85
Third Quarter	10.49	7.56
Fourth Quarter	15.75	10.29
Year Ended December 31, 2004		
First Quarter	$21.80	$14.95
Second Quarter (through May 13, 2004)	22.00	15.35

On April 1, 2004, the closing price of our common shares as reported by the New York Stock Exchange was $20.98 per share. We did not pay any dividends in 2002 or 2003. We have no current intention to declare dividends on our common shares in the near term. Our current policy is to retain all funds and earnings for use in the operation and expansion of our business, and our ability to pay dividends is restricted by the terms of our credit facilities.

DILUTION

Purchasers of our common shares offered by this prospectus will suffer immediate and substantial dilution in the net tangible book value per share. Our net tangible book value as of April 2, 2004 was approximately $140.4 million, or approximately $8.32 per common share. Net tangible book value per share represents the amount of total tangible assets less total liabilities, divided by the number of our common shares outstanding as of April 2, 2004.

Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of our common shares in this offering and the net tangible book value per share of our common shares immediately after this offering. After giving effect to our sale of 1,700,000 common shares in this offering at an assumed offering price of $ per share, the last reported sale price of our common shares on the New York Stock Exchange on , 2004, and after deduction of the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our net tangible book value as of April 2, 2004 would have been approximately $ million, or $ per share. This represents an immediate increase in net tangible book value of $ per common share to existing shareholders and an immediate dilution of $ per common share to purchasers of common shares in this offering.

Assumed public offering price per share	$
Net tangible book value per share as of April 2, 2004	8.32
Increase in net tangible book value	
Net tangible book value per share as of April 2, 2004 after giving effect to this offering	
Dilution in net tangible book value per share to new investors	

The foregoing does not take into account further dilution to new investors that could occur upon the issuance of additional common shares. The above discussion excludes 1,562,728 common shares reserved for issuance upon the exercise of options under our equity compensation plans as of May 7, 2004.

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SELECTED CONSOLIDATED FINANCIAL DATA

(Dollars in thousands, except per share data)

The tables below set forth selected consolidated financial data for the periods presented. We derived the financial data for the years ended December 31, 2003, 2002 and 2001 from our audited financial statements included in this prospectus. We derived the financial data for the years ended 2000 and 1999 from our audited financial statements not included herein. The selected consolidated financial data for the quarters ended April 2, 2004 and March 28, 2003 and as of April 2, 2004 are derived from our unaudited consolidated financial statements included elsewhere in this prospectus. The interim unaudited consolidated financial statements have been prepared on the same basis as the annual audited financial statements and include, in the opinion of management, all adjustments, consisting of normal and recurring adjustments, necessary to present fairly the data for such periods and may not necessarily be indicative of full year results.

Prospective investors should read the selected consolidated financial data in conjunction with Management s Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the related notes included elsewhere in this prospectus.

	Year Ended December 31,					First Quarter Ended	
	2003	2002	2001	2000	1999	April 2, 2004	March 28, 2003
						(unaudited)	
Statement of Operations Data:							
Net sales	$401,046	$372,829	$472,569	$563,690	$455,707	$125,862	$99,518
Cost of sales	328,008	324,932	404,574	444,951	363,773	96,285	82,405
Gross profit	73,038	47,897	67,995	118,739	91,934	29,577	17,113
Operating profit (loss)	(9,340)	(22,845)	(14,069)	22,986	10,558	6,071	(2,039)
Interest expense	3,355	3,010	3,327	4,652	4,173	2,218	772
Income (loss) from continuing operations before income taxes	(12,695)	(25,855)	(17,396)	18,334	6,385	3,853	(2,811)
Net income (loss)	$ (13,226)	$ (35,604)	$ (10,274)	$ 14,165	$ 6,439	$ 3,754	$ (3,016)
Net income (loss) per common share:							
Basic	$ (0.80)	$ (2.15)	$ (0.62)	$ 0.87	$ 0.40	$ 0.23	$ (0.18)
Diluted	$ (0.80)	$ (2.15)	$ (0.62)	$ 0.86	$ 0.40	$ 0.22	$ (0.18)
Dividends per common share			$ 0.24	$ 0.48	$ 0.48		
Depreciation and amortization	$ 20,731	$ 20,640	$ 21,609	$ 22,664	$ 27,037	$ 5,758	$ 5,184
Capital expenditures	$ 6,162	$ 5,248	$ 23,130	$ 21,306	$ 16,758	$ 1,356	$ 1,587
Mine development expenditures	$ 157	$ 166	$ 154	$ 332	$ 288	$ 90	$ 101

	At December 31,					
	2003	2002	2001	2000	1999	At April 2, 2004
						(unaudited)

Balance Sheet Data:						
Working capital	$ 85,141	$ 82,645	$110,894	$143,387	$124,831	$ 94,727
Property and equipment						
At cost	$535,421	$476,283	$469,663	$449,697	$440,234	$536,440
Cost less depreciation and amortization	$190,846	$152,544	$171,296	$170,460	$170,939	$186,906
Total assets	$371,616	$334,879	$403,653	$452,506	$428,406	$387,505
Other long-term liabilities	$ 64,097	$ 65,977	$ 62,473	$ 55,454	$ 53,837	$ 63,785
Long-term debt	$ 85,756	$ 36,219	$ 47,251	$ 43,305	$ 42,305	$ 84,292
Shareholders equity	$153,573	$159,094	$214,350	$229,907	$220,638	$160,274

MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL

CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with Selected Consolidated Financial Data and our consolidated financial statements and related notes included elsewhere in this prospectus. Portions of this document that are not statements of historical or current fact are forward-looking statements. This discussion contains forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations and intentions. The cautionary statements made in this prospectus should be read as applying to all related forward-looking statements wherever they appear in this prospectus. Our actual results could differ materially from those anticipated in the forward-looking statements. Factors that could cause our actual results to differ materially from those anticipated include those discussed in Risk Factors, as well as those discussed elsewhere. See Risk Factors and Forward-Looking Statements.

Overview

We are an integrated producer of engineered materials used in a variety of electrical, electronic, thermal and structural applications. After achieving record sales of $563.7 million in 2000, our sales declined rapidly over the next two years mainly as a result of the collapse of the global telecommunications and computer market. In light of the lower sales volumes, beginning in 2001, we implemented various financial and operational initiatives to sustain and improve cash flow and to position ourselves to return to profitability by broadening our market base, increasing margins, controlling costs, improving working capital utilization and reducing debt.

Sales rebounded in 2003, growing $28.2 million over 2002, due in part to our efforts to broaden our revenue base by developing new products and expanding our market penetration. Gross margin in turn grew over $25.0 million in 2003 while the operating loss was reduced by $13.5 million. This leverage resulted from a combination of an improved product mix, i.e., an increase in sales of higher margin products, manufacturing efficiencies, cost control and other factors. The manufacturing efficiencies helped to improve the margin contribution rate and the manpower and other cost saving initiatives initially implemented beginning in mid-2001 reduced the 2003 manufacturing overhead by $25.8 million from the 2001 level. Selling, general and administrative expenses and research and development expenses in 2003 were down an additional $8.6 million from the annual expense two years earlier. Cost control programs continued during 2003, and manpower levels by year-end 2003 were 27% lower than the peak level in 2001. The positive sales trend continued in 2004 as first quarter 2004 sales of $125.9 million grew 26% over sales in the first quarter 2003. Gross margins improved from the higher volumes and increased efficiencies, and as a result we generated a $6.1 million operating profit in the first quarter 2004.

Working capital utilization improved through a $6.9 million reduction in inventories in 2003 after a $14.8 million reduction in 2002. We have established buffer inventories, which are work-in-process inventories that can be quickly deployed in production if needed, for our most constrained manufacturing operations. Properly designed buffer inventories help to maximize the production time of the equipment that is most critical to our operations and allow for a more predictive and efficient production cycle and inventory flow, thereby reducing our downstream inventories. This in turn has contributed to faster customer response times and an improvement in inventory turns. The accounts receivable balance increased in 2003 due to the higher sales, but the average collection period was shorter than at the end of the prior year. Accounts receivable and inventories increased in the first quarter 2004 in support of and as a result of the increased sales.

The working capital, margin and cost improvements allowed us to reduce our total outstanding debt, key leases and other off-balance sheet obligations by $24.8 million in 2003 and $36.2 million in 2002. In addition, late in the fourth quarter 2003, we refinanced our debt on a long-term basis. The new structure provides increased borrowing capacity and extended maturity dates while lowering the projected financing costs and required cash payments in 2004.

Results of Operations

Annual Comparisons

	2003	2002	2001
		(Dollars in millions, except per share data)	
Net sales	$401.0	$372.8	$472.6
Operating profit (loss)	(9.3)	(22.8)	(14.1)
Earnings (loss) per share	(0.80)	(2.15)	(0.62)

Sales of $401.0 million in 2003 grew 8% over sales of $372.8 million in 2002 after having declined 21% in 2002 from sales in 2001. Approximately half of the sales increase in 2003 was due to higher precious metal prices and favorable foreign currency translation effect. For the year, domestic sales grew 3%, and international sales grew 19% as we aggressively pursued marketing opportunities overseas. Sales in each quarter of 2003 were higher than the comparable quarter in 2002. The lower sales in 2002 as compared to 2001 were caused mainly by the significant decline in demand from the telecommunications and computer market that began in the second quarter 2001 and continued throughout that year. Demand for isolated applications from this key market, which accounted for 35% of sales in 2003, compared to 30% of sales in 2002 and 42% of sales in 2001, increased in the early portion of 2003 while the overall market demand started to show some improvement in the fourth quarter. Sales into the automotive market, after improving slightly in 2002 over 2001, declined slightly in 2003. Sales for defense applications remained strong during this time period, as did sales into the optical media and magnetic head markets. Demand from other key markets, including industrial components and plastic tooling, remained weak through the majority of 2003, although certain sectors started to improve at the end of the year. A portion of the sales growth in 2003 was attributable to market share gains and new product development. Sales from both reportable segments the Metal Systems Group and the Microelectronics Group improved in 2003 after declining in 2002.

The sales order backlog entering 2004 was $65.5 million compared to $57.7 million at the beginning of 2003 and $91.1 million at the beginning of 2002. Sales order entry rates improved in the fourth quarter 2003 and early in 2004. Lead times continued to be very short, and we have made improvements in our manufacturing processes and inventory positions to more quickly respond to our customers needs.

The gross margin of $73.0 million was 18% of sales in 2003 compared to a gross margin of $47.9 million, or 13% of sales, in 2002 and $68.0 million, or 14% of sales, in 2001. Approximately 89% of the sales increase in 2003 flowed through to gross margin. In addition to the increased margin due to the higher sales, gross margin improved due to a favorable product mix, operational improvements on the manufacturing floor, foreign currency translation benefits and manufacturing overhead cost reductions. Margins from both segments improved in 2003 over 2002. The decline in gross margin in 2002 from 2001 was caused by the significant decline in sales volumes offset in part by a favorable product mix and a reduction in manufacturing overhead and inventory valuation adjustments.

Selling, general and administrative expenses, or SG&A, were $68.8 million, or 17% of sales, in 2003; $61.3 million, or 16% of sales in 2002; and $75.3 million, or 16% of sales, in 2001. Differences in the amounts charged or credited to expense from movements in the legal reserves and insurance recovery accounts caused $4.2 million of the increase in 2003 over 2002 and $6.3 million of the decrease in 2002 from 2001. We negotiated legal settlements on various cases involving chronic beryllium disease, or CBD, while other cases were dismissed in 2003 and 2002. In addition, we have also received several favorable court rulings on our litigation during the last two years. As a result of a court ruling in 2002 in a case that we were not a party to, we increased the recoverable portion on the outstanding insured legal claims that previously were not fully recoverable. The application of this ruling allowed for the potential recovery of the full amount of an insured claim from our carriers in the event of a loss (whether by settlement or verdict) whereas prior to this ruling the percent of the claim to be recovered was based on the overlap of the insurance coverage period and the alleged exposure period. Changes in the legal reserve and insurance recoverable charged to SG&A expense were limited to $0.2 million in 2003 while in 2002 changes in the

legal reserve and recoverable accounts generated a credit, i.e., reduction to expense, of $4.0 million. In 2001, the comparable expense was $2.3 million.

In addition to the impact of the legal reserve and recoverable accounts, SG&A expenses were higher in 2003 than 2002 due to an increase in incentive compensation expense, as a result of operational improvements implemented in the year, and an increase in costs under the company-owned life insurance program, while the weaker dollar caused a $1.2 million increase in the translated value of the international subsidiaries expenses. SG&A expenses in 2003 also included $0.6 million of the $6.0 million one-time charge associated with refinancing the debt in 2003, as further explained under Financial Position Refinancing. SG&A manpower and other activity levels remained relatively unchanged in 2003 as compared to the latter half of 2002. Cost saving initiatives and manpower reductions, net of severance costs, implemented in the second half of 2001 and in 2002 in response to the decrease in sales volume also served to reduce SG&A expenses in 2002 as compared to 2001. Offsetting a portion of these savings in 2002 was an increase in incentive compensation expense as several operating units achieved their objectives.

Research and development expenses, or R&D, were $4.2 million in 2003, $4.3 million in 2002 and $6.3 million in 2001. R&D expenses were approximately 1% of sales in each of the three years. Overall R&D spending was reduced during the latter half of 2001 as part of the cost reduction initiatives and spending has remained essentially unchanged since that time. Approximately two-thirds of the R&D spending supports the Metal Systems Group and one-third supports the Microelectronics Group.

Other-net expense was $9.3 million in 2003, $5.2 million in 2002 and $0.4 million in 2001 as the expense in both 2003 and 2002 included significant one-time items. The 2003 expense included $4.7 million of the $6.0 million refinancing charge as more fully described under Financial Position Refinancing. In 2002, we recorded asset impairment charges of $4.4 million in accordance with SFAS No. 144 that are described in further detail in the segment disclosures and Note C to the audited consolidated financial statements included elsewhere in this prospectus. In addition to the difference in these two charges, other-net expense was higher in 2003 due to a combination of other factors. Foreign exchange losses totaled $0.9 million in 2003 compared to gains of $1.5 million in 2002 with the difference attributable to the decline in the dollar s average value versus the euro, yen and pound sterling in 2003 compared to 2002. The unrealized valuation of the stock-based directors compensation plan was a $2.0 million swing between years. The valuation, and, therefore, the liability to us, is based upon the number of shares outstanding and the current common share price; in 2003, we recorded an expense of $0.9 million due to the increase in the share price of our common share while in 2002 we recorded income of $1.1 million due to the decline in the share price that year. Metal financing fees were $0.4 million lower in 2003 than in 2002, due to a decline in financed inventory on hand, while the bad debt expense as well as changes in the allowance for doubtful accounts was $0.3 million higher in 2003 than in 2002.

In addition to the asset impairment charge (see Critical Accounting Policies and the notes to our consolidated financial statements included elsewhere in this prospectus), other-net expense was higher in 2002 than in 2001 as a result of a $0.8 million decline in exchange gains in 2002 compared to 2001, which was offset in part by lower metal financing fees and the elimination of goodwill amortization due to the adoption of SFAS No. 142 in 2002. Other-net expense also includes amortization of intangible assets, gain or loss on the disposal of fixed assets, cash discounts and other non-operating income and expense items.

The operating loss was $9.3 million in 2003, a $13.5 million improvement over the $22.8 million loss in 2002. The operating loss was $14.1 million in 2001.

Interest expense was $3.4 million in 2003 compared to $3.0 million in 2002 and $3.3 million in 2001. Balance sheet debt increased by over $50.0 million due to the purchase of previously leased assets as part of the fourth quarter 2003 refinancing and resulted in an increase in interest expense of approximately $0.4 million. Prior to the refinancing, average debt levels were lower in 2003 than in 2002, and the effective interest rate was slightly higher. The 2002 expense was lower than 2001 due to a lower average debt level and a lower effective interest rate. Offsetting a portion of these benefits in 2002 was a $0.5 million decline in interest capitalized in association with long-term capital projects from 2001.

The loss before income taxes was $12.7 million in 2003, a $13.2 million improvement over 2002. The improvement resulted from the margin contribution on the increase in sales, an increase in margin contribution rate and continued manufacturing overhead control offset in part by higher SG&A expenses and the impact of the one-time charges. The 2002 loss before income taxes of $25.9 million as compared to $17.4 million in 2001 resulted primarily from the lower margins due to the significant drop in sales volumes, partially offset by overhead cost reductions.

The 2003 income tax expense of $0.6 million included a favorable tax provision of $4.7 million and a deferred tax valuation allowance of $5.3 million while the 2002 expense of $9.7 million included a favorable provision of $10.2 million and a deferred tax valuation allowance of $19.9 million. The 2001 tax benefit was $7.1 million. A valuation allowance was not required for 2001.

Prior to the recognition of the valuation allowances, tax benefit rates of 37.3%, 39.4% and 40.9% were applied against the loss before income taxes to calculate the favorable tax provisions in 2003, 2002 and 2001, respectively. The effects of percentage depletion and foreign source income were the major causes of the differences between the effective and statutory rates for all three years. The relative impact of percentage depletion and the company-owned life insurance program were the main differences between the 2003 and 2002 effective rates.

The deferred tax valuation allowances were recorded in 2003 and 2002 in accordance with SFAS No. 109, Accounting for Income Taxes. This statement requires a company to evaluate its deferred tax assets on its balance sheet for impairment in the event of recent operating losses. This evaluation process is not based upon the specific expiration date of the individual deferrals but rather on the company s ability to demonstrate taxable income that will result in utilization of those assets. As a result of a review in the fourth quarter 2002, we determined that the majority of our deferred tax assets were impaired and a valuation allowance was recorded with $19.9 million charged against expense and $7.3 million to other comprehensive income within shareholders equity. In 2003, the $5.3 million valuation allowance offset the deferred tax assets that were created by the current year domestic federal and various foreign tax benefits. The 2003 net tax expense of $0.6 million, therefore, represents the provision for state, local and certain other foreign taxes, which were not subject to a valuation allowance. An additional $1.9 million valuation allowance was charged against other comprehensive income in 2003 for deferred tax assets associated with the net charge to equity for the change in derivative fair values and the accrued pension liability. See Note I to the audited consolidated financial statements included elsewhere in this prospectus.

As a result of the preceding, the net loss was $13.2 million, or $0.80 per share, in 2003 compared to $35.6 million, or $2.15 per share, in 2002 and $10.3 million, or $0.62 per share, in 2001.

We aggregate our businesses into two reportable segments the Metal Systems Group and the Microelectronics Group. Our parent company and other corporate expenses, as well as the operating results from BEM Services, Inc. and Brush Resources Inc., two wholly owned subsidiaries, are not included in either segment and are shown in the All Other column in the segment results contained in Note M to the audited consolidated financial statements included elsewhere in this prospectus. BEM Services charges a management fee for the services it provides, primarily corporate, administrative and financial oversight, to the other businesses within our company on a cost-plus basis. Brush Resources sells beryllium hydroxide, produced through its Utah operations, to outside customers and to businesses within the Metal Systems Group. The profitability within All Other declined in 2003 as compared to 2002 as a result of the $6.0 million one-time charge associated with the debt refinancing, the $4.2 million difference in movements in the legal reserve, the increase in the company-owned life insurance expense and reduced profitability of Brush Resources primarily due to lower production activity.

Metal Systems Group

	2003	2002	2001
	(Dollars in millions)		
Net sales	$239.4	$227.9	$295.7
Operating profit (loss)	(16.6)	(37.7)	(20.1)

The Metal Systems Group is the larger of our reportable segments, accounting for approximately 60% of total sales and almost 70% of total assets. The group consists of Alloy Products; TMI, one of our wholly owned subsidiaries; and Beryllium Products. These units manufacture a variety of engineered materials that provide superior performance in demanding applications and compete against beryllium and non-beryllium-containing alloys. The Elmore, Ohio facility manufactures finished goods for Alloy Products and Beryllium Products as well as materials for further processing and sale by other operations within Alloy Products, Beryllium Products and TMI. Customers typically use our materials from this segment as their raw material input and are also usually one or more tiers removed from the end-use demand generator in a given market. After declining significantly in each of the last two years, primarily as a result of softness in the telecommunications and computer market, sales grew 5% in 2003 over 2002. Sales to external customers by business unit within the Metal Systems Group during the 2001 to 2003 time frame were as follows:

	2003	2002	2001
		(Dollars in millions)	
Alloy Products	$162.3	$151.9	$217.5
Technical Materials, Inc.	41.9	44.4	50.5
Beryllium Products	35.2	31.6	27.7
Total Segment Sales	$239.4	$227.9	$295.7

Alloy Products

Alloy Products, the largest unit within our company, manufactures and sells copper and nickel-based alloy systems, the majority of which also contain beryllium, and consists of two major product families strip and bulk products. Strip products, which include thin gauge precision strip and thin diameter rod and wire, provide a combination of high conductivity, high reliability and formability for use as connectors, contacts, switches, relays and shielding. Major markets for strip products include telecommunications and computer, automotive electronics and appliances. Bulk products include plate, rod, bar, tube and other customized forms that, depending upon the application, may provide superior strength, corrosion or wear resistance or thermal conductivity. Applications for bulk products include plastic mold tooling, bearings, bushings, welding rods and telecommunications housing equipment. Alloy Products are manufactured at our facilities in Ohio and Pennsylvania and are distributed worldwide through a network of our own service centers and outside distributors and agents.

Alloy Products sales of $162.3 million improved 7% over sales in 2002 while sales of $151.9 million in 2002 were 30% lower than sales in 2001. The improvement in sales in 2003 was due to strip products as sales of bulk products declined during 2003. The strip sales growth was caused by an increase in demand for the higher beryllium-containing and, therefore, higher priced alloys. Underlying volumes of these products improved 22% in 2003 over 2002. Sales of thin diameter rod and wire products also showed double-digit growth in 2003. Bulk sales volumes were 9% lower in 2003 than in 2002.

The Alloy Products sales growth in 2003 was in the international markets as domestic sales declined slightly. A portion of this international growth is due to domestic customers shifting manufacturing operations overseas, particularly to Asia. Alloy Products recently established additional sales and marketing offices in China to augment its existing service centers in Japan and Singapore in order to maintain and grow sales applications in the region. The sales growth also resulted from an increase in market share and the development of various new products. Demand from the telecommunications and computer market was unchanged for the first three quarters of 2003 and then showed some improvements in the fourth quarter. Demand for strip products from the automotive market remained sluggish in 2003. The lower bulk products sales was caused in part by soft demand from the plastic tooling market for the majority of the year (although demand started to improve in the fourth quarter), while demand from the industrial components market declined during 2003. The increased demand from the telecommunications and computer and plastic tooling markets continued into early 2004. Orders for new products, including the non-beryllium-containing ToughMet® alloy used in bearing applications in heavy equipment, also showed improvement in late 2003 and early 2004.

Sales of strip and bulk products both declined significantly in 2002 as compared to 2001. Strip volumes were down 17% and bulk volumes were down 33%. The lower sales were due in large part to the precipitous decline in demand from the telecommunications and computer market that began in the second quarter 2001. Automotive sales of strip products were essentially unchanged in 2002 as compared to 2001. Bulk sales into the undersea telecommunications market, which was the largest market segment for bulk products as recently as 2000, began to decline in the second half of 2001 and were minimal in 2002 due to the severe reduction in the number of new undersea fiber optic line installation projects throughout the world. Bulk product sales for plastic tooling applications also declined in 2002 due in part to customers adjusting their inventory positions.

Technical Materials, Inc.

TMI manufactures engineered materials systems, including clad inlay and overlay metals, precious and base metal electroplated systems, electron beam welded systems, contour profiled systems and solder-coated metal systems. These specialty strip metal products provide a variety of thermal, electrical or mechanical properties from a surface area or particular section of the material. Major markets for TMI products include telecommunications and computer and automotive electronics while major applications include connectors, contacts and semi-conductors.

TMI sales were $41.9 million in 2003, $44.4 million in 2002 and $50.5 million in 2001. The lower sales in each of the last two fiscal years were due to the continued soft demand from the telecommunications and computer market. Automotive sales, which had been relatively unchanged in the prior two years, also softened during the third and fourth quarters of 2003. However, overall sales order entry rates improved in the fourth quarter 2003 over the first nine months of the year, and this trend continued into early 2004.

Production capacity within the markets served by TMI continued to be transferred from the United States to Asia, and TMI has aggressively managed its marketing efforts and manufacturing and overhead cost structure in order to profitably position itself to maintain and grow its base business while expanding into new applications and markets. As a result, TMI s profits increased in 2003 over 2002 despite the 6% decline in sales.

Beryllium Products

Beryllium Products manufactures pure beryllium and beryllium aluminum alloys in rod, tube, sheet and a variety of customized forms at the Elmore, Ohio and Fremont, California facilities. These materials are used in applications that require high stiffness and/or low density, and they tend to be premium priced due to their unique combination of properties. Defense and government-related applications remain the largest market for Beryllium Products, accounting for approximately two-thirds of sales, while other markets served include automotive, electronics, medical and optical scanning.

Revenues from Beryllium Products were $35.2 million in 2003, $31.6 million in 2002 and $27.7 million in 2001. Revenues from Beryllium Products have grown for four consecutive years, including annual growth rates of 11% and 14% in 2003 and 2002, respectively. Sales for defense and government-related applications remained strong throughout this period. Several system upgrades for F-16 fighter jets and the new F-22 fighter are two of the largest platforms for Beryllium Products. Sales to the electronics market for acoustic components increased in 2003 over 2002 and represent a commercial growth opportunity for Beryllium Products. Acoustic component sales had declined in 2002 due to customers excess inventory positions. Performance automotive sales contributed to the sales growth in 2003 and 2002 as well; however, management is uncertain as to the growth prospects for this market in the coming year. In the third quarter 2003, we secured a material supply contract for NASA s James Webb Space Telescope program, which is anticipated to generate an additional $15.0 million in revenue, the majority of which should be invoiced in the 2004 to 2005 time frame.

Metal Systems Gross Margin and Expenses

The gross margin on Metal System sales was $39.5 million, or 16% of segment sales, in 2003 compared to $18.0 million, or 8% of segment sales, in 2002. The increased sales volume improved margins by $2.8 million in 2003 as compared to 2002. A favorable product mix, operational improvements and a favorable currency effect increased margins by $12.1 million. The favorable mix resulted primarily from strip products, although TMI and Beryllium Products had mix shifts due to higher margin generating products as well. Operational improvements were made at the Elmore, Ohio facility, including yield and machine utilization rates, and at the TMI facility in Lincoln, Rhode Island, including yields and cost controls. Manufacturing overhead costs and inventory valuation adjustments were $6.6 million lower in 2003 than in 2002, with the majority of savings coming from manpower, supplies and services at the Elmore facility.

The 2002 gross margin of $18.0 million was $21.1 million lower than the gross margin in 2001. The margin contribution decline due to the lower sales volume in 2002 totaled $30.7 million. An unfavorable product mix, primarily from Alloy Products, combined with a slightly favorable currency and copper impact, reduced margins by an additional $6.3 million. Mitigating the impact of volume and mix factors on margins was a reduction in manufacturing overhead expense of $14.9 million. Overhead costs were reduced at all of the Metal Systems Group s manufacturing facilities in response to the lower sales volume. This decrease in overhead in 2002 was net of a $4.7 million increase in rent expense from the off-balance sheet operating lease that was subsequently refinanced in December 2003, as the renewal terms under the lease had increased rent payments. Inventory valuation adjustments, primarily provisions for obsolescence, were also $1.0 million lower in 2002 than 2001.

SG&A, R&D and other-net expenses were $0.5 million higher in 2003 than in 2002 as a result of the foreign currency exchange gain/loss difference and an increase to incentive compensation accruals. SG&A and R&D manpower levels were relatively unchanged for the year. The $0.5 million increase was net of the impact of a one-time asset impairment charge in 2002. We determined that the projected cash flow from various assets used in the production of beryllium was less than the carrying value. The assets were written down to their net realizable values, and a $3.1 million charge was recorded against other-net expense in the fourth quarter 2002. The equipment has been shut down due to the use of alternative input materials and manufacturing processes. Expenses in 2002 were $3.5 million lower than 2001 as manpower and other cost savings initiatives reduced expenses by $6.6 million in 2002 compared to the prior year, the benefit of which was offset in part by the impairment charge.

The Metal Systems Group recorded an operating loss of $16.6 million in 2003, a $21.1 million improvement over the $37.7 million loss in 2002. The improvement was caused by the additional margin generated by the higher sales, favorable mix, operational efficiencies and manufacturing overhead cost reductions. In 2001, the Metal Systems Group lost $20.1 million.

Microelectronics Group

	2003	2002	2001
		(Dollars in millions)	
Net sales	$157.3	$139.2	$169.6
Operating profit (loss)	12.6	3.8	4.6

Microelectronics Group includes WAM and Electronic Products. These businesses manufacture a variety of high quality precision parts that are sold to assemblers and other fabricators of electronic components and equipment. Sales grew 13% in 2003 over 2002 after declining 18% in 2002 from 2001. Operating profit

improved by $8.8 million in 2003. Sales to external customers by business unit within the Microelectronics Group during the 2001 to 2003 time frame were as follows:

	2003	2002	2001
		(Dollars in millions)	
Williams Advanced Materials Inc.	$127.8	$109.1	$135.3
Electronic Products	29.5	30.1	34.3
Total Segment Sales	$157.3	$139.2	$169.6

Williams Advanced Materials Inc.

WAM manufactures precious, non-precious and specialty metal products at its facilities in New York, California and Asia. Specific products include vapor deposition targets, frame lid assemblies, clad and precious metal preforms, high temperature braze materials and ultra fine wire. Major markets for WAM s products include optical media, magnetic head, electron tube, performance film and the wireless, semi-conductor, photonic and hybrid segments of the microelectronics market.

Sales from WAM were $127.8 million in 2003, $109.1 million in 2002 and $135.3 million in 2001. WAM adjusts its selling prices daily to reflect the current cost of the precious and non-precious metals sold. The cost of the metal is a pass-through to the customer, and WAM generates its margin on its fabrication efforts irrespective of the type or cost of the metal used in a given application. Therefore, the cost and mix of metals sold will affect sales but not necessarily the margins generated by those sales. Metal prices increased on average in 2003 over 2002, and the underlying volumes grew 7% compared to a 17% growth in sales. In 2002, a mix shift to lower priced metals as compared to 2001 caused the majority of the decrease in sales, as volumes were only 2% lower than the prior year.

Sales of vapor deposition targets grew in 2003 from the 2002 level driven by the continued strong end-use demand from the optical media market for digital versatile disks. Demand for targets from the photonics and other segments of the microelectronics market, which was soft and caused a slight overall decline in target sales in 2002, started to improve in the latter part of 2003. Sales of various products into the wireless segment demonstrated improvement in 2003 over 2002. Demand for data storage applications for giant magnetic resistive thin film applications remained strong throughout the 2001 to 2003 time period. Frame lid assembly sales grew in 2003 and in 2002 as a result of acquiring various assets of competitors who exited the market in the second quarter 2001 and the second quarter 2003.

Due to the precious metal content of many of its products, WAM s customers continuously evaluate alternative lower cost materials and systems, and WAM faces stiff competition from other material providers. WAM strives to develop new alloys and products that satisfy its customers quality, cost and service objectives. A key competitive advantage for WAM is its ability to reclaim precious metals, from its own or customers scrap, through its in-house refinery. WAM also emphasizes new product and application development in order to keep pace with technological advancements.

Electronic Products

Electronic Products manufactures beryllia ceramics, electronic packages and circuitry for sale into the telecommunications and computer, medical, electronics, automotive and defense markets. These products provide specific thermal and/or electrical conductivity characteristics and are used as components in a variety of applications, including wireless telecommunications equipment, fiber optics, lasers for medical and other electronic equipment, automotive ignition module systems, satellites and radar systems. Electronic Products are manufactured by Zentrix Technologies Inc. and Brush Ceramic Products, two wholly owned subsidiaries. Sales from Electronic Products were $29.5 million in 2003 compared to $30.1 million in 2002 and $34.3 million in 2001.

Sales of beryllia ceramics were essentially unchanged in 2003 compared to 2002 after declining in 2002. This is a mature product line with established applications but limited growth opportunities. A temporary

disruption in the sales order pattern from the largest ceramics customer during a plant relocation offset mild improvements during 2003. Sales order entry levels for ceramics strengthened in the fourth quarter 2003. Softer demand from the telecommunications and computer market caused the lower sales of ceramics in 2002 as compared to 2001. Sales of electronic packages also declined in each of the last two years due to the slowdown in build rates for telecommunications infrastructure equipment. Sales into the automotive market declined in 2003 after growing in 2002 over 2001. Sales of circuitry, which are manufactured by Circuits Processing Technology, Inc., a wholly owned subsidiary of Zentrix, increased in 2003 due to strengthening defense orders after declining in 2002 due to softer demand for commercial applications.

Microelectronics Group Gross Margin and Expenses

The gross margin on Microelectronics Group sales was $32.8 million, or 21% of segment sales, in 2003, compared to $26.4 million, or 19% of segment sales, in 2002 and $25.6 million, or 15% of sales, in 2001. Margins improved by $3.3 million in 2003 as a result of the increased sales. The product mix effect, as well as operational efficiencies, primarily in Electronic Products, generated an additional $1.6 million in gross margin while manufacturing overhead costs and inventory adjustments were $1.4 million lower in 2003 than in 2002. The $0.8 million margin improvement in 2002 over 2001 resulted from an $8.1 million favorable mix effect, primarily from WAM, combining with a $3.1 million reduction in manufacturing overhead and inventory valuation adjustments to more than offset the reduction in margin due to the lower sales volume.

SG&A, R&D and other-net expenses were $2.4 million lower in 2003 than in 2002 in part due to one-time charges of $1.9 million recorded in 2002. Management determined that the projected cash flow from various assets used by Electronic Products was less than the carrying value. A charge of $1.3 million was recorded in other-net expense to write down the assets to their fair value as determined by an outside appraisal. See Note C to the audited consolidated financial statements included elsewhere in this prospectus. Expenses in 2002 also included severance costs of $0.6 million as we restructured the management of Electronic Products, eliminating various positions and closing two small foreign offices. In addition, expenses were lower in 2003 due to the full-year benefit of the manpower reductions made in 2002. The precious metal financing fee was lower in 2003 than in 2002 as well. Offsetting a portion of these benefits were increased costs to support the WAM sales growth and higher incentive accruals. Expenses were $1.8 million higher in 2002 than in 2001. In addition to the $1.9 million one-time items, WAM s SG&A and R&D expenses grew in 2002 over 2001 while the precious metal financing fee declined by $0.7 million.

The Microelectronics Group operating profit was $12.6 million, or 8% of segment sales, in 2003 compared to $3.8 million, or 3% of segment sales, in 2002. Improved margins and lower expenses combined to generate the profit improvement. Operating profit for the Microelectronics Group was $4.6 million, or 3% of segment sales, in 2001.

International Sales and Operations

	2003	2002	2001
	(Dollars in millions)		
From international operations	$ 89.5	$ 71.7	$ 86.8
Exports from U.S. operations	34.9	32.6	47.5
Total international sales	$124.4	$104.3	$134.3
Percent of total net sales	31%	28%	28%

The international sales presented in the preceding table are included in the Metal Systems Group and Microelectronics Group sales figures previously discussed. The majority of international sales are to the Pacific Rim, Europe and Canada. Sales to the Pacific Rim and Europe showed strong growth in 2003 resulting from a combination of additional market penetration, the relocation of United States production to overseas locations, increased market share and a favorable currency exchange effect. Sales into each major region were lower in 2002 than in 2001 with European sales accounting for over 60% of the total falloff.

International operations include service centers in Germany, England, Japan and Singapore that primarily focus on the distribution of Alloy Products while providing additional local support to various other businesses within our company. WAM has finishing operations in Singapore and the Philippines and a small joint venture that was established in Taiwan in 2003. We also have branch sales offices in the Republic of China and in Taiwan as well as an established network of independent distributors and agents.

As is the case domestically, telecommunications and computer and automotive electronics are the largest international markets for our products. Defense applications are not as prevalent overseas while the appliance market for alloy products is a more significant market, primarily in Europe, than it is domestically. Our market share is smaller in the overseas markets than it is domestically and given the macro-economic growth potential for the international economies, the international markets may present greater long-term growth opportunities for us.

Sales from the international operations are typically denominated in the local currency, particularly in Europe and Japan. Exports from the United States and sales from the Singapore operations are predominately denominated in United States dollars. Movements in the foreign currency exchange rates will affect the reported translated value of foreign currency-denominated sales while local competition limits our ability to adjust selling prices upwards to compensate for short-term unfavorable exchange rate movements. The dollar was weaker against the euro, yen and sterling over the course of 2003 compared to 2002, resulting in a favorable translation impact on sales of $6.4 million. The dollar was slightly weaker on average in 2002 than in 2001, resulting in a favorable translation impact on sales of $0.4 million in 2002. We have a hedge program with the objective of minimizing the impact of fluctuating currency values on our reported results.

First Quarter 2004 Comparison

Our financial results for the first quarter 2004 were the best in three years. The positive sales and order entry trends that began in 2003 continued throughout the first quarter 2004; total sales were 26% higher than the first quarter 2003 as each of our major product lines grew over the comparable period last year. Our major markets showed signs of strengthening, and our new product development efforts continued to generate new sales opportunities. Gross margins increased, not only from the higher sales volumes, but from improved manufacturing efficiencies at various facilities as well. As a result of the increased sales and margins, we generated the largest quarterly operating profit and net income since the first quarter 2001. Working capital investment, in terms of accounts receivable and inventories, climbed in support of and as a result of the significant increase in sales. With our debt refinanced in the fourth quarter 2003, we have the available capacity to finance this growth.

	First Quarter		
(Millions, except per share data)	**2004**	**2003**	**Change**
Sales	$125.9	$ 99.5	$26.4
Operating Profit (Loss)	6.1	(2.0)	8.1
Diluted E.P.S	$ 0.22	$(0.18)	$0.40

Sales of $125.9 million in the first quarter 2004 were 26% higher than first quarter 2003 sales of $99.5 million. This was the fifth consecutive quarter that sales were higher than the comparable period in the prior year. First quarter 2004 sales were the highest since the second quarter 2001, which is when the significant decline in demand from the telecommunications and computer market began. First quarter 2004 sales were also 19% higher than sales in the fourth quarter 2003.

Precious and base metal prices on average were higher while the dollar was weaker on average versus the applicable currencies in the first quarter 2004 as compared to the first quarter 2003. We estimate that these two factors combined accounted for approximately $6.4 million of the $26.4 million increase in sales.

International sales, including direct exports from the United States as well as sales from foreign operations, were $41.3 million, or 33% of sales in the first quarter 2004 and $29.7 million, or 30% of sales, in the first quarter 2003. International sales grew 39% in the first quarter 2004 over the first quarter 2003 while domestic sales grew 21%.

The majority of the sales growth was fueled by higher demand from the telecommunications and computer market, the automotive market (particularly in Europe), the optical media market and defense applications.

Sales order entry rates remained strong throughout the first quarter 2004, and the total orders received exceeded the orders shipped during the quarter by approximately 9%.

The gross margin was $29.6 million, or 24% of sales, in the first quarter 2004, and $17.1 million, or 17% of sales, in the first quarter 2003, as the gross margin improved $12.5 million on a $26.4 million increase in sales. The higher sales volumes accounted for approximately $8.3 million of the improvement in margins. Manufacturing efficiencies have allowed various operations to increase their output without a proportional increase in direct manufacturing costs (i.e., labor, supplies, maintenance and utilities), thereby improving margins. Higher base metal prices, particularly copper and nickel, could not be passed through to customers in all cases due to price contracts, pricing practices in the international markets and/or competitive pressures, reducing first quarter 2004 margins by approximately $2.1 million as compared to the first quarter 2003. This negative impact on margins was largely offset by the favorable impact from the translation of foreign currency denominated sales. Manufacturing overhead costs and inventory provisions were $0.3 million lower in the first quarter 2004 as compared to the first quarter 2003.

SG&A expenses were $19.0 million, or 15% of sales, in the first quarter 2004 compared to $17.3 million, or 17% of sales, in the first quarter 2003. Incentive compensation expense accounted for approximately sixty percent of this increase as the expense was higher in 2004 due to our significantly improved profitability. The currency impact on the translation of the foreign subsidiaries expenses was an unfavorable $0.3 million. Other expenses increased slightly in order to support the higher sales volumes.

R&D expenses were $1.3 million in the first quarter 2004, slightly above the $1.1 million expense in the first quarter 2003. R&D expense was 1% of sales in both periods. Our R&D efforts remain closely aligned with our marketing and manufacturing operations to develop new products and improved processes.

Net-other expense was $3.2 million in the first quarter 2004 compared to $0.7 million in the first quarter 2003. Three main factors contributed to this change in expense levels. Exchange losses were $1.2 million higher in the current year due to the weaker dollar as compared to the yen, euro and pound sterling. The unrealized loss on the valuation of the directors deferred compensation plan was $0.7 million higher as a result of the increase in our stock price in the first quarter 2004. We also recorded an unrealized loss of $0.5 million on the fair value of an interest rate swap contract that does not qualify for hedge accounting; the unrealized loss was caused by a decline in long-term interest rates during the first quarter 2004. Net-other also includes metal financing fees, bad debt expense, gains and losses on the disposal of fixed assets, amortization of intangible assets, cash discounts and other non-operating items.

We earned an operating profit of $6.1 million in the first quarter 2004, an $8.1 million improvement over the $2.0 million operating loss in the first quarter 2003. The improvement resulted from the margin earned on the higher sales and increased manufacturing efficiencies offset in part by higher expenses.

Interest expense was $2.2 million in the first quarter 2004 versus $0.8 million in the first quarter 2003. The increased expense was mainly due to the higher level of outstanding debt. Balance sheet debt increased as a result of the purchase of previously leased assets as part of the December 2003 refinancing and due to changes in working capital. Interest expense was also higher due to a $0.2 million increase in the amortization of deferred financing costs.

The income before income taxes was $3.9 million in the first quarter 2004 versus a loss before income taxes of $2.8 million in the first quarter 2003, a $6.7 million improvement.

A tax provision or benefit was not applied against the income or loss before income taxes in the first quarter 2004 and the first quarter 2003 for certain domestic and foreign taxes as a result of the deferred tax valuation allowance recorded in previous periods. The valuation allowance was reduced, offsetting a portion of the net tax expense, in the first quarter 2004 while the valuation allowance was increased in the first

quarter 2003 offsetting a net tax benefit in that period. The $0.1 million of expense in the first quarter 2004, and the $0.2 million of expense in the first quarter 2003 represent taxes from various state and local jurisdictions and foreign taxes from Japan and Singapore only.

Net income was $3.8 million in the first quarter 2004, an improvement of $6.8 million over the net loss generated in the first quarter 2003. Diluted earnings per share were $0.22 in the first quarter 2004 and a loss of $0.18 in the first quarter 2003.

Sales and profits from both the Metal Systems Group and the Microelectronics Group improved in the first quarter 2004 from the first quarter 2003. The operating loss within All Other increased in the first quarter 2004 over the first quarter 2003 primarily due to the unrealized losses on the directors compensation plan and the interest rate swap as previously described.

Metal Systems Group

	First Quarter		
(Millions)	**2004**	**2003**	**Change**
Sales	$76.0	$61.2	$14.8
Operating Profit (Loss)	$ 3.2	$ (3.4)	$ 6.6

The following chart summarizes sales by business unit within the Metal Systems Group:

	First Quarter		
(Millions)	**2004**	**2003**	**Change**
Alloy Products	$52.5	$40.5	$12.0
TMI	13.8	11.9	1.9
Beryllium Products	$ 9.7	$ 8.8	$ 0.9

Sales by Alloy Products of $52.5 million in the first quarter 2004 were approximately 30% higher than the year ago period. Strip volumes grew 42% while bulk volumes grew 12% in the first quarter 2004 over the first quarter 2003. The majority of this improvement was due to growth in the underlying markets that Alloy Products serves, primarily the telecommunications and computer market. Demand from the automotive market for strip products, particularly in Europe, was stronger in the first quarter 2004 as well. Sales into the industrial component market grew in the current quarter. New products and applications also contributed to the sales growth, including sales of ToughMet®. Demand from the plastic tooling market remained soft, as were sales into the undersea telecommunications market, although customer inquiries and other market research indicate that shipments into this market may increase later in the year. International sales accounted for the majority of the total growth in Alloy Products sales in the first quarter 2004.

TMI s sales of $13.8 million in the first quarter 2004 were 15% higher than in the first quarter 2003. The increase in TMI s sales was caused primarily by improved demand from the telecommunications and computer market while sales into the automotive market were relatively flat. TMI also continued to develop applications in new markets, including energy (e.g., fuel cells), which offer additional growth opportunities.

Sales by Beryllium Products were $9.7 million in the first quarter 2004, a 10% increase over the year ago period. The majority of the increase was due to the first shipments under the material supply contract for the James Webb Space Telescope program. Shipments for defense applications, the largest market for Beryllium Products, remained strong in the first quarter 2004. Sales into the electronics market for acoustic components and medical market for x-ray equipment components also contributed to the growth in the first quarter 2004 while automotive sales were down slightly. Shipments from the Fremont, California facility, the smaller of the two Beryllium Products manufacturing facilities, established a record high in the first quarter 2004.

The gross margin on Metal System Group sales was $19.7 million (26% of sales) in the first quarter 2004, a $9.9 million improvement over the gross margin of $9.8 million (16% of sales) in the first quarter 2003. The higher sales volume generated an additional $5.0 million in margin. Margins also increased as a result of improved manufacturing efficiencies at our Elmore, Ohio, Shoemakersville, Pennsylvania and Lincoln, Rhode Island facilities, while the change in product mix was slightly favorable (i.e., sales of higher margin generating products grew more than the lower margin products). The previously discussed impact of base metal prices on margins was largely offset by the foreign currency translation benefit. The purchase of previously leased assets as part of the December 2003 refinancing reduced manufacturing overhead in the first quarter 2004 as compared to the first quarter 2003 by approximately $1.6 million, as the depreciation expense on the owned assets was less than the prior lease expense. Other manufacturing overhead expenses and inventory valuation adjustments were $0.5 million higher in the first quarter 2004 than in the first quarter 2003, mainly in manpower costs at the Elmore plant.

The Metal Systems Group s SG&A, R&D and Other-net expenses totaled $16.6 million in the first quarter 2004 and $13.2 million in the first quarter 2003. As a percent of group sales, expenses were unchanged at 22% in each period. An increase in currency exchange losses, the unfavorable translation impact on the foreign subsidiaries expenses and an increase in incentive compensation expense were main causes of the higher expense level in the first quarter 2004. Selling and marketing costs were also higher in the first quarter 2004 than the first quarter 2003.

Operating profit for the Metal Systems Group was $3.2 million in the first quarter 2004, an improvement of $6.6 million over the $3.4 million loss generated in the first quarter 2003. The improvement resulted from the increased margins generated by the higher sales, manufacturing efficiencies and lower manufacturing overhead costs offset in part by higher expenses. Each unit improved its profitability, and TMI generated a profit for the ninth consecutive quarter. The first quarter 2004 operating profit was 4% of group sales.

Microelectronics Group

	First Quarter		
(Millions)	**2004**	**2003**	**Change**
Sales	$49.9	$38.3	$11.6
Operating Profit	$ 5.5	$ 2.5	$ 3.0

The following chart summarizes business unit sales within the Microelectronics Group:

	First Quarter		
(Millions)	**2004**	**2003**	**Change**
WAM	$42.1	$30.5	$11.6
Electronic Products	$ 7.8	$ 7.8	

WAM s sales of $42.1 million in the first quarter 2004 were 38% higher than sales in the first quarter 2003. Metal prices were higher in the first quarter 2004 than in the first quarter 2003, continuing the trend from last year, thereby increasing sales without a proportional flow through to margins. The growth in the underlying volumes was less than the growth in sales.

Increased sales of vapor deposition targets accounted for the majority of this growth as demand from the optical media, performance film and the wireless segment of the microelectronics markets remained strong in the first quarter 2004. Frame lid assembly volumes also increased in the first quarter 2004 over the first quarter 2003 from sales into various segments of the microelectronics market. Sales for giant magnetic resistive thin film applications within the optical media market contributed to the growth in 2004 as well. WAM continued to develop products for new semiconductor applications that offer growth potential. WAM is also developing new applications in the defense and medical equipment markets.

Sales from Electronic Products were $7.8 million in the first quarter 2004, unchanged from the first quarter 2003. Sales of electronic packages increased in the current year due to improved demand from the

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telecommunications and computer market. Circuitry sales declined, however, while beryllia ceramics sales were relatively unchanged.

The gross margin on Microelectronics Group sales was $10.9 million in the first quarter 2004 versus $7.4 million in the first quarter 2003, a $3.5 million improvement. As a percent of sales, the margin also improved from 19% in the first quarter 2003 to 22% in the first quarter 2004. Higher sales volumes accounted for approximately $2.7 million of the increased margin. Manufacturing efficiencies and the change in product mix generated an additional $0.8 million of margin. Manufacturing overhead costs were slightly higher in the first quarter 2004 as compared to the first quarter 2003.

SG&A, R&D and Other-net expenses totaled $5.4 million in the first quarter 2004 and $4.9 million in the first quarter 2003. Expenses were 11% of sales in the first quarter 2004 and 13% of sales in the first quarter 2003. Increased legal, workers compensation and other administrative costs within WAM coupled with the increased incentive expense accounted for the majority of the increase in expenses.

Operating profit from the Microelectronics Group was $5.5 million (11% of group sales) in the first quarter 2004 and $2.5 million (7% of group sales) in the first quarter 2003.

Legal Proceedings

Our subsidiary, Brush Wellman Inc., is a defendant in 14 proceedings in various state and federal courts brought by plaintiffs alleging that they have contracted CBD or other lung conditions as a result of exposure to beryllium. Plaintiffs in beryllium cases seek recovery under theories of intentional tort and various other legal theories and seek compensatory and punitive damages, in many cases of an unspecified sum. Spouses of some plaintiffs claim loss of consortium.

The following table summarizes the associated activity with beryllium cases. Settlement payment and dismissal for a single case may not occur in the same period.

	Quarter Ended Apr. 2, 2004	Year Ended Dec. 31, 2003
Total cases pending	14	15
Total plaintiffs	34	33
Number of claims (plaintiffs) filed during period ended	2(9)	11(22)
Number of claims (plaintiffs) settled during period ended	1(1)	24(47)
Aggregate cost of settlements during period ended (dollars in thousands)	$ 4	$2,045
Number of claims (plaintiffs) otherwise dismissed	2(7)	5(12)
Number of claims (plaintiffs) voluntarily withdrawn	0(0)	0(0)

Additional beryllium claims may arise. Management believes that we have substantial defenses in these cases and intends to contest the suits vigorously. Employee cases, in which plaintiffs have a high burden of proof, have historically involved relatively small losses to us. Third-party plaintiffs, typically employees of customers or contractors, face a lower burden of proof than do employees or former employees, but these cases are generally covered by varying levels of insurance. A reserve was recorded for beryllium litigation of $2.2 million at April 2, 2004 and $2.9 million at December 31, 2003. A receivable was recorded of $2.7 million at April 2, 2004 and $3.2 million at December 31, 2003 from our insurance carriers as recoveries for insured claims. An additional $0.9 million was reserved for insolvencies at the end of each period. These insolvencies relate to claims still outstanding as well as claims for which partial payments have been received.

Although it is not possible to predict the outcome of the litigation pending against us and our subsidiaries, we provide for costs related to these matters when a loss is probable and the amount is reasonably estimable. Litigation is subject to many uncertainties, and it is possible that some of these actions could be decided unfavorably in amounts exceeding our reserves. An unfavorable outcome or settlement of a

pending beryllium case or additional adverse media coverage could encourage the commencement of additional similar litigation. We are unable to estimate our potential exposure to unasserted claims.

While we are unable to predict the outcome of the current or future beryllium proceedings, based upon currently known facts and assuming collectibility of insurance, we do not believe that resolution of these proceedings will have a material adverse effect on the financial condition or our cash flow. However, our results of operations could be materially affected by unfavorable results in one or more of these cases. As of April 2, 2004, three purported class actions were pending.

Standards for exposure to beryllium are under review by the United States Occupational Safety and Health Administration and by other standard-setting organizations. One result of these reviews might be more stringent worker safety standards. More stringent standards, as well as other factors such as the adoption of beryllium disease compensation programs and publicity related to these reviews, may also affect buying decisions by the users of beryllium-containing products. If the standards are made more stringent or our customers decide to reduce their use of beryllium-containing products, our operating results, liquidity and capital resources could be materially adversely affected. The extent of the adverse effect would depend on the nature and extent of the changes to the standards, the cost and ability to meet the new standards, the extent of any reduction in customer use and other factors that cannot be estimated.

The 14 pending beryllium cases as of April 2, 2004 fall into two categories: 11 cases involving third-party individual plaintiffs, with 11 individuals (and five spouses who have filed claims as part of their spouse s case, and five children who have filed claims as part of their parent s case); and three purported class actions, involving 18 individuals, as discussed more fully below.

The first purported class action is John Wilson, *et al.* v. Brush Wellman Inc., originally filed in Court of Common Pleas, Cuyahoga County, Ohio, case number 00-401890-CV, on February 14, 2000. The named plaintiffs are John Wilson, Daniel A. Martin, Jospeh A. Szenderski, Larry Strang, Hubert Mays, Michael Fincher and Reginald Hohenberger. Mr. Szenderski was voluntarily dismissed by the court on September 27, 2000. Mr. Szenderski filed a separate claim, which is now settled and dismissed. The only defendant is Brush Wellman. The trial court denied class certification on February 12, 2002, and the Court of Appeals, Ohio 8th District, remanded on October 17, 2002. The case was appealed to Ohio Supreme Court, case number 03-0048, and oral arguments were heard on December 16, 2003. The plaintiffs purport to sue on behalf of a class of workers who belonged to unions in the Northwestern Ohio Building Construction Trades Council who worked in Brush Wellman s Elmore plant from 1953-1999. They have brought claims for negligence, strict liability, statutory product liability, ultrahazardous activities and punitive damages and seek establishment of a fund for medical surveillance and screening. The plaintiffs are seeking that Brush Wellman pay for a reasonable medical surveillance and screening program for plaintiffs and class members, punitive damages, interest, costs and attorneys fees.

The second purported class action is Manuel Marin, *et al.* v. Brush Wellman Inc., filed in Superior Court of California, Los Angeles County, case number BC299055, on July 15, 2003. The named plaintiffs are Manuel Marin, Lisa Marin, Garfield Perry and Susan Perry. The defendants are Brush Wellman, Appanaitis Enterprises, Inc. and Doe Defendants 1 through 100. The Company filed a demurrer on November 17, 2003, and the case is currently stayed. The plaintiffs allege that they have been sensitized to beryllium while employed at The Boeing Company. The plaintiffs wives claim loss of consortium. The plaintiffs purport to represent two classes of approximately 250 members each, one consisting of workers who worked at Boeing or its predecessors and are beryllium sensitized and the other consisting of their spouses. They have brought claims for negligence, strict liability-design defect, strict liability-failure to warn, fraudulent concealment, breach of implied warranties and unfair business practices. The plaintiffs seek injunctive relief, medical monitoring, medical and health care provider reimbursement, attorneys fees and costs, revocation of business license, and compensatory and punitive damages. Mr. Marin and Mr. Perry represent current and past employees of Boeing in California; and Ms. Marin and Ms. Perry are their spouses.

The third purported class action is Neal Parker, *et al.* v. Brush Wellman Inc., filed in Superior Court of Fulton County, State of Georgia, case number 2004CV80827, on January 29, 2004. The case was removed to U.S. District Court for Northern District of Georgia, case number 04-CV-606, on March 4, 2004. The named

plaintiffs are Neal Parker, Wilbert Carlton, Stephen King, Ray Burns, Deborah Watkins, Leonard Ponder, Barbara King and Patricia Burns. The defendants are Brush Wellman; Schmiede Machine and Tool Corporation; Thyssenkrupp Materials NA Inc., d/b/a Copper and Brass Sales; Axsys Technologies, Inc.; Alcoa, Inc.; McCann Aerospace Machining Corporation; Cobb Tool, Inc and Lockheed Martin Corporation. Messrs. Parker, Carlton, King and Burns and Ms. Watkins are current employees of Lockheed. Mr. Ponder is a retired employee, and Ms. King and Ms. Burns are family members. The plaintiffs have brought claims for negligence, strict liability, fraudulent concealment, civil conspiracy and punitive damages. The plaintiffs seek a permanent injunction requiring the defendants to fund a court-supervised medical monitoring program, attorneys fees and punitive damages.

Financial Position

Annual Comparison

Working Capital

Cash flow from operations totaled $26.3 million in 2003 as depreciation, other non-cash items and changes in working capital items more than offset the net loss of $13.2 million. Cash flow from operations in 2003 was a $10.6 million improvement over the $15.7 million generated in 2002. The cash balance was $5.1 million at December 31, 2003, an increase of $0.7 million for the year, as the balance of the cash generated from operations was used to reduce debt and fund capital expenditures.

The accounts receivable balance was $55.1 million at year-end 2003, an increase of $7.6 million from year-end 2002. The increase is largely due to the higher sales in the fourth quarter 2003 relative to the fourth quarter 2002 as the days sales outstanding, or DSO, a measure of how quickly receivables are collected, improved one day to 47 days. The DSO improved despite an increase in international sales, which typically take longer to collect. Accounts receivable declined in 2002 as a result of lower sales and a five-day improvement in the DSO.

Inventories declined $6.9 million in 2003 to $87.4 million after declining $14.8 million in 2002 as we continued to improve our manufacturing efficiencies and inventory utilization in order to improve customer response time and lower our working capital investment. The reduction in inventories in 2002 was net of a $6.0 million increase due to the termination of an off-balance sheet copper financing arrangement in the fourth quarter 2002. Total Metal Systems Group inventory was down 12% on a first-in, first-out, or FIFO, valuation basis in 2003. Each unit within the Metal Systems Group lowered its inventories in 2003, with Alloy Products responsible for the largest decline. Alloy inventory pounds declined 15% during the year and were down 50% from their peak levels in 2001. FIFO inventories within the Microelectronics Group increased 13% as WAM s inventories increased in order to support the higher sales volumes and as a result of higher precious metal prices. Brush Resources also increased its inventory, as ore was mined in excess of current production requirements in order to extract the ore from the existing pits within the allowable safety time frame. Overall inventory turns as of the fourth quarter 2003 improved over the fourth quarter 2002. The majority of the inventory reduction in 2002 was in the Metal Systems Group as Microelectronics Group inventories declined only slightly.

Prepaid expenses declined during 2003 mainly due to the collection of a $3.8 million federal income tax refund. The accounts payable balance was $0.9 million higher at year-end 2003 than at year-end 2002 due to higher activity levels. Other liabilities and accruals increased $7.0 million as a result of higher incentive compensation accruals, a change in the fair value of derivative financial instruments, higher interest accruals and other miscellaneous items. Other long-term liabilities of $14.7 million at December 31, 2003 were $2.8 million lower than at December 31, 2002 due to reductions in the legal reserves and changes in the long-term portion of the fair value of derivatives. We paid $1.2 million in 2003 for legal settlements, primarily for CBD cases, and received $1.6 million from our insurance carriers as partial reimbursement for the insured portions of claims paid in the current and prior years. In 2002, we paid $4.9 million in settlements and recovered $2.5 million from our insurance carriers.

Depreciation and Amortization

Depreciation, amortization and depletion was $19.5 million in 2003 and $20.4 million in 2002. The lower expense in 2003 resulted from the reduced level of capital spending. Amortization of deferred mine development was $1.2 million in 2003 and $0.3 million in 2002. Mine development costs are amortized based upon the units-of-production method as ore is extracted from the pits.

Capital Expenditures

Capital expenditures for property, plant and equipment and mine development totaled $6.3 million in 2003 compared to $5.4 million in 2002. Spending by the Metal Systems Group totaled $2.8 million in 2003 and $1.9 million in 2002, while the Microelectronics Group spending totaled $2.9 million in 2003 and $2.4 million in 2002. The majority of the spending was on small infrastructure and other individual projects as in general we had sufficient production capacity to meet the level of demand in 2003. The Microelectronics Group spending included the acquisition of various assets used to manufacture frame lid assemblies from a competitor who exited the market. In addition to the $6.3 million of spending, as part of the December 2003 refinancing, we purchased $51.8 million of assets previously held under an operating lease that have been in use at the Elmore facility since 1998 by the Metal Systems Group. Management anticipates that capital expenditures should increase in 2004 over the $6.3 million spent in 2003 but will still be below the level of depreciation.

Pension Liability

SFAS No. 87, Employers Accounting for Pensions , requires the recognition of a minimum pension liability if the present value of the accumulated benefit obligation is greater than the market value of the pension assets at year end. The market value of our pension assets in our domestic defined benefits plan was $85.8 million while the present value of the accumulated benefit obligation was $95.4 million as of December 31, 2003. We, therefore, reduced our minimum pension liability to $9.6 million (in other long-term liabilities) by adjusting the intangible pension asset by $0.6 million in other assets and recording a pre-tax credit of $1.0 million against other comprehensive income, a component of shareholders equity, in the fourth quarter 2003. The 2003 pension expense, which had increased the minimum liability, was $1.6 million. We had initially recorded a $13.6 million charge against other comprehensive income in the fourth quarter 2002 to adjust the carrying value of the recognized pension asset and to establish a minimum pension liability of $9.6 million based upon an asset market value of $78.1 million and an accumulated benefit obligation of $87.7 million at December 31, 2002. During 2003, the fair value of the pension assets increased as the investment earnings exceeded the plan payouts and expenses by $7.7 million while the accumulated benefit obligation increased a similar amount due to a lower discount rate, an additional year of service earned and other actuarial assumptions.

Refinancing

We refinanced our debt on a long-term basis with the completion of new debt facilities totaling $147.5 million in the fourth quarter 2003. The new financing includes an $85.0 million revolving line of credit secured by our working capital, $20.0 million of term loans secured by real estate and machinery and equipment and a $7.5 million facility secured by certain export accounts receivable. The remaining $35.0 million consists of a subordinated term loan that is secured by a second lien on our working capital, real estate and machinery and equipment and is payable at the end of five years. All of the new debt is variable rate based upon spreads over LIBOR or prime. The new debt provides additional capacity to fund our growth and provides stability through extension of maturity dates. See Note E to the audited consolidated financial statements included elsewhere in this prospectus.

Proceeds from the refinancing were used to retire the existing revolving credit agreement that was scheduled to mature in April 2004 and to purchase $51.8 million of leased assets, thereby terminating an existing off-balance sheet lease obligation. The leased assets have been used at the Elmore facility in the manufacture of alloy strip products since 1998. The $51.8 million purchase price was the notional value of

the lease at the time of the purchase and, therefore, while the balance sheet debt increased by $51.8 million as result of this transaction, our total obligations, as defined by debt plus off-balance sheet obligations, were unchanged.

The refinancing increases our liquidity and available credit lines, and we anticipate the related expense and repayments in 2004 will be lower than the projected expense and payments under the prior debt and lease structure. Lease payments to be expensed against cost of sales under the terminated lease would have been $10.4 million in 2004. Under the new structure, this expense has been eliminated and replaced by approximately $4.0 million of depreciation expense on the purchased assets. Therefore, cost of sales will be $6.4 million lower and gross margin will be $6.4 million higher in 2004 than it would have been under the prior financing arrangement. The margin improvement will flow through the Metal Systems Group. This benefit will be partially offset by an increase in the amortization of deferred financing fees and higher interest costs due to the increase in debt and changes in the interest rate structure. Based upon the interest rates and debt levels at the time of the refinancing, the increase in these costs are estimated to be $5.0 million in 2004 and, therefore, management estimates that earnings before income taxes in 2004 will improve by $1.4 million as a result of the refinancing. In addition, the increased interest payments plus the required debt repayments in 2004 are estimated to be $5.2 million lower than the 2004 lease payment would have been.

As a result of the refinancing, we recorded a $6.0 million one-time charge in the fourth quarter 2003 to write off deferred costs associated with the prior financing arrangement and to record derivative ineffectiveness on an associated interest rate swap. We have an interest rate swap that initially was designated as a hedge of the equipment operating lease payments. With the termination of the lease, the swap no longer qualified for hedge accounting, and the $4.6 million unfavorable fair value at the time of the refinancing that previously was deferred into other comprehensive income on our consolidated balance sheet was charged against the other-net expense on our consolidated income statements. We kept this swap in place, as its cash flows will serve to hedge a portion of the outstanding variable rate debt even though the swap does not technically qualify for hedge accounting. See Note G to the audited consolidated financial statements included elsewhere in this prospectus. An additional $0.1 million was recorded against other-net expense for other deferred costs while $0.7 million was recorded against cost of sales and $0.6 million against SG&A expense as part of the $6.0 million charge.

Debt issuance costs associated with the December 2003 refinancing totaling $6.2 million were deferred and included in other assets on the consolidated balance sheet. The issuance costs included $4.6 million of cash payments and $1.6 million representing the fair value of warrants to purchase 115,000 common shares and are being amortized using the effective interest method over the life of the debt.

Debt and Off-Balance Sheet Obligations

Total debt on the balance sheet was $99.1 million as of December 31, 2003 compared to $63.5 million as of December 31, 2002. The $35.6 million increase resulted from the $51.8 million purchase of the leased assets and the retirement of an existing off-balance sheet obligation as part of the refinancing partially offset by a $16.2 million reduction paid by cash flow from operations. Short-term debt totaled $13.4 million at year-end 2003 and included $2.1 million borrowed under the new revolving credit agreement, $9.7 million of gold denominated debt and $0.1 million of foreign currency-denominated debt. The gold loan is designed as a hedge against gold inventory. Short-term debt also includes $1.5 million of the current portion of long-term debt obligations. In addition to the new long-term debt obtained in the fourth quarter, we also had an $8.3 million variable rate industrial development bond, a $3.0 million variable rate demand note and a $0.9 million promissory note outstanding at December 31, 2003. We were in compliance with all of our debt covenants as of December 31, 2003.

In addition to the $99.1 million of balance sheet debt, we have an off-balance sheet operating lease with a notional value of $14.2 million that finances a building at the Elmore facility. Annual payments under this lease are $2.3 million. See Note F to the audited consolidated financial statements included elsewhere in this prospectus for further leasing details.

We maintain a portion of our precious metal inventories on a consignment basis in order to reduce our price exposure. See Market Risk Disclosures. The notional value of this inventory was $11.5 million at December 31, 2003 and $15.9 million at December 31, 2002. The value of the consigned precious metals declined during 2003 due to inventory reduction efforts and changes in the product mix. The impact of the decrease in quantity on hand was offset in part by higher prices at year-end 2003 than at year-end 2002. Since third parties own the consigned precious metal, its cost is not reflected in the total inventory on our balance sheet. We maintained an off-balance sheet financing arrangement with a bank for a portion of our copper-based inventories until it was terminated in the fourth quarter 2002. We purchased the copper inventory for $6.0 million from the bank and added it into our balance sheet inventory as we determined it was more cost effective to finance these inventories with traditional balance sheet debt.

We have made significant reductions in our total obligations, defined as balance sheet debt, key off-balance sheet leases and off-balance sheet inventory financing arrangements, over the last three years. The notional balance of these obligations as of December 31, 2003 and 2000, as well as the change between periods, is set forth in the following table:

	As of December 31,		
	2003	2000	Increase/ (Decrease)
		(Millions)	
Balance Sheet Debt			
Short-term	$ 13.4	$ 25.4	$(12.0)
Long-term	85.7	43.3	42.4
Key Off-balance Sheet Leases			
Synthetic Equipment Lease		59.7	(59.7)
Building Lease	14.2	17.9	(3.7)
Off-Balance Sheet Inventory Financing			
Precious Metal Consignment	11.5	51.1	(39.6)
Copper Financing		8.5	(8.5)
Total	$124.8	$205.9	$(81.1)

A summary of contractual payments under long-term debt agreements, operating leases and material purchase commitments by year is as follows:

		Payments Due In					
	Total	2004	2005	2006	2007	2008	Thereafter
				(Dollars in millions)			
Long-term debt repayments	$ 87.2	$ 1.5	$ 3.5	$ 3.5	$ 3.5	$65.6	$ 9.6
Elmore building lease payments	18.6	2.3	2.3	2.3	2.3	2.3	7.1
Other operating lease payments	10.5	2.7	1.9	1.3	1.0	1.0	2.6
Subtotal non-cancelable leases	29.1	5.0	4.2	3.6	3.3	3.3	9.7
Purchase obligations	47.7	12.3	12.2	12.2	11.0		
Total	$164.0	$18.8	$19.9	$19.3	$17.8	$68.9	$19.3

See Refinancing.

The new revolving credit agreement, the $35.0 million subordinated loan and the $20.0 million term loans mature in 2008. Management anticipates that new debt agreements will be negotiated prior to the maturation of these agreements in 2008, as warranted. Quarterly installments

against the term loans begin in 2004 while annual repayments are also required to be made against other portions of our long-term debt in each of the next five years. See Note E to the audited consolidated financial statements included elsewhere in this prospectus for additional debt information. The lease payments represent payments under non-cancelable leases with initial lease terms in excess of one year as of December 31, 2003. See Note F to the audited

consolidated financial statements included elsewhere in this prospectus. The purchase obligations include $0.3 million for capital equipment to be acquired in 2004. The balance of the obligations are for raw materials to be acquired under long-term supply agreements. These commitments end in 2007, although we have the opportunity to negotiate an extension for one of the agreements. See Note L to the audited consolidated financial statements included elsewhere in this prospectus.

First Quarter 2004 Comparison

Net cash used in operating activities was $9.1 million in the first quarter 2004 as increases in working capital items, primarily accounts receivable and inventory, more than offset net income and the benefits of depreciation and amortization. Cash balances stood at $5.3 million at the end of the first quarter 2004, an increase of $0.2 million from the prior year end.

Accounts receivable increased $12.0 million during the first quarter 2004, the majority of which resulted from the higher sales. Sales in the first quarter 2004 were $20.3 million greater than sales in the fourth quarter 2003. The DSO was 48 days at the end of the quarter compared to 47 days at the end of 2003. The slower DSO served to increase the outstanding receivable balance by approximately $1.4 million.

Inventories increased by $7.7 million, or 9%, during the first quarter 2004 in order to support the higher business levels. Despite the increase in inventory value, the inventory turnover ratio, a measure of how quickly inventory is sold on average, improved to 3.2 times from 3.0 times as of the end of last year. The majority of the increase in the FIFO inventory value was in the Metal Systems Group, and Alloy Products in particular, while the Microelectronics Group inventories increased more modestly. A portion of the inventory increase was also due to the higher metal prices.

Capital expenditures for property, plant and equipment and mine development totaled $1.4 million in the first quarter 2004 as spending remained limited to small, isolated projects. The Metal Systems Group accounted for approximately 58% of the spending.

The accounts payable balance increased $4.3 million in the first quarter due to the higher business levels. Other liabilities and accrued items declined $3.2 million as a result of the payment in the first quarter 2004 of the incentive compensation earned by employees in 2003, offset in part by accruals for the 2004 incentive compensation plans and increases in other miscellaneous accruals.

The retirement and post-retirement obligation balance was $49.8 million at the end of the first quarter 2004, an increase of $0.4 million since December 31, 2003. The liability for the domestic defined benefit pension plan increased $0.7 million in the quarter, as the annual expense under this plan is estimated at $2.7 million, or $1.0 million higher than in fiscal 2003.

Total balance sheet debt of $108.1 million at the end of the first quarter 2004 was $9.0 million higher than at December 31, 2003, with the increase used to finance the working capital growth. Short-term debt was $23.8 million at the end of the quarter compared to $13.4 million at the end of last year, while long-term debt stood at $84.3 million at quarter end and $85.7 million at year-end 2003. The majority of the change in long-term debt was due to a reclassification to short-term debt as additional debt became current. We were in compliance with all of our debt covenants as of the end of the first quarter 2004.

We received $1.9 million for the exercise of approximately 124,000 stock options during the first quarter 2004 as option exercise activity increased with the rising price for our stock.

The balance outstanding under the off-balance sheet precious metal consigned inventory arrangements increased $5.3 million during the first quarter 2004. Approximately 35% of this increase was due to higher metal prices. The increased quantity of metal on hand was driven by higher production requirements in order to satisfy the current demand.

There have been no substantive changes in the summary of contractual payments under long-term debt agreements, operating leases and material purchase commitments as of April 2, 2004 from the year-end 2003 totals.

Net cash used in operations was $0.2 million in the first quarter 2003 as the net loss of $3.0 million and an $11.5 million increase in accounts receivable more than offset the favorable impact of other working capital items. Total inventories increased $0.5 million in the first quarter 2003. The Metal Systems Group s inventory declined as a result of the continuing efforts of Alloy Products to reduce its inventory balance and improve its inventory utilization. The Microelectronics Group inventories increased while Brush Resources inventories increased due to timing differences between the mining of ore and shipments out. Capital expenditures were $1.7 million in the first quarter 2003. Accounts payable and other liabilities and accrued items increased $7.6 million due to changes in business levels and timing differences of disbursements. Balance sheet debt totaled $64.4 million at the end of the first quarter 2003, an increase of $0.9 million during that quarter. Balance sheet debt was higher in the first quarter 2004 than in the first quarter 2003 as a result of the December 2003 refinancing that included the purchase of assets held under lease for $51.8 million and the termination of the related off-balance sheet lease obligation. The cash balance was $3.4 million at the end of the first quarter 2003, a decline of $1.0 million during that period.

Other

The $10.6 million improvement in cash flow from operations in 2003 over 2002 was caused primarily by a $12.0 million increase in cash receipts from the sale of goods. Cash payments for materials and expenses declined $3.5 million despite a higher level of sales, further contributing to the improvement in cash flow from operations in 2003, while payments for interest and taxes were $4.9 million higher in 2003 than in 2002. Cash receipts from the sale of goods were significantly lower in 2002 than in 2001 due to the decline in sales in 2002 and the change in accounts receivable balances between periods. However, by reducing the level of production activities and as a result of our inventory reduction efforts and cost control programs, cash payments for materials and expenses declined as well, offsetting all but $13.2 million of the fall-off in cash receipts. Combined with a $6.4 million reduction in payments for interest and taxes, the decline in cash flow from operations was limited to $6.8 million in 2002 as compared to 2001.

The $9.0 million increase in net cash used in operations in the first quarter 2004 as compared to the first quarter 2003 resulted from cash payments for goods and expenses and payments for interest and taxes growing more than the increase in cash receipts from the sale of goods. Payments for goods and services included an inventory build in support of the improved sales in the first quarter 2004 and the annual incentive compensation payment while a portion of the increased sales were not collected by the end of the quarter as reflected by the higher receivable balance. We believe that additional working capital investments should not continue at the same pace as the first quarter in 2004 in subsequent quarters and cash receipts should grow faster than cash payments.

Management believes that cash flow from operations plus the available borrowing capacity are adequate to support operating requirements, capital expenditures, projected pension plan contributions and remediation projects. Our cost control and working capital management efforts allowed cash flow from operations to remain positive on an annual basis despite the operating losses in the 2001 through 2003 time period, while the capital expenditure limitations and the elimination of the regular dividend in the third quarter 2001 helped to further limit cash outlays. Cash flows were also sufficient to meet all debt service payments in the last three years. Further growth in cash receipts is dependent upon our ability to generate additional sales, either from new products or from existing products into new or current markets or geographic regions, and our continued ability to collect receivables on a timely basis. Future cash payments for materials and expenses may be affected, favorably or unfavorably, by a variety of factors, including our on-going cost control and inventory management programs, plant efficiencies and operating levels relative to sales, CBD-related payments and increased regulatory requirements, inflation and retirement plan benefits.

The refinanced debt structure provides improved stability in terms of maturity dates and improved flexibility in terms of available credit and covenant structures. Our current debt-to-equity ratio, recent operating losses or other financial measures may limit the ability to raise debt financing in excess of the existing revolving credit agreement. However, availability under existing unused lines of credit totaled $20.0 million as of April 2, 2004.

We attempt to maintain cash balances at a minimum with any excess cash used to reduce overnight or other short-term borrowings. Cash balances, if any, are invested in high quality, highly liquid investments.

We are offering 1,700,000 of our common shares for sale under this prospectus. We intend to use the net proceeds from this offering to repay a portion of the amounts outstanding under the credit facilities that are part of the refinancing we completed in December 2003. Any remaining net proceeds will be used for working capital and general corporate purposes, including capital expenditures, acquisitions of businesses or assets and investments. Although we intend to use a substantial portion of the net proceeds of the offering to repay a portion of the amounts outstanding under the credit facilities, we expect to maintain sufficient liquidity for potential acquisitions or investments because the paydown of these credit facilities from the net proceeds will provide more borrowing availability. As part of this offering, the selling shareholders are selling 115,000 of our common shares, which were issued upon exercise of warrants that were issued in connection with our December 2003 refinancing. The issuance of our common shares upon exercise of the warrants does not materially change our total shareholder equity, although it does increase the total number of our common shares outstanding.

As a result of this offering and the repayment of our debt, our liquidity, debt-to-equity ratio and available unused debt capacity will increase, while our future mandatory debt repayments will decline. The issuance of our common shares in this offering and subsequent debt reduction should also result in a lower interest expense in 2004 than it would have been otherwise.

Environmental

We have an active program of environmental compliance. We estimate the probable cost of identified environmental remediation projects and establish reserves accordingly. The environmental remediation reserve balance was $6.9 million at December 31, 2003 and $7.7 million at December 31, 2002. The reserve was reduced in 2003 for changes in the estimated cost for various projects based on analyses of the projected required remediation effort and payments for current activity. See Note L to the audited consolidated financial statements included elsewhere in this prospectus.

Ore Reserves

Our reserves of bertrandite ore are located in Juab County, Utah. An ongoing drilling program has generally added to proven reserves. Proven reserves are the measured quantities of ore commercially recoverable through open pit mining, by which an excavation or cut is made at the surface of the ground for the purpose of extracting ore. The mine is open to the surface for the duration of its life. Probable reserves are the estimated quantities of ore known to exist, principally at greater depths, but prospects for commercial recovery are indeterminable. Ore dilution that occurs during mining is approximately seven percent. Approximately 87% of beryllium in ore is recovered in the extraction process. We augment our proven reserves of bertrandite ore through the purchase of imported beryl ore, approximately 4% beryllium, which is also processed at the Utah extraction facility.

We use computer models to estimate ore reserves, which are subject to economic and physical evaluation. Development drilling can also affect the total ore reserves to some degree. The requirement that reserves pass an economic test causes open-pit mineable ore to be found in both proven and probable geologic settings. Proven reserves decreased slightly and probable reserves were unchanged in 2003 while proven reserves decreased and probable reserves increased in 2002. We own approximately 95% of the

proven reserves and lease the balance. Based upon average production levels in recent years, proven reserves would last approximately 100 years. Ore reserves classified as possible are excluded from the following table.

	2003	2002	2001	2000	1999
Proven bertrandite ore reserves at year end (thousands of dry tons)	6,687	6,730	7,270	7,690	7,769
Grade % beryllium	0.267%	0.267%	0.268%	0.263%	0.265%
Probable bertrandite ore reserves at year end (thousands of dry tons)	3,519	3,519	3,081	3,166	3,081
Grade % beryllium	0.232%	0.232%	0.219%	0.217%	0.215%
Bertrandite ore processed (thousands of dry tons, diluted)	41	40	48	84	93
Grade % beryllium, diluted	0.224%	0.217%	0.224%	0.235%	0.240%

Critical Accounting Policies

The preparation of consolidated financial statements requires the inherent use of estimates and management s judgment in establishing those estimates. The following are the most significant accounting policies used by us that rely upon management s judgment.

Accrued Liabilities. We have various accruals on our balance sheet that are based in part upon management s judgment, including accruals for litigation, environmental remediation and workers compensation costs. We establish accrual balances at the best estimate determined by a review of the available facts and trends by management and independent advisors and specialists as appropriate. Absent a best estimate, the accrual is established at the low end of the estimated reasonable range in accordance with SFAS No. 5, Accounting for Contingencies. Accruals are only established for identified and/or asserted claims; future claims, therefore, could give rise to increases to the accruals. The accruals are adjusted as the facts and circumstances change. The accruals may also be adjusted for changes in our strategies or regulatory requirements. Since these accruals are estimates, the ultimate resolution may be greater or less than the established accrual balance for a variety of reasons, including court decisions, additional discovery, inflation levels, cost control efforts and resolution of similar cases. Changes to the accruals would then result in an additional charge or credit to income. See Note L to the audited consolidated financial statements included elsewhere in this prospectus.

The accrued legal liability only includes the estimated indemnity cost, if any, to resolve the claim through a settlement or court verdict. The legal defense costs are not included in the accrual and are expensed in the period incurred, with the level of expense in a given year affected by the number and types of claims we are actively defending. Certain legal claims are subject to partial or complete insurance recovery. The accrued liability is recorded at the gross amount of the estimated cost and the insurance recoverable, if any, is recorded as a separate asset and is not netted against the liability.

We believe that our accruals are reasonable based upon our history and the facts and circumstances. However, if the December 31, 2003 environmental reserve, workers compensation reserve and the accrued CBD legal liability were understated by 10% for any reason, including the above identified causes, and assuming no increase in insurance coverage, then our future expense would increase and our cash flow from operations would decrease by approximately $1.2 million. Similarly, if these reserves were overstated by 10%, then the expense would decrease and cash flow would increase by $1.2 million.

Settlements for CBD litigation claims have averaged approximately $0.1 million per claim over the 2001 to 2003 time period while eleven new claims were filed per year on average over this time frame. Assuming we receive eleven new cases next year and establish reserves for those cases at the average cost of $0.1 million and there is no insurance coverage for these cases, we would record an increase to the reserve and an expense of $1.1 million. Assuming the cases are ultimately settled for the average cost, our cash flow would be reduced by $1.1 million at that time.

Pensions. We have a defined benefit pension plan that covers a large portion of our current and former domestic employees. We account for this plan in accordance with SFAS No. 87, Employers Accounting for Pensions. Under Statement No. 87, the carrying values of the associated assets and liabilities are determined on an actuarial basis using numerous actuarial and financial assumptions. Differences between the assumptions and current period actual results may be deferred into the net pension asset value and amortized against future income under established guidelines. The deferral process generally reduces the volatility of the recognized net pension asset or liability and current period income or expense. The actuaries adjust their assumptions to reflect changes in demographics and other factors, including mortality rates and employee turnover, as warranted. We periodically review other key assumptions, including the expected return on plan assets, the discount rate and the average wage rate increase, against actual results, trends and industry standards and make adjustments accordingly. These adjustments may then lead to a higher or lower expense in a future period.

We maintained our expected long-term rate of return on plan assets assumption at 9.0% as of December 31, 2003, unchanged from the previous year end. While our pension assets earned well in excess of 9.0% in 2003, the plan underperformed this level for several years prior to 2003. However, our long-term experience indicates that a 9.0% return is reasonable. Our pension plan investment strategies are governed by a policy adopted by the Retirement Plan Review Committee of the Board of Directors. The future return on pension assets is dependent upon the plan s asset allocation, which changes from time to time, and the performance of the underlying investments. Should the assets earn an average return less than 9.0% over time, in all likelihood the future pension expense would increase. Investment earnings in excess of 9.0% would tend to reduce the future expense. We establish the discount rate used to determine the present value of the projected and accumulated benefit obligation at the end of each year based upon the available market rates for high quality, fixed income investments. An increase to the discount rate would reduce the future pension expense and, conversely, a lower discount rate would raise the future pension expense. As of December 31, 2003, we elected to use a discount rate of 6.375% compared to a rate of 6.75% as of December 31, 2002. We estimate that the change in the discount rate and other actuarial assumptions and valuations combined with the amortization of prior differences between actual and expected results will result in a $1.0 million increase in the net expense from our qualified pension plan in 2004 over 2003 with the 2005 expense estimated to be an additional $1.1 million higher than the 2004 expense. If the expected rate of return assumption was changed by 50 basis points (0.50%) and all other pension assumptions remained constant, the 2004 projected expense would change by approximately $0.5 million. If the December 31, 2003 discount rate were reduced by 25 basis points (0.25%) and all other pension assumptions remained constant, the 2004 pension expense would increase by approximately an additional $0.3 million.

The $9.6 million additional minimum pension liability recorded as of December 31, 2003 does not by itself indicate that a cash contribution to the plan is required. This liability was recorded according to SFAS No. 87, while cash contributions and funding requirements are governed by ERISA and IRS guidelines. Based upon these guidelines and current assumptions and estimates, we initially anticipated that a cash contribution to the pension plan of approximately $1.7 million may be required in 2004. The inter-relationship of the many factors affecting the plan assets and liabilities makes it difficult to project contributions beyond one year out; however, a contribution may be required in 2005 that is greater than the 2004 projected contribution. The United States Congress passed legislation in April 2004 designed to establish a new interest rate assumption for calculation of required pension plan contributions. While we have not yet fully evaluated the impact of this legislation on our defined benefit pension plan, it is possible that our contribution to the plan in 2004 may be lower than initially estimated. The minimum pension liability under SFAS No. 87 will be recalculated at the measurement date, December 31 of each year, and any adjustments to this account and other comprehensive income within shareholders equity will be recorded at that time accordingly. See Note K to the audited consolidated financial statements included elsewhere in this prospectus for additional details on our pension plan.

LIFO Inventory. The prices of certain major raw materials, including copper, nickel, gold, silver and other precious metals purchased by us, fluctuate during a given year. Such changes in costs are generally reflected in selling price adjustments. The prices of labor and other factors of production generally increase

with inflation. Additions to capacity, while more expensive over time usually result in greater productivity or improved yields. However, market factors, alternative materials and competitive pricing affect our ability to offset wage, benefit and other cost increases. Therefore, we use the last-in, first-out, or LIFO, method for costing the majority of our domestic inventories. Under the LIFO method, inflationary cost increases are charged against the current cost of goods sold in order to more closely match the cost with revenue. The carrying value of the inventory is based upon older costs and as a result, the LIFO cost of the inventory on the balance sheet is typically lower than it would be under most alternative costing methods. The LIFO impact on the income statement in a given year is dependent upon the inflation rate effect on raw material purchases and manufacturing conversion costs, the level of purchases in a given year and the inventory mix and balance. In 2003, the average inflation rate was low, and we reduced our inventories. As a result, LIFO inventory layers were liquidated that reduced cost of sales by $3.6 million in 2003. However, the cost of various raw materials, including copper and nickel, increased near the end of the fourth quarter 2003, and prices continued to rise in the early portion of 2004.

Deferred Tax Assets. We record deferred tax assets and liabilities in accordance with SFAS No. 109, Accounting For Income Taxes. The deferrals are determined based upon the temporary difference between the financial reporting and tax bases of assets and liabilities. We review the expiration dates of the deferrals against projected income levels to determine if the deferral will or can be realized. If it is determined that it is not probable a deferral will be realized, a valuation allowance would be established for that item. Certain deferrals, including the alternative minimum tax credit, do not have an expiration date. See Note I to the audited consolidated financial statements included elsewhere in this prospectus for additional deferred tax details.

In addition to reviewing the deferred tax assets against their expiration dates, we evaluated our deferred tax assets for impairment due to the recent operating losses, as previously described, and recorded valuation allowances of $7.2 million in 2003, with $5.3 million charged to expense and $1.9 million charged to other comprehensive income, and $27.2 million in 2002, with $19.9 million charged to expense and $7.3 million charged to other comprehensive income. Should we generate a domestic pre-tax profit in subsequent periods, the valuation allowance will be reversed against the current period domestic federal tax expense, resulting in higher net income and net income per share for that period. Once we establish a trend of consistent actual and projected positive earnings, significant portions or all of the remaining valuation allowance may be reversed back to income. Should we generate domestic pre-tax losses in subsequent periods, a domestic federal tax benefit will not be recorded, and the valuation allowance recorded against the net deferred tax assets will increase. This will result in a larger net loss and net loss per share for that period versus a comparable period when a favorable tax benefit was recorded. We will continue to record tax provisions or benefits as appropriate for state and local taxes and various foreign taxes regardless of the status of this valuation allowance.

The valuation allowance available to be reversed to offset future tax expense was $25.2 million as of December 31, 2003. Changes in the deferred tax valuation allowance do not impact cash flows.

Derivatives. We may use derivative financial instruments to hedge our foreign currency, commodity price and interest rate exposures. We apply hedge accounting when an effective hedge relationship can be documented and maintained. If a hedge is deemed effective, changes in its fair value are recorded in other comprehensive income until the underlying hedged item matures. If a hedge does not qualify as effective, changes in its fair value are recorded against income in the current period. We secure derivatives with the intention of hedging existing or forecasted transactions only and do not engage in speculative trading or holding derivatives for investment purposes. Our annual budget and quarterly forecasts serve as the basis for determining forecasted transactions. The use of derivatives is governed by policies established by the Board of Directors. The level of derivatives outstanding may be limited by the availability of credit from financial institutions. See Market Risk Disclosures and Note G to the audited consolidated financial statements included elsewhere in this prospectus for more information on our derivatives.

Market Risk Disclosures

We are exposed to precious metal and commodity price, interest rate and foreign exchange rate differences. While the degree of exposure varies from year to year, our methods and policies designed to manage these exposures have remained fairly consistent. We attempt to minimize the effects of these exposures through a combination of natural hedges and the use of derivatives. Our use of derivatives is governed by policies adopted by the Board of Directors.

We use gold and other precious metals in manufacturing various Microelectronics Group and Metal Systems products. To reduce the exposure to market price changes, certain amounts of precious metals are maintained on a consigned inventory basis. The metal is purchased out of consignment when it is ready to ship to a customer as a finished product. Our purchase price forms the basis for the price charged to the customer for the precious metal content and, therefore, the current cost is matched to the selling price and the price exposure is minimized. We maintain a certain amount of gold in our own inventory, which is typically balanced out by having a loan denominated in gold for the same number of ounces. Any change in the market price of gold, either higher or lower, will result in an equal change in the fair value of the asset and liability recorded on the balance sheet.

We are charged a consignment fee by the financial institutions that actually own the precious metals. This fee, along with the interest charged on the gold-denominated loan, is partially a function of the market price of the metal. Because of market forces and competition, the fee, but not the interest on the loan, can be charged to customers on a case-by-case basis. To further limit price and financing rate exposures, under some circumstances we will require customers to furnish their own metal for processing. This practice is used more frequently when the rates are high and/or more volatile. Should the market price of precious metals used by us increase by 15% from the prices on December 31, 2003, the additional pre-tax cost to us on an annual basis would be approximately $0.2 million. This calculation assumes no changes in the quantity of inventory or the underlying fee and interest rates and that none of the additional fee is charged to customers.

We also use base metals, primarily copper, in our production processes. Fluctuations in the market price of copper are passed on to customers in the form of price adders or reductions for the majority of the copper sales volumes. However, when we cannot pass through the price of copper, margins can be reduced by increases in the market price of copper. To hedge this exposure, we may enter into copper swaps with financial institutions that exchange a variable price of copper for a fixed price. By so doing, the difference between our purchase price and selling price of copper will be a known, fixed value for the quantities covered by the swaps. We did not have any copper swaps outstanding as of December 31, 2003, in part due to credit constraints. The notional value of the outstanding copper swaps was $1.8 million as of December 31, 2002.

We are exposed to changes in interest rates on our debt and cash. This interest rate exposure is managed by maintaining a combination of short-term and long-term debt and variable and fixed rate instruments. We also use interest rate swaps to fix the interest rate on variable debt obligations, as we deem appropriate. Excess cash, if any, is typically invested in high quality instruments that mature in seven days or less. We had $95.2 million in variable rate debt and variable-to-fixed interest rate swaps with a notional value of $55.9 million outstanding at December 31, 2003. If interest rates were to increase 200 basis points (2.0%) from the December 31, 2003 rates and assuming no changes in debt or cash from the December 31, 2003 levels, the additional annual net expense would be $0.8 million on a pre-tax basis. The calculation excludes any additional expense on fixed rate debt that upon maturity may or may not be extended at the prevailing interest rates.

Our international operations sell products priced in foreign currencies, mainly the euro, yen and sterling, while the majority of these products costs are incurred in United States dollars. We are exposed to currency movements in that if the United States dollar strengthens, the translated value of the foreign currency sale and the resulting margin on that sale will be reduced. We typically cannot increase the price of our products for short-term exchange rate movements because of our local competition. To minimize this exposure, we may purchase foreign currency forward contracts, options and collars. Should the dollar strengthen, the decline in the translated value of the margins should be offset by a gain on the contract. A decrease in the value of the dollar would result in larger margins but potentially a loss on the contract, depending upon the method used

to hedge the exposure. The notional value of the outstanding currency contracts was $39.8 million as of December 31, 2003 compared to $26.4 million as of December 31, 2002. If the dollar weakened 10% against all currencies from the December 31, 2003 exchange rates, the increased loss on the outstanding contracts as of December 31, 2003 would reduce pre-tax profits by approximately $4.5 million. This calculation does not take into account the increase in margins as a result of translating foreign currency sales at the more favorable exchange rate, any changes in margins from potential volume fluctuations caused by currency movements or the translation effects on any other foreign currency-denominated income statement or balance sheet item.

We record the fair values of derivatives on our balance sheet in accordance with SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities and SFAS No. 138, Accounting for Certain Derivative Instruments and Certain Hedging Activities. The fair values are determined by financial institutions and represent the market price for the instrument between two willing parties as of the balance sheet dates. Changes in the fair value of outstanding derivatives are recorded in equity or against income as appropriate under the statement guidelines. The fair value of the outstanding foreign currency contracts was a liability of $2.9 million at December 31, 2003, indicating that the average hedge rates were unfavorable compared to the actual year-end market exchange rates. The fair value of the interest rate swaps was a loss of $5.3 million as the available interest rates were lower than the rates fixed under the swap contracts. The net derivative loss recorded in other comprehensive income within shareholders equity was $3.2 million as of December 31, 2003 compared to $7.8 million at December 31, 2002.

Outlook

Sales trends remained strong in the early portion of the second quarter 2004. Key markets served, including telecommunications and computer, have improved while our application development efforts are also contributing to the sales growth potential. We also continue to press forward with efforts to further develop the international markets. As a result, we estimate that sales in the second quarter 2004 may be 15% to 25% higher than sales in the second quarter 2003.

Operational efficiencies and manufacturing improvements developed over the last several years are combining to increase margins, and our facilities generally have sufficient capacity to satisfy the current demand.

Our business plan currently calls for both receivables and inventory levels to stabilize in the coming quarters. Capital expenditure levels may start to rise in subsequent quarters, but we do not believe there will be a significant increase in the near term. We believe cash flows from operations should be sufficient to start reducing debt accordingly in subsequent periods. The successful completion of this offering would also improve our liquidity and financial flexibility.

We made additional progress on our CBD litigation in 2003, reducing the number of outstanding claims without a material impact on cash flows or financial position. We are encouraged by this progress but caution that it is difficult to predict the outcome of the remaining claims or the probability and the potential impact of future claims. The progress made thus far is a testament to our health and safety measures and our investment in worker protection, education and medical research.

BUSINESS

Overview

We are a leading global provider of high-performance engineered materials for a growing variety of commercial and industrial applications where superior performance and reliability are essential. Our engineered materials are critical components of many high-technology or high-performance products and enable those products to be made stronger, smaller and lighter, with improved performance characteristics. We produce and distribute high-performance beryllium products, alloy products, electronic products, precious metal products and engineered material systems. Our engineered materials have product applications in a variety of end-use markets, including telecommunications and computer, automotive electronics, optical media, industrial components, appliance, aerospace and defense.

Beryllium is a key raw material in many of our products. Beryllium is a naturally occurring element number four on the periodic table of elements, with the symbol Be and is the lightest structural metal on Earth. It is stiffer than steel, lighter than aluminum and possesses other unique mechanical and thermal properties. Beryllium is extracted from bertrandite and beryl ores. We operate the only active bertrandite ore mine in the developed world, located on 7,500 acres in Juab County, Utah. Through our subsidiaries Brush Wellman Inc., Brush Resources Inc. and Brush Ceramic Products Inc., we are the world s only fully integrated provider of beryllium, beryllium-containing alloys and beryllia ceramics.

We were organized as a holding company for our various businesses in 2000. Our subsidiary Brush Wellman Inc. was founded in 1931 as The Brush Beryllium Company, was publicly traded since 1956 and was listed on the NYSE in 1972. We currently operate 16 manufacturing facilities located in the United States, Singapore and the Philippines. We also have global service and distribution centers in Germany, Japan, Singapore, England and the United States, and sales offices throughout the United States, China and Taiwan.

We have two business segments: Metal Systems Group and Microelectronics Group. Our Metal Systems Group accounted for approximately 60% of our sales during 2003, and our Microelectronics Group accounted for approximately 39% of our sales during 2003. The balance of our sales during 2003 were from Brush Resources, which sells beryllium hydroxide produced through its Utah operations to businesses within our Metal Systems Group and to outside customers.

Metal Systems Group

Our Metal Systems Group includes Alloy Products, Beryllium Products and Technical Materials Inc., or TMI.

Alloy Products, our largest business, manufactures and sells copper and nickel-based alloy systems, most of which incorporate beryllium. These beryllium alloys exhibit high strength and hardness, good formability and excellent resistance to corrosion, wear and fatigue, while retaining good thermal and electrical conductivity. They often are the material of choice for critical components in cell phones and wireless communications equipment, notebook and network computers and web servers, PDAs, automotive electronics and industrial products. Alloy Products also manufactures non-beryllium-containing alloys including ToughMet®, a copper-nickel-tin alloy which are corrosion and wear resistant, have excellent lubricity properties and are used in plastic mold tooling, aerospace, oil and gas and heavy equipment product applications.

Beryllium Products manufactures pure beryllium and aluminum-beryllium composites that are used in many high-performance applications, primarily for the defense and aerospace industries. Beryllium s unique properties stiffness, strength, lightweight, temperature resistance and reflectivity are critical to a number of NASA programs.

TMI produces engineered material systems including clad metals, plated metals and electron beam welded, solder coated and reflow materials. Clad metals are a combination of two or more metals that are bonded to enhance performance properties. Plated metals are metals that are electroplated, or coated, with gold, silver, palladium-nickel, tin, tin-lead or nickel. Electron beam welded materials are precious and non-

precious metals of varying thickness, strength, conductivity and other properties that are welded using an electron beam. Solder coated materials are metals coated with a layer or strips of solder. Reflow materials are soldered using the mass heating of solder or solder paste to form solder strips at metallized areas. These engineered material systems are produced by combining precious and non-precious metals in continuous strip form, which provide a variety of thermal, electrical or mechanical properties over a surface area or particular section of the material. TMI s products are used in complex electrical components in telecommunications systems, automotive electronics, semi-conductors and computers, as well as other high-technology applications.

Microelectronics Group

Our Microelectronics Group includes Williams Advanced Materials Inc., or WAM, and Electronic Products, which consists of Brush Ceramic Products and Zentrix Technologies Inc.

WAM manufactures precious metal and specialty alloy products specifically fabricated to meet the exacting standards required in high reliability applications for the microelectronics, semi-conductor, optical media, including DVDs, electron tube, magnetic head, aerospace and performance film industries.

Brush Ceramic Products produces beryllia ceramic materials used in wireless telecommunications, laser, medical and defense applications. Zentrix manufactures electronic packaging and circuitry used in wireless telecommunications, automotive, medical, aerospace and defense applications.

Our Financial and Operational Initiatives

After generating record sales of $147.2 million during the fourth quarter of 2000 and strong sales of $145.5 million during the first quarter of 2001, we experienced a dramatic and sustained decline in sales. Our quarterly revenue has ranged between approximately $89 million and $106 million since the second quarter of 2001. This drop in sales levels was primarily due to the collapse of the global telecommunications and computer market, which accounted for approximately 50% of our sales in 2000 and approximately 35% of sales in 2003. As a result, we recorded significant operating losses in 2001, 2002 and 2003.

In 2001, we implemented several financial and operational initiatives designed to return us to consistent profitability. These initiatives are focused on five key areas: reducing debt, reducing overhead, improving margins, broadening our revenue base and positioning ourselves to capitalize on a general economic recovery, including a recovery in the telecommunications and computer market.

Through these initiatives, we have reduced total debt, off-balance sheet financing and precious metal consignment obligations by more than $80 million since the end of 2000. In December 2003, we completed a five-year, $147.5 million debt refinancing that lowered costs compared to an existing credit and lease facility. We used the proceeds from the transaction to retire existing debt and terminate an existing key off-balance sheet obligation through the purchase of certain leased assets. The refinancing also provides increased liquidity to support working capital requirements for future growth. We achieved targeted overhead cost reductions through, among other things, improved efficiencies, a 27% reduction in headcount from 2000 year-end levels, a wage freeze and fringe benefit reductions. Despite a decline in revenue, our gross margins have improved approximately 3.8 percentage points since 2001. In 2003, Alloy Products reduced manufacturing cycle times for our alloy products by 18%, improved manufacturing inventory turns by 48%, raised yields by 11% and shipped 23% more pounds per manufacturing employee. We also broadened our revenue base through the introduction of several new products for existing and new markets and positioned ourselves to capitalize on growth in Asia by developing sales, marketing and distribution capabilities in a number of markets in the region.

Our Competitive Strengths

Unique Status as a Fully Integrated Provider of Beryllium Products

We operate the only active bertrandite ore mine in the developed world and are the world s only fully integrated provider of beryllium, beryllium-containing alloys and beryllia ceramics. We mine bertrandite ore

at our 7,500-acre mine in Juab County, Utah and extract beryllium from that ore at our processing facility in Delta, Utah. Based on average production levels in recent years, our proven bertrandite ore reserves would last approximately 100 years. As a fully integrated provider, we offer our customers the convenience and security of a single supply chain source for critical engineered materials.

High Barriers to Entry

Our vertical integration, access to beryllium resources, know-how and expertise in refining and processing beryllium and beryllium-containing materials, and the capital investment required in the plant, equipment and health and safety infrastructure for our business establish high barriers to entry for potential competitors.

Product Breadth Within Existing Markets

Each of our businesses provides a diverse selection of products. Product breadth is an important consideration for many customers and distributors in their selection of suppliers. Our extensive product offerings provide an advantage in developing and maintaining relationships with OEMs and in establishing partnerships with distributors.

Global Distribution Network

Our global distribution network allows us to actively market our products and effectively respond to our customers needs throughout the world. This network includes sales, service and distribution centers in the United States and in key European and Asian markets, as well as sales offices throughout the United States, China and Taiwan. We augment our internal distribution capabilities with a worldwide network of independent distributors.

Strategic Customer Relationships

We have established long-term relationships with a variety of customers in key growth end markets. These relationships allow us to work cooperatively with customers in their new product development activities, which often results in our products being included in design specifications for a customer s new product. We believe that these relationships have resulted from our responsiveness, our ability to meet special customer requirements based on innovative technology, the quality of our products and the speed of our delivery.

Technological Capabilities and Product Quality

We believe that our precious and base metal alloys, precious metal products, precious metal refining, precious metal plating technologies, customized machinery, processes and attention to quality are competitive advantages. A portion of our products and processes are proprietary. We believe that our products superior characteristics and performance tolerances provide an important competitive advantage, particularly in the sophisticated alloys required for the most demanding end user applications.

Capacity to Support Profitable Market Growth

As the market s demand for engineered materials increases, we are well-positioned to expand our manufacturing output without significant incremental cash investment. In addition to manufacturing capacity, our focus on Six Sigma and lean manufacturing techniques and emphasis on worker productivity have significantly improved our manufacturing efficiency and have positioned us to improve our profitability. Six Sigma is an analytical process that helps companies to improve efficiency, quality and customer satisfaction while reducing cycle time and operating costs.

Significant Operating Expertise

Our senior managers have significant experience in the engineered materials industry. We believe that our management team is successfully implementing our financial and operational initiatives to return us to profitability. We also believe that our management team s extensive experience positions us to identify and capitalize on emerging growth opportunities.

Our Growth Strategy

Our objective is to grow our business profitably while strengthening our position as a leading global provider of high-performance engineered materials. Key elements of our growth strategy are to:

Capture Improved Demand in Telecommunications and Computer Market

We are positioned to benefit from an increase in equipment spending and a general improvement in the conditions of the telecommunications and computer market. During 2003, demand for telecommunications and computer products began to improve as commercial and industrial users began to make more significant expenditures on information and communication systems. This increasing demand among commercial customers was augmented by increasing consumer demand for cellular phones, wireless communication systems and other communication products. We are well positioned in these markets and expect to benefit from improvements in market conditions.

Capitalize on the Trend Towards Higher Performance and Miniaturization of Electronic Components

We seek to capitalize on our ability to provide our customers with engineered materials that are well suited to meet the demanding standards associated with the trend towards higher performance and miniaturization of electronic components. New electronic components must meet enhanced performance requirements, which in turn require materials that can meet demanding mechanical, electrical and thermal properties. These demands for heightened performance are coupled with ongoing efforts to make these components stronger, smaller and lighter. As manufacturers continue to miniaturize their products, more high-performance engineered materials capable of meeting stringent performance and reliability standards need to be included in those products.

Expand and Diversify Our Revenue Base

We seek to build on existing customer relationships and our core manufacturing competencies to increase the breadth of our product offerings in existing markets and diversify into additional markets. We intend to reduce our susceptibility to economic cycles and increase our prospects for profitable growth by continuing to expand the markets and customers we serve and products we offer.

Today, the telecommunications and computer market comprises approximately 35% of worldwide sales versus nearly 50% in 2001. We are not content to wait it out until there is a robust recovery in the telecommunications and computer market. Although we remain well-positioned in existing markets, efforts are continuing to broaden the product base and diversify into other potential long-term growth markets.

Some examples of our new products and their applications and markets include:

Product	Application/Market
Strip New Product Forms	Tubing, Bearings and Other Oil and Gas Instrumentation Transportation
New Strip Alloys-Alloy 390	Electronics Market
MoldMAX® XL	Plastic Tooling
ToughMet®	Bearings and Wear Applications
Undersea Housings	Marine and Power Systems
New Silver Alloy	Optical Media

The following charts indicate our percentage of sales by market for years 2000 and 2003:

2000

Telecom/Computer	Automotive	Industrial	Optical Media	Aerospace/Defense	Appliance	Other
49%	11%	11%	10%	6%	2%	11%

2003

Telecom/Computer	Automotive	Optical Media	Industrial	Aerospace/Defense	Appliance	Other
35%	14%	13%	11%	9%	7%	11%

Increase Our Global Presence

We support our customers in their geographic markets throughout the world. As the trend towards high-performance materials and miniaturization continues, we believe that new market opportunities and new potential customers will emerge. We intend to continue to expand our sales, marketing and service capabilities into international markets in response to our existing customers needs and new business opportunities. Our presence in the local markets of our customers allows us to quickly respond to their needs and requests, which we believe provides us with a key competitive advantage. For example, Alloy Products is focused on expanding its foothold in the high growth China and other Asian markets where consumer, personal computer and wireless applications are key drivers to future development. Alloy Products focus in this region complements the solid foundations it has already established in Europe.

Increase Operational Efficiency

We intend to build upon the success of our existing cost reduction and manufacturing efficiency initiatives to improve margins and position ourselves for profitable growth in both strong and weak economic environments. Despite the fall in revenue, gross margins have improved approximately 3.8% since 2001.

In 2003, for example, Alloy Products reduced manufacturing cycle times by 18%, improved manufacturing inventory turns by 48%, raised yields by 11% and shipped 23% more pounds per manufacturing employee. At TMI, margins improved and earnings increased despite lower sales. At WAM,

after considering metal prices, operating margin increased approximately 10%. In 2003, margins also improved in all of our other units.

We have programs in place, including Six Sigma and lean manufacturing techniques, to address and improve costs, manufacturing processes and inventory utilization on an ongoing basis.

Pursue Selective Acquisitions in Our Selective Markets

We intend to selectively pursue acquisitions that can extend our geographic reach, expand and diversify our customer base or increase the breadth of our product and services offerings.

Segment Reporting

Our operations are organized under two reportable segments, the Metal Systems Group and the Microelectronics Group, as follows:

The Metal Systems Group includes Brush Wellman Inc. (Alloy Products and Beryllium Products) and TMI. The Microelectronics Group includes WAM and Electronic Products, which in turn, consists of Zentrix, and Brush Ceramic Products. Portions of Brush International, Inc. are included in both segments. Included in All Other in our consolidated financial statements included elsewhere in this prospectus are the operating results from BEM Services, Inc. and Brush Resources Inc., two of our wholly owned subsidiaries. BEM Services charges a management fee for services, such as administrative and financial oversight, to the other businesses within our company on a cost-plus basis. Brush Resources sells beryllium hydroxide produced through its Utah operations to outside customers and to businesses within the Metal Systems Group.

Metal Systems Group

The Metal Systems Group is comprised of Alloy Products, Beryllium Products and TMI. In 2003, 60% of our sales were from this segment (61% in 2002 and 63% in 2001). As of December 31, 2003 the Metal Systems Group had 1,125 employees.

Alloy Products

Alloy Products, the largest unit within our company and this segment, manufactures and sells copper and nickel-based alloy systems, the majority of which also contain beryllium. These products are metallurgically tailored to meet specific customer performance requirements. Copper-beryllium alloys exhibit high electrical and thermal conductivities, high strength and hardness, good formability and excellent resistance to corrosion, wear and fatigue. These alloys, sold in strip and bulk form, are ideal choices for demanding applications in the following markets:

telecommunications and computer;

automotive electronics;

aerospace;

oil and gas;

undersea housings for electronics equipment;

foundry;

appliances; and

plastic mold tooling.

Copper-beryllium strip is an ideal electronic connector material for telecommunications and computer and automotive electronic product applications. As electronic components require miniaturization, thinner connector design, lighter material and faster processing, copper-beryllium can provide the appropriate level of physical properties for applications such as electromagnetic imaging shieldings, burn-in test sockets, modular jacks, processor sockets and battery and subscriber identity module, or SIM, card contacts. Alloy Products recently introduced Alloy 390 specifically designed for high-power applications, providing a unique combination of high strength and high thermal and electrical conductivity.

Alloy Products also manufactures non-beryllium-containing alloys including ToughMet®, a copper-nickel-tin alloy. Bearings made with ToughMet® last longer and require less frequent maintenance and lubrication while significantly reducing unplanned downtime. These alloys are corrosion and wear resistant and have excellent lubricity properties and are used in plastic mold tooling, heavy equipment, aerospace and oil and gas product applications.

Alloy products are sold domestically through our distribution centers and internationally through our independent distribution centers and independent sales representatives. NGK Insulators, Ltd. of Nagoya, Japan, with subsidiaries in the United States and Europe, competes with beryllium alloy strip products and beryllium products. Alloy Products also competes with alloy systems manufactured by Olin Corporation, Wieland Electric, Inc. and Stolberger Metallwerke GmbH, Nippon Mining, PMX and other generally less expensive materials, including phosphor bronze, stainless steel and other specialty copper and nickel alloys that are produced by a variety of companies around the world. In the area of beryllium alloy bulk products (bar, plate, tube and rod), in addition to NGK Insulators, we compete with several smaller regional producers such as Freedom Alloys in the United States, LaBronze Industriel in Europe and Young II in Asia.

The following charts highlight the markets and applications for Alloy Products:

Alloy Strip Products

Market	Application
Automotive	Power, communication, and signal distribution components such as connectors, switches and relays used in cars and light trucks.
Telecommunications	Strip and wire components used as connectors, contacts, shielding, switch on cell phones, pagers, wireless base stations, transmission equipment and other communication networks.
Computers	Strip and wire components used as connectors, shielding and contacts on desktop computers, PDAs, workstations, servers and other data storage devices made by major brands such as Sun, HP, Compaq and Intel.
Appliance	Strip and wire components for power delivery and controls.

Alloy Bulk Products

Market	Application
Automotive	Plate and bar products for tooling for plastic molded components resistance welding equipment, valve and suspension components.
Oil & Gas	Rod and tube product for instrumentation housings, control valves and drilling components.
Aerospace	Rod and tube products for bushings and bearings.
Foundry	Casting products for power delivery systems, automotive castings, and industrial equipment.
Marine	Rod, tube, and custom engineered products for signal transmission and amplification.
Consumer	Plate and rod products for containers.

Beryllium Products

Beryllium Products manufactures products that include beryllium, AlBeMet® and E-materials. Beryllium is a lightweight metal possessing unique mechanical and thermal properties. Its specific stiffness is much greater than other engineered structural materials such as aluminum, titanium and steel. Beryllium is extracted from both bertrandite and beryl ores.

In September 2003, beryllium was chosen by Northrop Grumman Space Technology as the material for the 18 segment, 6.5-meter primary mirror of NASA s James Webb Space Telescope. This state-of-the-art lightweight beryllium mirror will allow scientists to see ten to eleven billion light years away. We expect this application to add approximately $15 million in sales of optical grade beryllium over the next two to three years.

Beryllium-containing products are sold throughout the world through a direct sales organization and through our independent distribution centers. While Beryllium Products is the only domestic producer of metallic beryllium, it competes primarily with engineering designs utilizing other materials. Our Beryllium Products include:

Beryllium metal One of the lightest, low density metals, beryllium metal is a vacuum cast and hot/cold isostatically pressed powder-derived metal. Beryllium metal exhibits high stiffness, thermal conductivity and low thermal expansion. Beryllium metal is transparent and is a neutron reflector.

AlBeMet® These lightweight aluminum/beryllium composites are powder-derived metals and are either extruded, rolled sheet or isostatically pressed. AlBeMet® exhibits many of the same properties as beryllium metal but is easier to fabricate.

E-Materials These low expansion, lightweight electronic packaging materials are composites of beryllium metals and beryllium oxide.

Beryllium oxide and chemicals Beryllium oxide and chemicals are specialty beryllium-containing chemicals and ceramic-grade beryllium oxide powder.

The following chart highlights the markets and applications for our Beryllium Products:

Beryllium Products

Market	Application
Optics	Optical substrate and support structures for visual and infrared target acquisition systems in fighter aircraft, helicopters and tanks, surveillance systems and astronomical telescopes.
Aerospace/Defense	Structures and sensors for defense and commercial telecommunications satellites.
Electronics	Electronic packaging, including circuit boards, covers and packages, for defense avionics, radar and electronic countermeasures systems for helicopters and fighter aircraft.
Medical	Radiographic tube components for medical diagnostic equipment such as x-ray, mammography and CAT-scan equipment and industrial x-ray equipment.
Optical Scanning	Mirrors for laser scanners used in reprographic and other high-performance laser applications.
Motion Control	Structural components for high-precision semi-conductor processing and industrial robotic equipment.

TMI

TMI manufacturers engineered material systems that are combinations of precious and non-precious metals in continuous strip form and are used in complex electronic and electrical components in telecommunications systems, automotive electronics, semi-conductors and computers. TMI s products are sold directly and through its sales representatives. TMI has limited competition in the United States and several European manufacturers are competitors for the sale of inlaid strip. Strip with selective electroplating is a competitive alternative as are other design approaches. Additional competition for TMI exists in the plating area in North America and worldwide. The following chart indicates some of the applications of TMI products:

TMI Product Applications

Capacitors	Leadframes	Relays	Medical Devices
Connectors	Micro Motors	Sensors	Heat Transfer Applications
Contact Probes	Microwaves	Solder Clips	Fuel Cells
Fuses	Potentiometers	Switches	Computer Disk Drive Arms

Sales and Backlog

The backlog of unshipped orders for the Metal Systems Group as of December 31, 2003, 2002 and 2001 was $47.7 million, $35.1 million and $61.0 million, respectively. Backlog is generally represented by purchase orders that may be terminated under certain conditions. We expect that substantially all of our backlog of orders for this segment at December 31, 2003 will be filled during 2004.

Sales are made to approximately 1,700 customers. Government sales, principally subcontracts, accounted for about 7.9% of Metal Systems Group net sales in 2003 as compared to 9.3% in 2002 and 3.3% in 2001. Sales outside the United States, principally to Western Europe, Canada and the Pacific Rim, accounted for approximately 42% of the Metal Systems Group sales in 2003, 35% in 2002 and 38% in 2001. Other segment reporting and geographic information is set forth in Note M to the audited consolidated financial statements included elsewhere in this prospectus.

Research and Development

Active research and development programs seek new product compositions and designs as well as process innovations for the Metal Systems Group. Expenditures for research and development amounted to $2.8 million in 2003, $2.5 million in 2002 and $4.7 million in 2001. A staff of 21 scientists, engineers and technicians was employed in this effort as of year end 2003. Some research and development projects, expenditures for which are not material, were externally sponsored.

Microelectronics Group

The Microelectronics Group is comprised of WAM and Electronic Products, which consists of Zentrix and Brush Ceramic Products. In 2003, 39% of our sales were from this segment, compared to 37% in 2002 and 36% in 2001. As of December 31, 2003, the Microelectronics Group had 552 employees.

WAM

WAM manufactures and fabricates precious metal and specialty alloy metal products for the optical media, magnetic head, including magnetic resistive, or MR, and giant magnetic resistive, or GMR, materials, electron tube, performance film and the wireless, semi-conductor, photonic and hybrid segments of the microelectronics market. WAM s major product lines include vapor deposition plating materials, clad and precious metals preforms, high temperature braze materials, ultra fine wire, sealing lids for the semi-conductor/hybrid markets and restorative dental alloys. The following chart indicates the businesses, markets and end uses for WAM products:

Williams Advanced Materials

Business	Market	Example of End Use
Physical Vapor Deposition Products	Wireless microelectronics Optical media Photonics Glass decorative Wear resistance materials	Wireless and photonic components; recordable CDs; DVDs; and faucets.
Packaging Material Products	Wireless Photonics Hybrid microelectronic devices	Cellular phones, LEDs; fiber-optic networks; personal computers; military electronics; avionics; medical electronics; and appliances.
Specialty Alloy Products	Electron tubing Photonics Aerospace Microelectronic packaging	Cellular base stations; lasers; x-ray machines; and industrial microwaves.

WAM s products are sold directly from WAM s facilities in Buffalo, Brewster and Wheatfield, New York, Singapore, Taiwan and the Philippines, as well as through direct sales offices and independent sales representatives throughout the world. Principal competition includes companies such as Sumitomo Metals, Praxair, Inc., Honeywell International Inc. and a number of smaller regional and national suppliers.

Electronic Products

Electronic Products has two business groups: Zentrix and Brush Ceramic Products. Zentrix processes electronic packages at our production site in Newburyport, Massachusetts. Its products are used in wireless,

telecommunications, fiberoptic, automotive and defense applications. Zentrix competes with other electronic packaging suppliers, including Kyocera Corporation.

Circuits Processing Technology Inc., or CPT, a subsidiary of Zentrix, manufacturers electronic circuitry and circuit components at its production site in Oceanside, California. Its products are used in defense and wireless telecommunications applications. CPT competes with other circuitry suppliers, including Anaren Microwave and Aeroflex, Inc.

Brush Ceramic Products, located in Tucson, Arizona, produces beryllia ceramics used in wireless telecommunications, laser, automotive and defense product applications. Principal competitors include CBL Ceramics Ltd. and American Beryllia, Inc. Competitive materials include aluminum nitride and metal matrix composites.

The following chart indicates the businesses and applications for Electronic Products:

Electronic Products Group

Business	Application
Electronic Packaging Products (Zentrix)	RF power packages for cellular base stations and wireless data networks, cellular handsets and military radar applications. Automotive components for ignition systems in cars and trucks. Power circuit assemblies for DC motor controls.
Circuit Processing Technology (Zentrix)	High frequency military and aerospace circuitry for military radar and missile guidance. High frequency wireless circuitry for satellite communications. Package components for amplifiers in fiber optic networks.
Brush Ceramic Products	RF power package components for cellular base stations and high reliability military applications. Package components for amplifiers in fiber optic networks. Components for medical laser applications. Automotive components for ignition systems in cars and trucks.

Sales and Backlog

The backlog of unshipped orders for the Microelectronics Group as of December 31, 2003, 2002 and 2001 was $13.7 million, $19.8 million and $20.5 million, respectively. Backlog is generally represented by purchase orders that may be terminated under certain conditions. We expect that substantially all of our backlog of orders for this segment at December 31, 2003 will be filled during 2004.

Sales are made to approximately 1,700 customers. Government sales, principally subcontracts, accounted for less than 1% of Microelectronics Group net sales in 2003 as compared to less than 1% in 2002 and 2.8% in 2001. Sales outside the United States, principally to Western Europe, Canada and the Pacific Rim, accounted for approximately 15% of Microelectronics Group net sales in 2003, 18% in 2002 and 13% in 2001. Other segment reporting and geographic information is set forth in Note M to the audited consolidated financial statements included elsewhere in this prospectus.

Research and Development

Active research and development programs seek new product compositions and designs as well as process innovations for the Microelectronics Group. Expenditures for Microelectronics Group research and development amounted to $1.4 million for 2003, $1.7 million for 2002 and $1.6 million in 2001. A staff of 6 scientists, engineers and technicians was employed in this effort as of year end 2003.

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Raw Materials

Our principal raw materials are beryllium (extracted from both imported beryl ore and bertrandite mined from our Utah properties), copper, gold, silver, nickel, platinum, palladium and aluminum. See ore reserve data in Management s Discussion and Analysis included elsewhere in this prospectus. We have agreements to purchase stated quantities of beryl ore, beryllium metal and beryllium-copper master alloy from the Defense Logistics Agency of the United States government. In addition, we have a long-term supply arrangement with Ulba/ Kazatomprom of the Republic of Kazakhstan and its marketing representative, Nukem, Inc. of New York, to purchase quantities of beryllium-copper master and beryllium vacuum cast billet. The availability of these raw materials, as well as other materials used by us, is adequate and generally not dependent on any one supplier.

Patents and Licenses

We own patents, patent applications and licenses relating to certain of our products and processes. While our rights under the patents and licenses are of some importance to our operations, our business is not materially dependent on any one patent or license or on all of our patents and licenses as a group.

Regulatory Matters

We are subject to a variety of laws which regulate the manufacture, processing, use, handling, storage, transport, treatment, emission, release and disposal of substances and wastes used or generated in manufacturing. For decades, we have operated our facilities under applicable standards of inplant and outplant concentrations of beryllium in the air. The inhalation of airborne beryllium particulate may present a health hazard to certain individuals. The Occupational Safety and Health Administration is currently reviewing its beryllium standards.

Properties

We have 16 milling and manufacturing facilities, which are located in Arizona, California, Massachusetts, New York, Ohio, Pennsylvania, Rhode Island, Utah, the Philippines and Singapore. We also have global service and distribution centers in England, Germany, Japan, Singapore and the United States, and sales offices throughout the United States, China and Taiwan. Our material properties, all of which are owned in fee except as otherwise indicated, are as follows:

Manufacturing Facilities

Brewster, New York A 35,000-square-foot leased facility on a 6.0-acre site for manufacturing services relating to non-precious metals.

Buffalo, New York A complex of approximately 97,000 square feet on a 3.8-acre site providing facilities for manufacturing, refining and laboratory services relating to high purity precious metals.

Delta, Utah An ore extraction plant consisting of 86,000 square feet of buildings and large outdoor facilities situated on a 4,400-acre site. This plant extracts beryllium from bertrandite ore from our mines as well as from imported beryl ore.

Elmore, Ohio A complex containing approximately 856,000 square feet of building space on a 439-acre plant site. This facility employs diverse chemical, metallurgical and metalworking processes in the production of beryllium, beryllium oxide, beryllium alloys and related products.

Fremont, California A 16,800-square-foot leased facility for the fabrication of precision electron beam welded, brazed and diffusion bonded beryllium structures.

Juab County, Utah 7,500 acres with respective mineral rights from which the beryllium-bearing ore, bertrandite, is mined by the open pit method. A portion of the mineral rights is held under lease.

Lincoln, Rhode Island A manufacturing facility consisting of 140,000 square feet located on 7.5 acres. This facility produces reel-to-reel strip metal products which combine precious and non-precious metals in continuous strip form and related metal systems products.

Lorain, Ohio A manufacturing facility consisting of 55,000 square feet located on 15 acres. This facility produces non-beryllium metal alloys in electronic induction furnaces which are continually cast into bar stock and heat treated.

Newburyport, Massachusetts A 30,000-square-foot manufacturing facility on a four-acre site that produces alumina, beryllia ceramic and direct bond copper products.

Oceanside, California Two leased facilities totaling 20,200 square feet on 1.25 acres of leased land. Over three-quarters of these facilities are comprised of clean rooms for the production of thick-film circuits and other complex circuits.

Santa Clara, California A 5,800-square-foot leased facility that provides bonding services relating to physical vapor deposition materials.

Shoemakersville, Pennsylvania A 123,000-square-foot plant on a 55-acre site that produces thin precision strips of copper beryllium and other alloys and copper beryllium rod and wire.

Singapore A 4,500-square-foot leased facility for the assembly and sale of precious metal hermetic sealing lids.

Subic Bay, Philippines A 5,000-square-foot leased facility that manufactures Combo-Lid® and performs preform assembly, inspection and packaging.

Taipei, Taiwan A 5,000-square-foot leased service/bonding center supporting the physical vapor deposition product market in Asia.

Tucson, Arizona A complex containing approximately 63,000 square feet of building space on a ten-acre site for the production of beryllium oxide ceramic substrates.

Wheatfield, New York A 29,000-square-foot facility on a 10.2-acre site for manufacturing services relating to braze material and specialty alloys.

Research Facilities and Administrative Offices

Cleveland, Ohio A 110,000-square-foot building on an 18-acre site housing corporate and administrative offices, data processing and research and development facilities.

Service and Distribution Centers

Elmhurst, Illinois A 28,500-square-foot leased facility principally for distribution of copper beryllium alloys.

Fairfield, New Jersey A 24,500-square-foot leased facility principally for distribution of copper beryllium alloys.

Fukaya, Japan A 35,500-square-foot facility on 1.8 acres of land in Saitama Prefecture principally for distribution of copper beryllium alloys.

Singapore A 2,500-square-foot leased sales office that houses employees of Alloy Products and WAM Far East.

Stuttgart, Germany A 24,750-square-foot leased facility principally for distribution of copper beryllium alloys.

Theale, England A 19,700-square-foot leased facility principally for distribution of copper beryllium alloys.

Warren, Michigan A 34,500-square-foot leased facility principally for distribution of copper beryllium alloys.

MANAGEMENT

The following table sets forth the names and ages of our directors and executive officers, as well as the positions and offices held by those persons.

Name	Age	Position
Gordon D. Harnett	61	Chairman of the Board, President, Chief Executive Officer and Director
John D. Grampa	56	Vice President Finance and Chief Financial Officer
Daniel A. Skoch	54	Senior Vice President Administration
Albert C. Bersticker	70	Director
David H. Hoag	64	Director
Joseph P. Keithley	55	Director
William B. Lawrence	59	Director
William P. Madar	64	Director
William G. Pryor	65	Director
N. Mohan Reddy	50	Director
William R. Robertson	62	Director
John Sherwin, Jr.	65	Director

Set forth below is biographical information for our directors and executive officers.

Gordon D. Harnett. Mr. Harnett was elected our Chairman of the Board, Chief Executive Officer and Director effective January 1991. In addition, Mr. Harnett has served as our President from January 1991 to May 2001 and from May 2002 to the present. He is a director of Lubrizol Corporation, EnPro Industries, Inc. and PolyOne Corporation.

John D. Grampa. Mr. Grampa was elected our Vice President Finance and Chief Financial Officer in November 1999. He had served as our Vice President Finance since October 1998. Prior to that, he had served as Vice President, Finance for the Worldwide Materials Business of Avery Dennison Corporation since March 1994 and held other various financial positions at Avery Dennison Corporation from 1984.

Daniel A. Skoch. Mr. Skoch was elected our Senior Vice President Administration in July 2000. Prior to that time, he had served as our Vice President Administration and Human Resources since March 1996.

Albert C. Bersticker. Mr. Bersticker has been a Director since 1993. He was elected Chairman of Ferro Corporation, a producer of a diverse array of performance materials, in February 1996 and retired in 1999. He served as Chief Executive Officer of Ferro Corporation, a producer of performance materials, from 1991 until January 1999 and as its President from 1988 until February 1996. Mr. Bersticker is the non-executive Chairman of the Board of Oglebay Norton Company. Oglebay Norton Company filed for chapter 11 bankruptcy protection in February 2004. He is currently Secretary, Treasurer and a member of the Board of Directors of St. John s Medical Center in Jackson, Wyoming.

David H. Hoag. Mr. Hoag has been a Director since 1999. He retired as Chairman of the Board of The LTV Corporation in January 1999. He had served as its Chairman since June 1991, as Chief Executive Officer from February 1991 until September 1998 and as President from January 1991 until July 1997. The LTV Corporation filed for chapter 11 bankruptcy protection in December 2000. Mr. Hoag is a director of Lubrizol Corporation, NACCO Industries, Inc., PolyOne Corporation and The Chubb Corporation. He is also a member of the Boards of Trustees of Allegheny College and University Hospitals of Cleveland.

Joseph P. Keithley. Mr. Keithley has been a Director since 1997. He has been Chairman of the Board of Keithley Instruments, Inc., a designer, developer, manufacturer and marketer of complex electronic instruments and systems, since 1991. He has served as Chief Executive Officer of Keithley Instruments, Inc. since November 1993 and as its President since May 1994. He is a director of Keithley Instruments, Inc. and Nordson Corporation, a designer, manufacturer and marketer of precision dispensing systems.

William B. Lawrence. Mr. Lawrence has been a Director since 2003. He served as Executive Vice President, General Counsel & Secretary of TRW Inc., an automotive, defense, aerospace and information technology company, from 1997 until the sale of TRW to Northrop Grumman Corporation in December 2002. Prior to 1997, he also held various other positions at TRW since 1976. Mr. Lawrence has been a director of Ferro Corporation since 1999.

William P. Madar. Mr. Madar has been a Director since 1988. He retired as Chairman of the Board of Nordson Corporation effective March 2004, a position he held since December 1997. Prior to that time, he served as Vice Chairman of Nordson Corporation from August 1996 until October 1997 and as Chief Executive Officer from February 1986 until October 1997. From February 1986 until August 1996, he also served as its President. He is a director of Lubrizol Corporation and Nordson Corporation.

William G. Pryor. Mr. Pryor has been a Director since 2003. He served as President of Van Dorn Demag Corporation, a manufacturer of plastic injection molding equipment, from 1993 to 2002 when he retired. He had also served as President and Chief Executive Officer of Van Dorn Corporation, predecessor to Van Dorn Demag Corporation. Mr. Pryor is a director of Oglebay Norton Company and Oxis International, Inc., a biopharmaceutical/nutraceutical/diagnostic company.

Dr. N. Mohan Reddy. Dr. Reddy has been a Director since 2000. He has been a professor at the Weatherhead School of Management, Case Western Reserve University for the past five years. Dr. Reddy is a director of Keithley Instruments, Inc.

William R. Robertson. Mr. Robertson has been a Director since 1997. He has been a Managing Partner of Kirtland Capital Partners, a private venture capital fund business, since September 1997. Prior to that time, he was president and a director of National City Corporation from October 1995 until July 1997. He also served as Deputy Chairman and a director of National City Corporation from August 1988 until October 1995. Mr. Robertson is a member of the Board of Managers of the Prentiss Foundation and a member of and a vice president of the Board of Trustees of the Cleveland Museum of Art. He is a director of Gries Financial LLC, Fairport Asset Management LLC, and Instron Corporation, a designer, manufacturer, marketer and servicer of materials and structural testing systems, software and accessories.

John Sherwin, Jr. Mr. Sherwin has been a Director since 1981. He has been President of Mid-Continent Ventures, Inc., a private venture capital fund business, during the past five years. Mr. Sherwin is a director of John Carroll University and Shorebank Cleveland, a trustee of The Cleveland Clinic Foundation and Chairman of The Cleveland Foundation.

SELLING SHAREHOLDERS

In connection with the debt refinancing we completed on December 4, 2003, we issued warrants to purchase 115,000 common shares to our subordinated lenders as part of the consideration for a $35.0 million subordinated loan. One of these warrants to purchase 16,429 of our common shares was issued to Bank One, NA, which subsequently transferred the warrant to one of its affiliates, First Chicago Capital Corporation. In addition, one of the warrants to purchase 20,000 of our common shares was issued to H/Z Acquisition Partners LLC, which subsequently transferred the warrant to one of its affiliates, Cochran Road, LLC. The common shares registered for sale by the selling shareholders in the registration statement of which this prospectus is a part are the common shares the selling shareholders have acquired upon exercise of those warrants. The table below sets forth information regarding ownership of our common shares by the selling shareholders and the number of shares that may be sold by them under this prospectus.

None of the selling shareholders has had any position or office or material relationship with us during the past three years, other than as a security holder, except that certain affiliates of the selling shareholders are lenders under the above-mentioned subordinated loan and/or our $105.0 million senior secured credit facility. The $35.0 million subordinated loan and the $105.0 million senior secured credit facility are described in the notes to our consolidated financial statements included elsewhere in this prospectus.

Name	Shares beneficially owned prior to this offering		Shares offered in this offering	Shares to be beneficially owned after this offering
	Number	Percent		
First Chicago Capital Corporation	16,429(1)	*	16,429	0
Cochran Road, LLC	20,000(2)	*	20,000	0
Upper Columbia Capital Company, LLC	78,571(3)	*	78,571	0

* Less than 1% of outstanding common shares.

(1) Includes 16,429 common shares issued upon exercise of the warrants.

(2) Includes 20,000 common shares issued upon exercise of the warrants.

(3) Includes 78,571 common shares issued upon exercise of the warrants.

DESCRIPTION OF CAPITAL STOCK

Upon completion of this offering, there will be 18,578,229 common shares issued and outstanding, based on the number of shares outstanding as of May 7, 2004, and no shares of preferred stock issued and outstanding.

As of May 7, 2004, our authorized capital stock consisted of 60,000,000 common shares, no par value, of which 16,878,229 shares were issued and outstanding, and 5,000,000 shares of preferred stock, no par value, of which no shares were issued and outstanding.

Common Shares

Each outstanding common share is entitled to one vote on all matters submitted to a vote of shareholders. Pursuant to Ohio law, holders of our common shares have the right to cumulative voting. Our articles of incorporation provide for our board to be divided into three classes of directors, as nearly equal in number as possible, serving staggered terms. Approximately one-third of our board will be elected by the shareholders each year.

Subject to any superior rights of any holders of preferred stock, each outstanding common share will be entitled to such dividends as may be declared from time to time by our board of directors out of legally available funds. We have no current intention to declare dividends on our common shares in the near term. Our current policy is to retain all funds and earnings for use in the operation and expansion of our business, and our ability to pay dividends is restricted by the terms of our credit facilities. In the event of our liquidation, dissolution or winding up, holders of our common shares will be entitled to their proportionate share of any assets remaining after payment of liabilities and any amounts due to the holders of preferred stock. Holders of our common shares have no preemptive rights and no right to convert or exchange their common shares into any other securities. No redemption or sinking fund provisions apply to our common shares. All outstanding common shares are, and all common shares to be outstanding upon completion of this offering will be, fully paid and non-assessable.

Under the terms of our shareholder rights plan, one preferred share purchase right is associated with each of our outstanding common shares. Until the occurrence of specified events described in the shareholder rights plan, the rights are not exercisable, are evidenced by the certificates for our common shares and may be transferred only with our common shares. The rights will expire on May 16, 2010. Additional information relating to the common shares and the preferred share purchase rights can be found in the Form 8-A we filed on May 16, 2000, which is incorporated into this document by reference.

Preferred Stock

Our board of directors is authorized, without shareholder approval, to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions granted to or imposed upon the preferred stock, including voting rights, dividend rights, conversion rights, terms of redemption, liquidation preference, sinking fund terms and the number of shares constituting any series or the designation of a series. Our board of directors can, without shareholder approval, issue preferred stock with voting and conversion rights that could adversely affect the voting power of the holders of common shares. Any preferred stock issued would also rank senior to our common shares as to rights up on liquidation, winding-up or dissolution. The issuance of convertible preferred stock could have the effect of delaying, deferring or preventing a change in control of our company. We have no present plan to issue any shares of preferred stock.

Warrants

In connection with the debt refinancing completed on December 4, 2003, we issued warrants to purchase 115,000 common shares to our subordinated lenders as part of the consideration for a $35 million subordinated loan. One of these warrants to purchase 16,429 of our common shares was issued to Bank One, NA, which subsequently transferred the warrant to one of its affiliates, First Chicago Capital Corporation. In addition, one

of the warrants to purchase 20,000 of our common shares was issued to H/Z Acquisition Partners LLC, which subsequently transferred the warrant to one of its affiliates, Cochran Road, LLC. The exercise price of the warrants was $0.01 per share. All of the warrants have been exercised.

Registration Rights

The selling shareholders have demand registration rights with respect to common shares that were issued upon exercise of the warrants pursuant to the terms of their warrants. Pursuant to those rights, we are required, upon request, to file a registration statement relating to the common shares as expeditiously as possible after the filing of our annual report on Form 10-K for the fiscal year ending December 31, 2003. We are also required to use our commercially reasonable efforts to cause such registration statement to become and remain effective for a period of time not to exceed 120 days. We have also granted the selling shareholders piggyback registration rights pursuant to the warrants, which entitle the selling shareholders to notice and to include, at our expense, their common shares in some registrations of our common shares. The selling shareholders have exercised their rights to include in this offering the common shares they have received upon exercise of the warrants described above.

Ohio Control Share Acquisition Statute

Section 1701.831 of the Ohio Revised Code requires the prior authorization of the shareholders of certain corporations in order for any person to acquire, either directly or indirectly, shares of that corporation that would entitle the acquiring person to exercise or direct the exercise of 20% or more of the voting power of that corporation in the election of directors or to exceed specified other percentages of voting power. In the event an acquiring person proposes to make such an acquisition, the person is required to deliver to the corporation a statement disclosing, among other things, the number of shares owned, directly or indirectly, by the person, the range of voting power that may result from the proposed acquisition and the identity of the acquiring person. Within 10 days after receipt of this statement, the corporation must call a special meeting of shareholders to vote on the proposed acquisition. The acquiring person may complete the proposed acquisition only if the acquisition is approved by the affirmative vote of a majority of the voting power of the corporation in the election of directors represented at the meeting and a majority of the portion of the voting power of all shares entitle to vote in the election of directors represented at the meeting excluding the voting power of all interested shares represented at the meeting. Interested shares include any shares held by the acquiring person and those held by officers and directors of the corporation as well as by certain others, including many holders commonly characterized as arbitrageurs. Section 1701.831 does not apply to a corporation if its articles of incorporation or code of regulations state that the statute does not apply to that corporation. Neither our articles of incorporation nor our regulations contain a provision opting out of this statute.

Ohio Interested Shareholder Statute

Chapter 1704 of the Ohio Revised Code prohibits certain corporations from engaging in a chapter 1704 transaction with an interested shareholder for a period of three years after the date of the transaction in which the person became an interested shareholder, unless, among other things:

the articles of incorporation expressly provide that the corporation is not subject to the statute (we have not made this election); or

the board of directors of the corporation approves the chapter 1704 transaction or the acquisition of the shares before the date the shares were acquired.

After the three-year moratorium period, the corporation may not consummate a chapter 1704 transaction unless, among other things, it is approved by the affirmative vote of the holders of at least two-thirds of the voting power in the election of directors and the holders of a majority of the voting shares, excluding all shares beneficially owned by an interested shareholder or an affiliate or associate of an interested shareholder, or the shareholders receive certain minimum consideration for their shares. A chapter 1704 transaction includes certain mergers, sales of assets, consolidations, combinations and majority share acquisitions

involving an interested shareholder. An interested shareholder is defined to include, with limited exceptions, any person who, together with affiliates and associates, is the beneficial owner of a sufficient number of shares of the corporation to entitle the person, directly or indirectly, alone or with others, to exercise or direct the exercise of 10% or more of the voting power in the election of directors after taking into account all of the person s beneficially owned shares that are not then outstanding.

Related Party Transactions

Pursuant to our articles of incorporation, related party transactions require the affirmative vote of both a majority of our outstanding voting stock and a majority of the portion of our outstanding voting stock not including the voting stock owned by the related party involved in the related party transaction. A related party means any party, together with its affiliates or associates, that is the beneficial owner of 10% or more but less than 90% of our voting stock. A related party transaction means:

any merger or consolidation between us or a subsidiary with a related party;

any transaction outside the ordinary course of business between us or a subsidiary and a related party involving the acquisition or disposition of assets for $5 million or more in value;

the issuance or transfer of any of our securities or that of our subsidiaries to a related party, excluding pro rata distributions to all of our shareholders;

any reclassification of our securities or any recapitalization or other transaction that would increase the voting power of a related party; and

the adoption by us of any liquidation or dissolution plan or proposal which the related party votes in favor of.

Transfer Agent and Registrar

National City Bank, N.A. is the transfer agent and registrar for our common shares.

Listing

Our common shares are listed on the New York Stock Exchange under the symbol BW.

UNDERWRITING

Subject to the terms and conditions set forth in an underwriting agreement by and among the selling shareholders, KeyBanc Capital Markets, a division of McDonald Investments Inc., Jefferies & Company, Inc., BB&T Capital Markets, a division of Scott & Stringfellow, Inc., and Wm Smith Securities, Incorporated, as representatives for the underwriters named in the agreement, and us, we and the selling shareholders have agreed to sell to each underwriter, and each underwriter has severally agreed to purchase from the selling shareholders and us, the number of common shares set forth opposite its name in the table below.

Underwriter	Number of Shares
KeyBanc Capital Markets, a division of McDonald Investments Inc.	
Jefferies & Company, Inc.	
BB&T Capital Markets, a division of Scott & Stringfellow, Inc.	
Wm Smith Securities, Incorporated	
Total	1,815,000

Under the terms of the underwriting agreement, the underwriters are committed to purchase all of these common shares if any shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We and the selling shareholders have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

The underwriting agreement provides that the underwriters obligations to purchase the common shares depend on the satisfaction of the conditions contained in the underwriting agreement. The conditions contained in the underwriting agreement include the requirement that the representations and warranties made by the selling shareholders and us to the underwriters are true, that there is no material change in the financial markets and that we deliver to the underwriters customary closing documents.

The underwriters propose to offer the selling shareholders and our common shares directly to the public at $ per share and to certain dealers at such price less a concession not in excess of $ per share. The underwriters may allow, and such dealers may reallow, a concession not in excess of $ per share to other dealers. If all of the shares are not sold at the public offering price, the representatives of the underwriters may change the public offering price and the other selling terms.

We intend to distribute and deliver this prospectus by hand or by mail only and not by electronic delivery. Also, we intend to use printed prospectuses only and not other forms of prospectuses.

The following table shows the per share and total underwriting discount that the selling shareholders and we will pay to the underwriters. These amounts are shown assuming both no exercise and full exercise of the underwriters option to purchase 272,250 additional common shares.

	Per share	Total Without Option Exercised	Total With Option Exercised
Public offering price	$	$	$
Underwriting discount(1)			
Payable by us	$	$	$
Payable by the selling shareholders	$	$	