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## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## **FORM 10-K**

(Mark One)

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

For the fiscal year ended December 31, 2006

OR

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

For the transition period from

Commission file number 1-15885

## BRUSH ENGINEERED MATERIALS INC.

(Exact name of Registrant as specified in its charter)

Ohio

(State or other jurisdiction of incorporation or organization)

17876 St. Clair Avenue, Cleveland, Ohio

(Address of principal executive offices)

3 4-1919973

(I.R.S. Employer Identification No.)

44110

(Zip Code)

Registrant's telephone number, including area code 216-486-4200

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

Common Stock, no par value

New York Stock Exchange

### Securities registered pursuant to Section 12(g) of the Act:

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes □ No ☑ Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Act. Yes □

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check One) Accelerated filer **☑** Non-accelerated filer □ Large accelerated filer □

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  $\square$ 

The aggregate market value of Common Stock, no par value, held by non-affiliates of the registrant (based upon the closing sale price on the New York Stock Exchange) on June 30, 2006 was \$411,419,122.

As of March 2, 2007, there were 20,369,124 shares of Common Stock, no par value, outstanding.

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the annual report to shareholders for the year ended December 31, 2006 are incorporated by reference into Parts I, II and IV. Portions of the proxy statement for the annual meeting of shareholders to be held on May 1, 2007 are incorporated by reference into Part III.

## BRUSH ENGINEERED MATERIALS INC.

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### PART I

### **Forward-Looking Statements**

Portions of the narrative set forth in this document that are not statements of historical or current facts are forward-looking statements. Our actual future performance may materially differ from that contemplated by the forward-looking statements as a result of a variety of factors. These factors include, in addition to those mentioned elsewhere herein:

- The global economy;
- The condition of the markets which we serve, whether defined geographically or by segment, with the major market segments being telecommunications and computer, data storage, aerospace and defense, automotive electronics, industrial components and appliance;
- Changes in product mix and the financial condition of our customers;
- Actual sales, operating rates and margins for 2007;
- Our success in developing and introducing new products and new product ramp up rates;
- Our success in passing through the costs of raw materials to customers or otherwise mitigating fluctuating prices for those materials;
- Our success in integrating newly acquired businesses;
- Our success in implementing our strategic plans and the timely and successful completion of any capital projects;
- The availability of adequate lines of credit and the associated interest rates;
- Other financial factors, including cost and availability of raw materials (both base and precious metals), tax rates, exchange rates, pension and other employee benefit costs, energy costs, regulatory compliance costs and the cost and availability of insurance;
- The uncertainties related to the impact of war and terrorist activities;
- Changes in government regulatory requirements and the enactment of new legislation that impact our obligations; and,
- The conclusion of pending litigation matters in accordance with our expectation that there will be no material
  adverse effects.

### Item 1. BUSINESS

Brush Engineered Materials Inc., through its wholly owned subsidiaries, is a leading manufacturer of high performance advanced enabling engineered materials serving the global telecommunications and computer, data storage, aerospace and defense, automotive electronics, industrial components and appliance markets. As of December 31, 2006, we had 2,185 employees.

Previously, we aggregated our businesses into two reporting segments. The Metal Systems Group included Alloy Products, Beryllium Products, Technical Materials, Inc. (TMI) and Brush Resources Inc (BRI). The Microelectronics Group included Williams Advanced Materials Inc. (WAM) and Electronic Products. Electronic Products consisted of Brush Ceramic Products Inc. and Zentrix Technologies Inc. Beginning with the fourth quarter of 2006, we changed our segments to more closely align with the way the business is currently managed. We believe that the new segments provide shareholders with increased transparency over the sales and profitability of our businesses. Prior year results have been adjusted for each segment to reflect the change. Our businesses are now organized under four reportable segments: Advanced Material Technologies and Services, Specialty Engineered Alloys, Beryllium and Beryllium Composites, and Engineered Material Systems. Advanced Material Technologies and Services includes WAM. The Specialty Engineered Alloys segment consists of Alloy Products, which includes bulk and strip form products, and hydroxide (BRI) The Beryllium and Beryllium Composites segment consists of Beryllium Products and Brush Ceramic Products Inc. and the Engineered Material Systems segment includes TMI.

Our parent company, Brush Engineered Materials Inc., and other corporate expenses, as well as the operating results from BEM Services, Inc., Zentrix Technologies Inc. and Circuits Processing Technology (CPT), all wholly owned subsidiaries, are not part of either segment and remain in All Other. BEM Services charges a management fee for the services it provides, primarily corporate, administrative and financial oversight, to our other businesses on a cost-plus basis. Zentrix manufactures electronic packages and other components for sale to the telecommunications and computer and automotive electronics markets and CPT manufactures circuitry for defense and commercial applications. Corporate employees not covered as part of either reportable segment, including employees of BEM Services, Inc., Zentrix Technologies Inc. and CPT, totaled 191 as of December 31, 2006.

Our website address is <a href="www.beminc.com">www.beminc.com</a>. Information contained on our website does not constitute part of this Form 10-K. We make available, free of charge through our website, our annual report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, as well as amendments to those reports, as soon as reasonably practicable after we file such reports with, or furnish such reports to, the Securities and Exchange Commission.

### ADVANCED MATERIAL TECHNOLOGIES AND SERVICES

Advanced Material Technologies and Services (AMTS) is comprised of WAM. In 2006, 45% of our sales were from this segment (39% in 2005 and 33% in 2004). As of December 31, 2006 Advanced Material Technologies and Services had 597 employees.

AMTS manufactures and fabricates precious, non-precious and specialty metal products for the data storage, medical and the wireless, semiconductor, photonic and hybrid segments of the microelectronics market. AMTS also has refining capabilities for the reclaim of precious metals from internally or customer-generated scrap. In addition, AMTS provides chamber services for its customers to reclaim precious metals and refurbish reusable components used in its customers vapor deposition systems. Advanced Material Technologies and Services' major product lines include vapor deposition systems, clad and precious metals preforms, high temperature braze materials, ultra fine wire, sealing lids for the semiconductor/hybrid markets and specialty inorganic materials.

AMTS' products are sold directly from its facilities in Buffalo, New York; Brewster, New York; Wheatfield, New York; Buellton, California; Milwaukee, Wisconsin; Ireland; Singapore; Taiwan; Japan; Korea 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, Heraeus Inc., Praxair, Inc., Honeywell International Inc. and a number of smaller regional and national suppliers.

## Advanced Material Technologies and Services — Sales and Backlog

The backlog of unshipped orders for Advanced Material Technologies and Services as of December 31, 2006, 2005 and 2004 was \$28,711,000, \$15,971,000 and \$10,632,000, 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, 2006 will be filled during 2007. The increase in backlog from 2005 to 2006 is primarily due to the acquisition of CERAC, incorporated in January 2006 and an increase in the demand for vapor deposition targets.

Sales are made to over 3,000 customers. Government sales, principally subcontracts, accounted for less than 1% of the volume in 2006, and 0% in 2005 and 2004. Sales outside the United States, principally to Europe and Asia, accounted for approximately 18% of sales in 2006, 2005 and 2004. Other segment reporting and geographic information set forth on page 56 in Note M to the consolidated financial statements in the annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference.

### Advanced Material Technologies and Services — Research and Development

Active research and development programs seek new product compositions and designs as well as process innovations. Expenditures for research and development for AMTS amounted to \$382,192 in 2006, \$767,511 in 2005 and \$635,741 in 2004. A staff of seven scientists, engineers and technicians was employed in this effort as of year-end 2006.

### SPECIALTY ENGINEERED ALLOYS

Specialty Engineered Alloys (SEA) sells strip products, bulk products and hydroxide (BRI). In 2006, 36% of our sales were from this segment (39% in 2005 and 42% in 2004) As of December 31, 2006, Specialty Engineered Alloys had 942 employees.

Specialty Engineered Alloys manufactures beryllium-containing and other high performance-based materials including copper-nickel-tin alloys that are metallurgically tailored to meet specific customer performance requirements. These products exhibit high electrical and thermal conductivities, high strength and hardness, good formability, lubricity, and excellent resistance to corrosion, wear and fatigue. These alloys, sold in strip and bulk form, are ideal choices for demanding applications in the telecommunications and computer, automotive electronics, aerospace, industrial components (including oil and gas, heavy equipment and plastic mold tooling) and appliance markets. These products are sold domestically through SEA and independent distribution centers and internationally through Company-owned and independent distribution centers and independent sales representatives.

SEA's primary direct competitor in strip form beryllium alloys is NGK Insulators, Ltd. of Nagoya, Japan, with subsidiaries in the U.S. and Europe. SEA also competes with alloy systems manufactured by Olin Corporation, Wieland Electric, Inc., Stolberger Metallwerke GmbH, Nippon Mining, PMX Industries, Inc. and also with other generally less expensive materials, including phosphor bronze, stainless steel and other specialty copper and nickel alloys which are produced by a variety of companies around the world. In the area of bulk products (bar, plate, tube and rod), in addition to NGK Insulators, SEA competes with several smaller regional producers such as Freedom Alloys in the U.S., LaBronze Industriel in Europe and Young II in Asia.

Specialty Engineered Alloys, through BRI, manages our mine and milling operations. The milling operations produce beryllium hydroxide from mined bertrandite ore and purchased beryl ore. The hydroxide is used primarily as a raw material input by the other businesses within the company. BRI also sells hydroxide externally to SEA's primary competitor in beryllium alloys, NGK Insulators, Ltd.

### Specialty Engineered Alloys — Sales and Backlog

The backlog of unshipped orders for Specialty Engineered Alloys as of December 31, 2006, 2005 and 2004 was \$59,485,000, \$58,301,000 and \$50,215,000 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, 2006 will be filled during 2007.

Sales are made to approximately 1,100 customers. Government sales, principally subcontracts, accounted for less than 1% of sales in 2006, 2005 and 2004. Sales outside the United States, principally to Europe and Asia, accounted for approximately 54% in 2006, 51% in 2005 and 50% in 2004. Other segment reporting and geographic information set forth on page 56, Note M to the consolidated financial statements in the annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference.

### Specialty Engineered Alloys — Research and Development

Active research and development programs seek new product compositions and designs as well as process innovations. Expenditures for research and development amounted to \$2,112,000 in 2006, \$2,644,000 in 2005 and \$2,503,000 in 2004. A staff of nine scientists, engineers and technicians was employed in this effort as of year-end 2006.

## BERYLLIUM AND BERYLLIUM COMPOSITES

Beryllium and Beryllium Composites includes Beryllium Products and Brush Ceramic Products, Inc. Sales from this segment were 8% in 2006, 10% in 2005 and 11% in 2004 of total sales. As of December 31, 2006, Beryllium and Beryllium Composites had 246 employees.

Beryllium and Beryllium Composites manufactures products that include beryllium, AlBeMet <sup>®</sup> and 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 imported beryl ore. Beryllium products are used in a variety of high performance applications in the defense, space, industrial, scientific equipment, electronics (including acoustics), medical, automotive and optical scanning markets. Beryllium-containing products are sold throughout the world through a direct sales organization and through Company-owned and independent distribution centers. While Beryllium and Beryllium Composites is the only domestic producer of metallic beryllium, it competes with other fabricators as well as with designs utilizing other materials.

Beryllium and Beryllium Composites also manufactures beryllia ceramics for electronic packaging and electrooptical applications including lasers. Electronic components utilizing beryllia are used in the telecommunications, medical, industrial, automotive and defense markets. These products are distributed through direct sales and independent sales agents. Direct competitors include American Beryllia Inc. and CBL Ceramics Limited.

## Beryllium and Beryllium Composites — Sales and Backlog

The backlog of unshipped orders for Beryllium and Beryllium Composites as of December 31, 2006, 2005 and 2004 was \$18,414,000, \$16,489,000 and \$26,638,000 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, 2006 will be filled during 2007.

Sales are made to over 400 customers. Government sales, principally subcontracts, accounted for less than 1% of Beryllium and Beryllium Composites sales in 2006, 2005 and 2004. Sales outside the United States, principally to Europe and Asia, accounted for approximately 29% in 2006, 16% of sales in 2005 and 17% in 2004. Other segment reporting and geographic information set forth on page 56, Note M to the consolidated financial statements in the annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference.

### Beryllium and Beryllium Composites — Research and Development

Active research and development programs seek new product compositions and designs as well as process innovations. Expenditures for research and development amounted to \$1,101,000 in 2006, \$1,141,000 in 2005 and \$867,000 in 2004. A staff of six scientists, engineers and technicians was employed in this effort as of year-end 2006. Some research and development projects, expenditures for which are not material, were externally sponsored.

### **ENGINEERED MATERIAL SYSTEMS**

Engineered Material Systems is comprised of TMI. In both 2006 and 2005, 9% of our sales were from this segment (11% in 2004). As of December 31, 2006, Engineered Material Systems had 209 employees.

Engineered Materials Systems manufactures engineered material systems, which include clad inlay and overlay metals, precious and base metal electroplated systems, electron beam welded systems, contour profiled systems and solder-coated metals systems These products are used in telecommunications and computer systems, automotive electronics, semi-conductors, energy, defense and medical applications. Engineered Material Systems products are sold directly and through its sales representatives. Engineered Material Systems has limited competition in the United States and several European manufacturers are competitors for the sale of inlay strip.

### Engineered Material Systems — Sales and Backlog

The backlog of unshipped orders for Engineered Material Systems as of December 31, 2006, 2005 and 2004 was \$16,131,000, \$16,259,000 and \$9,252,000, 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, 2006 will be filled during 2007.

Sales are made to approximately 300 customers. Engineered Material Systems did not have any sales to the government for 2006, 2005 or 2004. Sales outside the United States, principally to Europe and the Asia, accounted for approximately 9% of Engineered Material Systems' sales in 2006, 6% in 2005 and 7% in 2004. Other segment reporting and geographic information set forth on page 56 in Note M to the consolidated financial statements in the annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference.

### **Engineered Material Systems** — Research and Development

Active research and development programs seek new product compositions and designs as well as process innovations. Expenditures for research and development for Engineered Material Systems amounted to \$5,500 in both 2006 and 2005 and \$2,700 in 2004.

### **GENERAL**

### **Availability of Raw Materials**

The principal raw materials we use are beryllium (extracted from both imported beryl ore and bertrandite mined from our Utah properties), copper, gold, silver, nickel, platinum, palladium, aluminum and ruthenium. We will be developing a new bertrandite pit at our Utah mine site, targeting early 2008 to begin extracting ore. Ore reserve data in Management's Discussion and Analysis of Financial Condition and Results of Operations on pages 29 and 30 of our annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference. We have agreements to purchase stated quantities of beryl ore, beryllium metal and copper beryllium master alloy from the Defense Logistics Agency of the U.S. Government. These agreements expire in 2007. We had purchased the remaining quantities of beryl ore and copper beryllium master by December 31, 2006 and had minor purchase of beryllium metal in 2006. There are no remaining fixed commitments under these agreements. 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 copper beryllium master alloy 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 emissions and releases. 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.

## **Executive Officers of the Registrant**

The following table shows the name, age and position of each of our executive officers as of December 31, 2006:

Name	Age	<b>Positions and Offices</b>
Richard J. Hipple	54	Chairman of the Board, President and Chief Executive Officer. In May 2006, Mr. Hipple was named Chairman of the Board and Chief Executive Officer of Brush Engineered Materials Inc. He had served as President since May 2005. He was Chief Operating Officer from May 2005 until May 2006. Mr. Hipple served as President of Alloy Products from May 2002 until May 2005. He joined the Company in July 2001 as Vice President of Strip Products and served in that position until May of 2002. Prior to joining Brush, Mr. Hipple was President of LTV Steel Company, a business unit of the LTV Corporation (integrated steel producer and metal fabricator). Prior to running LTV's steel business, Mr. Hipple held numerous leadership positions in Engineering, Operations Strategic Planning, Sales and Marketing and Procurement since 1975 at LTV.
John D. Grampa	59	Senior Vice President Finance and Chief Financial Officer. Mr. Grampa was named Senior Vice President Finance and Chief Financial Officer in December 2006. Prior to that he had served as Vice President Finance and Chief Financial Officer since November 1999 and as 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 (producer of pressure sensitive materials, office products, labels and other converted products) from 1984.
Daniel A. Skoch	57	Senior Vice President Administration. Mr. Skoch was named Senior Vice President Administration in July 2000. Prior to that time, he had served as Vice President Administration and Human Resources since March 1996. He had served as Vice President Human Resources since July 1991 and prior to that time, he was Corporate Director — Personnel.

### Item 1A. RISK FACTORS

Our business, financial condition, results of operations and cash flows can be affected by a number of factors, including but not limited to those set forth below and elsewhere in the Annual Report on Form 10-K, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results. Therefore, an investment in us involves some risks, including the risks described below. The risks discussed below are not the only risks that we may experience. If any of the following risks occur, our business, results of operations or financial condition could be negatively impacted.

Health issues and litigation relating to machining and manufacturing of beryllium-containing products could significantly reduce demand for our products, limit our ability to operate and cause us to pay material amounts in respect of product liability claims.

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. 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 significantly reduce demand for our products.

One of our subsidiaries, Brush Wellman Inc., is a defendant in proceedings in various state and federal courts brought by plaintiffs alleging that they have contracted, or have been placed at risk of contracting, chronic beryllium disease or other lung conditions as a result of exposure to beryllium. Plaintiffs in beryllium cases seek recovery under negligence and various other legal theories and seek compensatory and punitive damages, in many cases of an unspecified sum. Spouses, if any, claim loss of consortium. As of December 31, 2006 there were 13 cases pending. Approximately 85% of our pending beryllium-related claims are covered by various syndicates of Lloyd's of London (now reinsured through Equitas Holdings Limited) and other London insurance market companies, some of whom are or may become insolvent. If our insurance carriers are insolvent or become insolvent, we may become directly responsible for payments relating to product liability claims, which could divert funds from other intended purposes, including capital expenditures or other operating requirements.

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 unable to estimate the potential exposure to unasserted claims.

We are currently self-insured for product liability claims based on exposure to beryllium after July 2001, and we may incur material losses from those claims, which 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. We may incur significant losses from claims for which we are self-insured.

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 the United States Occupational Safety and Health Administration and by other governmental and private standard-setting organizations. One result of these reviews will likely be more stringent worker safety standards. More stringent standards may 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 this 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.

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, which would increase our costs of production.

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

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 beryllium-containing products may decrease, which could reduce our sales.

## 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, at one time we produced 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.

## 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 reduce our sales.

### We have incurred significant losses in the past, and may not be able to sustain profitability on an ongoing basis.

Although we have been profitable in 2004, 2005 and 2006 (net income of \$15.5 million, \$17.8 million and \$49.6 million, respectively), we have incurred significant losses in the past (net loss of \$35.6 million in 2002 and \$13.2 million in 2003) and may not be able to sustain this recent profitability on an ongoing basis. We have implemented strategic initiatives designed to improve our operating performance on an ongoing basis. We may not be able to successfully implement or realize the expected benefits of any of those initiatives or sustain improvements made to date. We may not meet our strategic goals or sustain profitability if we fail to achieve the goals of these initiatives.

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 reduce our sales.

A substantial number of our customers are in the telecommunications and computer, data storage, aerospace and defense, automotive electronics, industrial components and appliance industries. Each of these industries is cyclical in nature, influenced by a combination of factors which could have a negative impact on our business, including, among other things, periods of economic growth or recession, strength or weakness of the United States dollar, the strength of the consumer electronics, automotive electronics and computer industries and the rate of construction of telecommunications infrastructure equipment and government spending on defense. Also, in times when growth rates in our markets slow down, there may be temporary inventory adjustments by our customers, that may negatively affect our business.

The demand for our products is generally affected by macroeconomic fluctuations in the global economies in which we sell our products. Future economic downturns, stagnant economies or global currency fluctuations could also negatively affect our financial performance.

Our business is dependent on continued capital spending by the global telecommunications and computer industries, and a decrease in capital spending for infrastructure and equipment could affect our revenue from these markets. 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 reduce demand for our products.

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

We have been active over the last 24 months in pursuing niche acquisitions for one of our subsidiaries, Williams Advanced Materials Inc. We intend to continue to consider further growth opportunities through the acquisition of assets or companies and routinely review acquisition opportunities. 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.

### 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 and make capital expenditures. 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 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. We have been and are continuing to expand our geographic reach in Europe and Asia. Shipments to customers outside of the United States accounted for approximately 35% of our sales in 2006 and 33% in 2005 and 2004. 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 Asia) amounted to approximately 23% of our sales in 2006, 25% in 2005 and 24% in 2004. 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, including terrorist attacks;
- 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. The fair value of our net liability relating to outstanding foreign currency contracts was (\$0.8) million at December 31, 2006, 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. See also "— Health issues and litigation relating to machining and manufacturing of beryllium-containing products could significantly reduce demand for our products, limit our ability to operate and cause us to pay material amounts in respect of product liability claims", found on page 6 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", found on page 7. Further, any of these risks could continue in the future.

# 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 working capital and certain assets, such as plant, property and equipment. Our working capital line-of-credit includes 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 an instrument in place that has the effect of fixing the interest rate on a portion of our outstanding debt for two years. In addition, the appraised value of the collateral may not allow us to take advantage of the full capacity of our line of credit. For additional information regarding our market risks, please refer to pages 31 and 32 of our annual report to shareholders for the period ended December 31, 2006.

## The availability and prices of some raw materials we use in our manufacturing operations fluctuate, and increases in raw material costs can increase our operating costs.

We manufacture engineered materials using various precious and non-precious metals, including gold, silver, palladium, platinum, ruthenium, 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 can increase our operating costs. For example, prices for copper have recently reached an all-time high due to, among other things, smelting capacity and increased demand from China. 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 increase our operating costs. We use ruthenium for the manufacture of perpendicular magnetic recording technology products for the data storage market. Ruthenium is not widely used or traded on a public market and therefore there is no established market for hedging price exposure. Although our selling price is generally based on our cost to purchase ruthenium, the inventory carrying value may be exposed to market fluctuations.

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

Because many of our European and automotive electronics customers slow or cease operations during the summer months, we sometimes experience 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 harm 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, one of our major markets, 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 and reduce our sales.

### 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 third parties and us. Any explosion could expose us to adverse publicity or liability for damages and materially adversely affect our operations. Any of these events could increase our cost of operations.

## 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. Material plant shutdowns or reductions in operations could harm our ability to fulfill our customers' demands, which could harm our sales and cause our customers to find other suppliers. Further, remediation of any interruption in production capability may require us to make large capital expenditures which 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.

## Many of our manufacturing facilities are dependent on single source energy suppliers, and interruption in energy services may cause manufacturing curtailments or shutdowns.

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. Any substantial unmitigated interruption of our operations due to these conditions could harm our ability to meet our customers' demands and reduce our sales.

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

We have numerous milling and manufacturing facilities and a mining operation, which depend on electrical power, fuel or other energy sources. See "Item 2. — Properties," found on page 15. Our operating expenses are sensitive to changes in electricity prices and fuel prices, including natural gas prices. Prices for electricity and natural gas have continued to increase and 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 will continue to increase our cost of operations.

## We have a limited number of manufacturing facilities, and damage to those facilities could interrupt our operations, increase our costs of doing business and impair 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 "Item 2 — Properties," found on page 15. 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.

# Our lengthy and variable sales and development cycle makes it difficult for us to predict if and when a new product will be sold to customers.

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, especially newly introduced 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.

### Future terrorist attacks and other acts of violence or war may directly harm our operations.

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, decreasing demand for consumer goods that contain our products. Further, when the United States armed 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 negatively impact our sales.

### We may be unable to access the financial markets on favorable terms.

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

All of these factors, except a material breakdown in our risk management procedures, have adversely impacted our access to the financial markets at various times over the last five years.

Low investment performance by our pension plan assets may require us to increase our pension liability and expense, which may also lead us to accelerate funding our pension obligations and divert funds from other potential uses.

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 an 8.5% rate of return on pension assets.

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 8.5% over time, it is likely that future pension expenses would increase. Investment earnings in excess of 8.5% may reduce future pension expenses. The actual return on our plan assets for the twelve months ending December 31, 2006 was 12.5% and the ten-year average annualized return as of year-end 2006 was 7.8%.

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 in the discount rate would reduce the future pension expense and, conversely, a lower discount rate would raise the future pension expense.

Based on current guidelines, assumptions and estimates, including stock market prices and interest rates, we anticipate that we will be required to make a cash contribution of approximately \$3.8 million to our pension plan in

2007. If our current assumptions and estimates are not correct, a contribution in years beyond 2007 may be greater than the projected 2007 contribution required.

We cannot predict whether changing market or economic conditions, regulatory changes or other factors will further increase our pension expenses or 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% at December 31, 2006 from 9% at December 31, 2005. In addition, we have assumed that this health care cost increase trend rate will decline to 5% by 2010. 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 \$0.7 million at December 31, 2006.

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.

# We are subject to fluctuations in currency exchange rates, which may negatively affect our financial performance.

A significant portion of our sales is conducted in international markets and priced in currencies other than the United States dollar. Revenues from customers outside of the United States (principally Europe and Asia) amount to 35% for 2006 and 33% for both 2005 and 2004. A significant part of these international sales are priced in currencies other than the U.S. dollar. Significant fluctuations in currency values relative to the United States dollar may negatively affect our financial performance. 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.

### Item 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

## **Item 2. PROPERTIES**

We operate manufacturing plants, service and other facilities throughout the world. Information as of December 31, 2006, with respect to our significant facilities that are owned or leased, and the respective segments in which they are included, is set forth below.

Location	Owned or Leased	Approximate Number of Square Feet
Manufacturing Facilities		
Brewster, New York (1)	Leased	35,000
Buellton, California (1)	Leased	35,000
Buffalo, New York (1)	Owned	97,000
Delta, Utah (2)	Owned	86,000
Elmore, Ohio (2)(3)	Owned/Leased	556,000/300,000
Fremont, California (3)	Leased	16,800
Limerick, Ireland (1)	Leased	18,000
Lincoln, Rhode Island (4)	Owned	140,000
Lorain, Ohio (2)	Owned	55,000
Milwaukee, Wisconsin (1)	Owned/Leased	99,000/7,300
Newburyport, Massachusetts (5)	Owned	30,000
Oceanside, California (5)	Leased	12,000
Reading, Pennsylvania (2)	Owned	123,000
Santa Clara, California (1)	Leased	5,800
Singapore (1)	Leased	4,500
Subic Bay, Philippines (1)	Leased	5,000
Taipei, Taiwan (1)	Owned	5,000
Tucson, Arizona (3)	Owned	53,000
Wheatfield, New York (1)	Owned	29,000
Corporate and Administrative Offices		
Cleveland, Ohio (2)(3)(5)	Owned	110,000
Service and Distribution Centers		
Elmhurst, Illinois (2)	Leased	28,500
Fukaya, Japan (2)(3)(4)	Owned	35,500
Singapore (2)(3)(4)	Leased	2,500
Stuttgart, Germany (2)(4)	Leased	24,750
Theale, England (2)(3)(4)	Leased	19,700
Warren, Michigan (2)	Leased	34,500

<sup>(1)</sup> Advanced Material Technologies and Services

<sup>(2)</sup> Specialty Engineered Alloys

<sup>(3)</sup> Beryllium and Beryllium Composites

<sup>(4)</sup> Engineered Material Systems

<sup>(5)</sup> All Other

In addition to the above, there are 7,500 acres in Juab County, Utah 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. Ore reserve data set forth on page 29 in the annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference.

### Item 3. LEGAL PROCEEDINGS

Our subsidiaries and our holding company are subject, from time to time, to a variety of civil and administrative proceedings arising out of our normal operations, including, without limitation, product liability claims, health, safety and environmental claims and employment-related actions. Among such proceedings are the cases described below.

### **Beryllium Claims**

As of December 31, 2006, our subsidiary, Brush Wellman Inc., was a defendant in 13 proceedings in various state and federal courts brought by plaintiffs alleging that they have contracted, or have been placed at risk of contracting, chronic beryllium disease or other lung conditions as a result of exposure to beryllium. Plaintiffs in beryllium cases seek recovery under negligence 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.

During 2006, the number of beryllium cases remained unchanged from 13 (involving 54 plaintiffs) as of December 31, 2005 to December 31, 2006. During 2006, one case (involving two plaintiffs) was settled and dismissed. One purported class action (involving one named plaintiff) was voluntarily dismissed by the plaintiff, but was later refiled. One case (involving two plaintiffs) was filed in 2006.

The 13 pending beryllium cases as of December 31, 2006 fall into two categories: Nine cases involving third-party individual plaintiffs, with 13 individuals (and six spouses who have filed claims as part of their spouse's case and two children who have filed claims as part of their parent's case); and four purported class actions, involving 33 named plaintiffs, as discussed more fully below. Claims brought by third party plaintiffs (typically employees of our customers or contractors) are generally covered by varying levels of insurance.

The first 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. A First Amended Complaint was filed on September 15, 2004, naming five additional plaintiffs. The five additional named plaintiffs are Robert Thomas, Darnell White, Leonard Joffrion, James Jones and John Kesselring. 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. Messrs. Marin, Perry, Thomas, White, Joffrion, Jones and Kesselring represent current and past employees of Boeing in California; and Ms. Marin and Ms. Perry are spouses. Defendant Appanaitis Enterprises, Inc. was dismissed on May 5, 2005.

The second purported class action is Neal Parker, *et al.* v. Brush Wellman Inc., filed in the Superior Court of Fulton County, State of Georgia, case number 2004CV80827, on January 29, 2004. The case was removed to the U.S. District Court for the Northern District of Georgia, case number 04-CV-606, on May 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, Burns and Ms. Watkins are current employees of Lockheed. Mr. Ponder is a retired employee, and Ms. King and Ms. Burns and Ms. Watkins 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. On March 29, 2005, the Court entered an order directing plaintiffs to amend their pleading to segregate out those plaintiffs who have endured only subclinical, cellular and subcellular effects from those who have sustained actionable tort injuries, and that following such amendment, the Court will enter an order dismissing the claims asserted by the former subset of claimants, dismissing Count I of the Complaint, which sought the creation of a medical monitoring fund; and dismissing the claims against defendant Axsys Technologies Inc. On April 20, 2005, the plaintiffs filed a Substituted Amended Complaint for Damages, contending that each of the eight named plaintiffs and the individuals listed on the attachment to the original Complaint, and each of the putative class members have sustained personal injuries; however, they allege that they identified five individuals whose injuries have manifested themselves such that they have been detected by physical examination and/or laboratory test. On March 10, 2006, the Court entered an order construing Defendants' Motion to Enforce the March 29, 2005 Order as a Motion for Summary Judgment and granted summary judgment in the Company's favor; however, the plaintiffs have filed an appeal, and the case is now in the U.S. Court of Appeals for the Eleventh Circuit, case number 06-12243-D.

The third purported class action is George Paz, et al., v. Brush Engineered Materials Inc., et al., filed in the U.S. District Court for the Southern District of Mississippi, case number 1:04CV597, on June 30, 2004. The named plaintiffs are George Paz, Barbara Faciane, Joe Lewis, Donald Jones, Ernest Bryan, Gregory Condiff, Karla Condiff, Odie Ladner, Henry Polk, Roy Tootle, William Stewart, Margaret Ann Harris, Judith Lemon, Theresa Ladner and Yolanda Paz. The defendants are Brush Engineered Materials Inc.; Brush Wellman Inc.; Wess-Del Inc.; and the Boeing Company. Plaintiffs seek the establishment of a medical monitoring trust fund as a result of their alleged exposure to products containing beryllium, attorneys' fees and expenses, and general and equitable relief. The plaintiffs purport to sue on behalf of a class of present or former Defense Contract Management Administration (DCMA) employees who conducted quality assurance work at Stennis Space Center and the Boeing Company at its facility in Canoga Park, California; present and former employees of Boeing at Stennis; and spouses and children of those individuals. Messrs, Paz and Lewis and Ms. Faciane represent current and former DCMA employees at Stennis. Mr. Jones represents DCMA employees at Canoga Park. Messrs. Bryan, Condiff, Ladner, Polk, Tootle and Stewart and Ms. Condiff represent Boeing employees at Stennis. Ms. Harris, Ms. Lemon, Ms. Ladner and Ms. Paz are family members. We filed a Motion to Dismiss on September 28, 2004, which was granted and judgment was entered on January 11, 2005; however, the plaintiffs filed an appeal. Brush Engineered Materials Inc. was dismissed for lack of personal jurisdiction on the same date, which plaintiffs did not appeal. On April 7, 2006, the U.S. Court of Appeals for the Fifth Circuit, in case number 05-60157, certified the question regarding whether Mississippi has a medical monitoring cause of action to the Mississippi Supreme Court. The case is now in the Supreme Court of Mississippi, case number 2006-FC-007712-SCT.

As reported above, one purported class action has been dismissed. The fourth purported class action was Gary Anthony v. Brush Wellman Inc., et al., filed in the Court of Common Pleas of Philadelphia County, Pennsylvania, case number 01718, on March 3, 2005. The case was removed to the U.S. District Court for the Eastern District of Pennsylvania, case number 05-CV-1202, on March 14, 2005. The only named plaintiff was Gary Anthony. The defendants were Brush Wellman Inc., Gary Kowalski, and Dickinson & Associates Manufacturers Representatives. The plaintiff purported to sue on behalf of a class of current and former employees of the U.S. Gauge facility in Sellersville, Pennsylvania who had ever been exposed to beryllium for a period of at least one month while employed at U.S. Gauge. The plaintiff brought claims for negligence. Plaintiff sought the establishment of a medical monitoring trust fund, cost of publication of approved guidelines and procedures for medical screening and monitoring of the class, attorneys' fees and expenses. Plaintiff filed a motion to remand to state court, which the District Court denied on February 14, 2006. On February 28, 2006, plaintiff filed a notice of appeal to the Third Circuit Court of Appeals. On August 15, 2006, the Court of Appeals dismissed plaintiff's appeal as improper. On August 11, 2006, plaintiff filed a Stipulation of Dismissal of the underlying action in the U.S. District Court, which was approved by the Court on August 22, 2006; however, the Court further ordered that the action was dismissed without prejudice for plaintiff to refile. On November 15, 2006, defendant Tube Methods, Inc. filed a third-party complaint against Brush Wellman Inc. in the U.S. District Court for the Eastern District of Pennsylvania, case number 06-CV-04419-JKG. Tube Methods alleges that Brush supplied beryllium-containing products to

U.S. Gauge, and that Tube Methods worked on these products, but that Brush is liable to Tube Methods for indemnification and contribution. Brush moved to dismiss the Tube Methods complaint on December 22, 2006.

### Subsequent Events

From January 1, 2007 to March 5, 2007, one third-party case (involving two plaintiffs) was voluntarily dismissed by the plaintiffs. In George Paz, *et al.* v. Brush Engineered Materials Inc., *et al.*, the Supreme Court of Mississippi issued an opinion that the laws of Mississippi do not allow for a medical monitoring cause of action without an accompanying physical injury on January 4, 2007. Plaintiffs filed a motion for rehearing, which was denied by the Mississippi Supreme Court on March 1, 2007. No new cases were filed during the period.

### **Other Claims**

One of our subsidiaries, Williams Advanced Materials Inc. (WAM) is a party to patent litigation with Target Technology Company, LLC (Target). In first actions filed in April 2003 by WAM against Target in the U.S. District Court, Western District of New York, consolidated under case number 03-CV-0276A (SR), WAM has asked the Court for a judgment declaring certain Target patents as invalid and/or unenforceable and awarding WAM damages in related cases. Target has counterclaimed alleging infringement and seeking a judgment for infringement, an injunction against further infringement and damages for past infringement. On August 3, 2005, the U.S. Court of Appeals for the Federal Circuit, case number 04-1602, affirmed the District Court's decision denying Williams' motion to enjoin Target from suing and threatening to sue Williams' customers. The case reverted for further proceedings to the District Court, which has dismissed, without prejudice to their refiling, all other pending motions. Williams' substitute revised supplemental and amended complaint with a proposed stipulated order was re-filed with the court on January 31, 2006, which the court approved on February 2, 2006. In September 2004, Target filed a separate action for patent infringement in U.S. District Court, Central District of California, case number SAC04-1083 DOC (MLGx), which action named as defendants, among others, WAM and WAM customers who purchase certain WAM alloys used in the production of DVDs. In the California action, Target alleges that the patent at issue, which is related to the patents at issue in the New York action, protects the use of certain silver alloys to make the semi-reflective layer in DVDs, and that in DVD-9s, a metal film is applied to the semi-reflective layer by a sputtering process, and that raw material for the procedure is called a sputtering target. Target alleges that WAM manufactures and sells sputtering targets made of a silver alloy to DVD manufacturers with knowledge that these targets are used by its customers to manufacture the semi-reflective layer of a DVD-9. In that action, Target seeks judgment that its patent is valid and that it is being infringed by the defendants, an injunction permanently restraining the defendants, damages adequate to compensate plaintiff for the infringement, treble damages and attorneys' fees and costs. Trial, which had been scheduled for February 2007, has been adjourned to July 2007.

On April 17, 2003, the Company filed a complaint in the Court of Common Pleas for Ottawa County, Ohio, case no. 03-CVH-089, seeking a declaration of certain rights under insurance policies issued by Lloyds of London, certain London Market companies and certain domestic insurers, and damages and breach of contract. On August 30, 2006, the court granted Brush's motion for partial summary judgment in its entirety. The parties then stipulated to the amount of damages and prejudgment interest resulting from those breaches of contract of approximately \$7.3 million, subject to reduction if an appellate court modifies or amends the grant of partial summary judgment. The defendants' attempt to appeal on an interlocutory basis was denied. The parties agreed separately to approximately \$0.5 million in damages related to claims not covered by the partial summary judgment order. Trial of the bad faith claim is set for December 2007. The damage award was subsequently increased to \$8.8 million as a result of the defendants stipulating to the attorney's fees incurred in pursuing this action. Given the uncertainty surrounding the timing and outcome of the appeal process and the possibility for a portion or all of the award to be reversed, we have not recorded the impact of the award in our consolidated financial statements as of December 31, 2006.

### Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of security holders during the fiscal fourth quarter of 2006.

### PART II

# Item 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our shares of common stock are traded on the New York Stock Exchange under the symbol "BW". As of March 2, 2007 there were 1,506 shareholders of record. The information as to stock price set forth in Note R on page 59 of the consolidated financial statements in the annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference. We did not pay any dividends in 2005 or 2006. 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 the use in the operation and expansion of our business.

We did not purchase any of our shares of common stock or other securities during the year ended December 31, 2006.

### Item 6. SELECTED FINANCIAL DATA

Selected Financial Data on pages 60 and 61 of the annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference.

## Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The management's discussion and analysis of financial condition and results of operations on pages 18 through 33 of the annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference.

### Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The market risk disclosures on pages 31 and 32 of the annual report to shareholders for the year ended December 31, 2006 are incorporated herein by reference.

### Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The report of the independent registered public accounting firm and the following consolidated financial statements included in the annual report to shareholders for the year ended December 31, 2006 are incorporated herein by reference:

Consolidated Balance Sheets — December 31, 2006 and 2005.

Consolidated Statements of Income — Years ended December 31, 2006, 2005 and 2004.

Consolidated Statements of Shareholders' Equity — Years ended December 31, 2006, 2005 and 2004.

Consolidated Statements of Cash Flows — Years ended December 31, 2006, 2005 and 2004.

Notes to Consolidated Financial Statements.

Quarterly Data on page 59 in Note R to the consolidated financial statements in the annual report to shareholders for the year ended December 31, 2006 is incorporated herein by reference.

# Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

### Item 9A. CONTROLS AND PROCEDURES

We carried out an evaluation under the supervision and with participation of our management, including the chief executive officer and chief financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2006 pursuant to Rule 13a-15(e) and 15d-15(e) under the Securities

Exchange Act of 1934, as amended (the "Exchange Act"). Based upon that evaluation, our management, including the chief executive officer and chief financial officer, concluded that our disclosure controls and procedures were effective as of the evaluation date.

There have been no changes in our internal controls over financial reporting identified in connection with the evaluation required by Rule 13a-15 under the Securities Exchange Act of 1934, as amended, that occurred during the quarter ended December 31, 2006 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's assessment on our internal control over financial reporting is contained in Management's Report on Internal Control over Financial Reporting on page 35 in our annual report to shareholders for the year ended December 31, 2006 and is incorporated herein by reference.

The Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting opining on management's assessment, included in Management's Report on Internal Control over Financial Reporting, and opining on the effectiveness of our internal control over financial reporting is contained on page 35 in the annual report to shareholders for the year ended December 31, 2006 and is incorporated herein by reference.

## Item 9B. OTHER INFORMATION

None

### **PART III**

## Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information under "Election of Directors" in the proxy statement for our 2007 annual meeting of shareholders, to be filed with the Securities and Exchange Commission pursuant to Regulation 14A, is incorporated herein by reference. The information required by this item relating to our executive officers is included under the caption "Executive Officers of the Registrant" in Part I of this report and is incorporated by reference into this section. The information required by Item 10 with respect to directors, the Audit Committee of the Board of Directors and Audit Committee financial experts is incorporated herein by reference from the section entitled "Corporate Governance; Committees of the Board of Directors — Audit Committee" and "— Audit Committee Expert, Financial Literacy and Independence" in the proxy statement for our 2007 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A. The information required by Item 10 regarding compliance with Section 16(a) of the Securities Exchange Act is incorporated by reference from the section entitled "Section 16(a) Beneficial Ownership Reporting Compliance" in the proxy statement for our 2007 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A.

We have adopted a Policy Statement on Significant Corporate Governance Issues and a Code of Conduct Policy that applies to our chief executive officer and senior financial officers, including the principal financial and accounting officer, controller and other persons performing similar functions, in compliance with applicable New York Stock Exchange and Securities and Exchange Commission requirements. These materials, along with the charters of the Audit, Governance and Organization, Compensation and Retirement Plan Review Committees of our Board of Directors, which also comply with applicable requirements, are available on our website at <a href="https://www.beminc.com">www.beminc.com</a>, and copies are also available upon request by any shareholder to Secretary, Brush Engineered Materials Inc., 17876 St. Clair Avenue, Cleveland, Ohio 44110. We make our reports on Forms 10-K, 10-Q and 8-K available on our website, free of charge, as soon as reasonably practicable after these reports are filed with the Securities and Exchange Commission, and any amendments or waivers to our Code of Conduct Policy and Statement on Significant Corporate Governance Issues will also be made available on our website. The information on our website is not incorporated by reference into this annual report on Form 10-K.

### Item 11. EXECUTIVE COMPENSATION

The information required under this heading is incorporated by reference from the sections entitled "Executive Compensation," "2006 Director Compensation" and "Compensation Committee Interlocks and Insider Participation" in the proxy statement for our 2007 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A.

## Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required under this heading is incorporated by reference from the section entitled "Security Ownership of Certain Beneficial Owners and Management" in the proxy statement for our 2007 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A. The Equity Compensation Plan Information required by Item 12 is set forth in the table below.

<u>Plan Category</u>	Number of Securities to be Issued Upon Weighted Average Exercise of Exercise Price of Outstanding Options, Warrants and Rights and Rights Gory (a) (b)		ercise Price of Outstanding ions, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))	
Equity compensation					
plans approved by security holders	965,919(1)	\$	$17.45^{(2)}$	$1,070,350^{(3)}$	
Equity compensation plans not approved by					
security holders	0		0	0	
Total	965,919	\$	17.45	1,070,350	

<sup>(1)</sup> Consists of options awarded under the 1979, 1984, 1989, 1995 and 2006 Stock Incentive Plans and the 1990 and 1997 Non-employer Director Stock Incentive Plans. This amount includes 50,284 restricted shares, 14,984 restricted stock units, and 119,311 performance restricted shares at the target level. In addition, up to 59,656 performance shares could be issued if performance goals are achieved above target.

## Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information as to related party transactions required under Item 13 is incorporated by reference from the sections entitled "Related Party Transactions" and "Corporate Governance; Committees of the Board of Directors — Board Independence" of the proxy statement for our 2007 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A.

### Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required under Item 14 is incorporated by reference from the section entitled "Ratification of Independent Registered Public Accounting Firm" of the proxy statement for our 2007 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A.

<sup>(2)</sup> The weighted average calculation does not include restricted shares, restricted stock units, or performance restricted shares as they have no exercise price.

<sup>(3)</sup> Represents the number of shares of common stock available to be awarded as of December 31, 2006. Effective May 2, 2006, all equity compensation awards are granted pursuant to the shareholder approved 2006 Stock Incentive Plan and the 2006 Non-employee Director Equity Plan.

#### PART IV

### Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

### (a) 1. Financial Statements and Supplemental Information

Included in Part II of this Form 10-K annual report incorporated by reference to the annual report to shareholders for the year ended December 31, 2006 are the following consolidated financial statements:

Consolidated Balance Sheets — December 31, 2006 and 2005.

Consolidated Statements of Income — Years ended December 31, 2006, 2005, and 2004.

Consolidated Statements of Shareholders' Equity — Years ended December 31, 2006, 2005 and 2004.

Consolidated Statements of Cash Flows — Years ended December 31, 2006, 2005 and 2004.

Notes to Consolidated Financial Statements.

Report of Independent Registered Public Accounting Firm.

### (a) 2. Financial Statement Schedules

The following consolidated financial information for the years ended December 31, 2006, 2005 and 2004 is submitted herewith:

Schedule II — Valuation and qualifying accounts.

All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore have been omitted.

### (a) 3. Exhibits

All documents referenced below were filed pursuant to the Securities Exchange Act of 1934 by Brush Engineered Materials Inc., file number 001-15885, unless otherwise noted.

- (3a) Amended and Restated Articles of Incorporation of Brush Engineered Materials Inc. (filed as Annex B to the Registration Statement on Form S-4 filed by the Company on February 1, 2000, Registration No. 333-95917), incorporated herein by reference.
- (3b) Amended and Restated Code of Regulations of Brush Engineered Materials Inc. (filed as Exhibit 4b to the Current Report on Form 8-K filed by Brush Wellman Inc. on May 16, 2000), incorporated herein by reference.
- (4a) Rights Agreement, dated as of May 10, 2000, by and between Brush Engineered Materials Inc. and National City Bank, N.A. as Rights Agent (filed as Exhibit 4a to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on May 16, 2000), incorporated herein by reference.
- (4b) First Amendment to Rights Agreement, dated as of December 7, 2004, by and between Brush Engineered Materials Inc. and LaSalle Bank, N.A. as Rights Agent (filed as Exhibit 4.1 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on December 13, 2004), incorporated herein by reference.
- (4c) Indenture Modification between Toledo-Lucas County Port Authority, dated as of May 30, 2003 (filed as Exhibit 4 to the Quarterly Report on Form 10-Q filed by Brush Engineered Materials Inc. on August 11, 2003), incorporated herein by reference.
- (4d) Pursuant to Regulation S-K, Item 601(b)(4), the Company agrees to furnish to the Commission, upon its request, a copy of the instruments defining the rights of holders of long-term debt of the Company that are not being filed with this report.

- (4e) Credit Agreement dated December 4, 2003 among Brush Engineered Materials Inc. and other borrowers and Bank One, N.A, acting for itself and as agent for certain other banking institutions as lenders (filed as Exhibit 99.1 to the Company's Form 8-K on December 5, 2003), incorporated herein by reference. (superseded by Exhibit 41)
- (4f) Post-Closing Letter Agreement dated December 4, 2003 among the Company, Bank One, N.A., as agent, and the other parties to the Credit Agreement dated as of the date hereof, and Associated Waivers (filed as Exhibit 4(a) to the Quarterly Report on Form 10-Q for the quarter ended July 2, 2004), incorporated herein by reference. (superseded by Exhibit 41)
- (4g) First Amendment to Credit Agreement dated March 1, 2004 among Brush Engineered Materials Inc. and other borrowers and Bank One, N.A., acting for itself and as agent for certain other banking institutions as lenders (filed as Exhibit 4f to the Company's Form 10-K Annual Report for the year ended December 31, 2003), incorporated herein by reference. (superseded by Exhibit 41)
- (4h) Second Amendment to Credit Agreement dated December 22, 2004 among Brush Engineered Materials Inc. and other borrowers and Bank One, N.A., acting for itself and as agent for certain other banking institutions as lenders (filed as Exhibit 99.1 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on December 27, 2004), incorporated herein by reference. (superseded by Exhibit 41)
- (4i) Third Amendment to Credit Agreement dated October 5, 2005 among Brush Engineered Materials Inc. and other borrowers and JPMorgan Chase Bank, N.A. (formerly Bank One, N.A.), acting for itself and as agent for certain other banking institutions as lenders (filed as Exhibit 99.1 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on October 5, 2005), incorporated herein by reference. (superseded by Exhibit 41)
- (4j) Fourth Amendment to Credit Agreement dated December 29, 2005 among Brush Engineered Materials Inc. and other borrowers and JPMorgan Chase Bank, N.A. (formerly Bank One, N.A.), acting for itself and as agent for certain other banking institutions as lenders (filed as Exhibit 99.1 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on January 3, 2006), incorporated herein by reference. (superseded by Exhibit 4l)
- (4k) Amended and Restated Credit Agreement dated January 31, 2007 among Brush Engineered Materials Inc. and other borrowers and J. P. Morgan/Chase Bank, N.A, acting for itself and as agent for certain other banking institutions as lenders (filed as Exhibit 99.1 to the Company's Form 8-K on January 31, 2007), incorporated herein by reference.
- (41) Post-closing Letter Agreement dated December 4, 2003 among the Company, Bank One, N.A., as agent, and the other parties to the Credit Agreement dated as of the date hereof, and Associated Waivers (filed as Exhibit 4a to the Quarterly Report on Form 10-Q for the quarter ended July 2, 2004), incorporated herein by reference.
- (4m) Precious Metals Agreement dated March 24, 2005 between Brush Engineered Materials Inc. and Fleet Precious Metals Inc., a corporation operating as Bank of America Precious Metals (filed as Exhibit 99.1 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on March 31, 2005), incorporated herein by reference.
- (4n) First Amendment to Precious Metals Agreement dated November 16, 2005 between Brush Engineered Materials Inc. and Fleet Precious Metals Inc., a corporation operating as Bank of America Precious Metals (filed as Exhibit 99.1 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on November 16, 2005), incorporated herein by reference.
- (40) Second Amendment to Precious Metals Agreement dated December 29, 2005 between Brush Engineered Materials Inc. and Fleet Precious Metals Inc., a corporation operating as Bank of America Precious Metals (filed as Exhibit 99.2 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on January 3, 2006), incorporated herein by reference.

- (10a)\* Form of Indemnification Agreement entered into by the Company and its executive officers and key employees (filed as Exhibit 10.2 to the Current Report on Form 8-K filed on May 5, 2005), incorporated herein by reference.
- (10b)\* Form of Indemnification Agreement entered into by the Company and its directors (filed as Exhibit 10.1 to the Current Report on Form 8-K filed on May 5, 2005), incorporated herein by reference
- (10c)\* Form of Severance Agreement for Executive Officers (filed as Exhibit 10f to the Company's form 10-k Annual Report for the year ended December 31, 2001), incorporated herein by reference. (Superseded by Exhibit 10d)
- (10d)\* Form of Severance Agreement for Executive Officers (filed as Exhibit 10.6 to the Current Report on Form 8-K filed on February 13, 2007), incorporated herein by reference.
- (10e)\* Form of Severance Agreement for Key Employees (filed as Exhibit 10.5 to the Current Report on Form 8-K filed on May 8, 2006), incorporated herein by reference.
- (10f)\* Form of Executive Insurance Agreement entered into by the Company and certain employees dated January 2, 2002 (filed as Exhibit 10g to the Company's Form 10-K Annual Report for the year ended December 31, 1994), incorporated herein by reference.
- (10g)\* Form of Trust Agreement between the Company and Key Trust Company of Ohio, N.A. (formerly Ameritrust Company National Association) on behalf of the Company's executive officers (filed as Exhibit 10e to the Company's Form 10-K Annual Report for the year ended December 31, 1994), incorporated herein by reference.
- (10h)\* 2004 Management Performance Compensation Plan (filed as Exhibit 10.1 to the Current Report on Form 8-K filed on February 7, 2005), incorporated herein by reference.
- (10i)\* 2005 Management Performance Compensation Plan (filed as Exhibit 10.2 to the Current Report on Form 8-K filed on February 7, 2005), incorporated herein by reference.
- (10j)\* 2006 Management Performance Compensation Plan (filed as Exhibit 10.1 to the Current Report on Form 8-K filed on February 8, 2006), incorporated herein by reference.
- (10k)\* 2007 Management Performance Compensation Plan (filed as Exhibit 10.1) to the Current Report on Form 8-K filed on February 13, 2007), incorporated herein by reference.
- (101)\* Long-term Incentive Plan for the performance period January 1, 2003 through December 31, 2004 (filed as Exhibit 10.3 to the Current Report on Form 8-K filed on February 7, 2005), incorporated herein by reference.
- (10m)\* Long-term Incentive Plan for the performance period January 1, 2004 through December 31, 2006 (filed as Exhibit 10.2 to the Current Report on Form 8-K filed on February 8, 2006), incorporated herein by reference.
- (10n)\* Long-term Incentive Plan for the performance period January 1, 2005 through December 31, 2007 (filed as Exhibit 10.5 to the Current Report on Form 8-K filed on February 7, 2005), incorporated herein by reference.
- (10o)\* Long-term Incentive Plan for the performance period January 1, 2007 through December 31, 2007 (filed as Exhibit 10.2 to Amendment No. 1 to the Current Report on Form 8-K filed on February 16, 2007), incorporated herein by reference.
- (10p)\* 1979 Stock Option Plan, as amended pursuant to approval of shareholders on April 21, 1982 (filed by Brush Wellman Inc. as Exhibit 15A to Post-Effective Amendment No. 3 to Registration Statement No. 2-64080), incorporated herein by reference.
- (10q)\* Amendment, effective May 16, 2000, to the 1979 Stock Option Plan (filed as Exhibit 4b to Post-Effective Amendment No. 5 to Registration Statement on Form S-8, No. 2-64080), incorporated herein by reference.
- (10r)\* 1984 Stock Option Plan as amended by the Board of Directors on April 18, 1984 and February 24, 1987 (filed by Brush Wellman Inc. as Exhibit 4.4 to Registration Statement on Form S-8, No. 33-28605), incorporated herein by reference.
- (10s)\* Amendment, effective May 16, 2000, to the 1984 Stock Option Plan (filed as Exhibit 4b to Post-Effective Amendment No. 1 to Registration Statement on Form S-8, No. 2-90724), incorporated herein by reference.

- (10t)\* 1989 Stock Option Plan (filed as Exhibit 4.5 to Registration Statement on Form S-8, No. 33-28605), incorporated herein by reference.
- (10u)\* Amendment, effective May 16, 2000, to the 1989 Stock Option Plan (filed as Exhibit 4b to Post-Effective Amendment No. 1 to Registration Statement on Form S-8, No. 33-28605, incorporated herein by reference.
- (10v)\* 1995 Stock Incentive Plan (as Amended March 3, 1998) (filed as Appendix A to the Company's Proxy Statement dated March 16, 1998), incorporated herein by reference.
- (10w)\* Amendment, effective May 16, 2000, to the 1995 Stock Incentive Plan (filed as Exhibit 4b to Post-Effective Amendment No. 1 to Registration Statement No. 333-63357), incorporated herein by reference.
- (10x)\* Amendment No. 2, effective February 1, 2005, to the 1995 Stock Incentive Plan (filed as Exhibit 10.4 to the Current Report on Form 8-K filed on February 7, 2005) incorporated herein by reference.
- (10y)\* 2006 Stock Incentive Plan (filed as Exhibit 10.1 to the current Report on Form 8-K filed on May 8, 2006), incorporated herein by reference.
- (10z)\*# Amendment No. 1, effective January 1, 2007, to the Brush Engineered Materials Inc. 2006 Stock Incentive Plan.
- (10aa)\* Form of Nonqualified Stock Option Agreement, (filed as Exhibit 10t to the Company's Annual Report for the year ended December 31, 2004) incorporated herein by reference.
- (10ab)\* Form of Nonqualified Stock Option Agreement (filed as Exhibit 10.7 to the Current Report on Form 8-K filed on February 7, 2005) incorporated herein by reference.
- (10ac)\* Form of Nonqualified Stock Option Agreement for Mr. Harnett (filed as Exhibit 10.6 to the Current Report on Form 8-K filed on February 7, 2005) incorporated herein by reference.
- (10ad)\* Form of Special Restricted Stock Agreement (filed as Exhibit 10w to the Company's Form 10-K Annual Report for the year ended December 31, 2004) incorporated herein by reference.
- (10ae)\* Form of 2004 Special Restricted Stock Agreement (filed as Exhibit 10x to the Company's Form 10-K Annual Report for the year ended December 31, 2004) incorporated herein by reference.
- (10af)\* Form of 2007 Restricted Stock Agreement (filed as Exhibit 10.3 to the Current Report on Form 8-K filed on February 13, 2007), incorporated herein by reference.
- (10ag)\* Form of 2005 Performance Share Agreement (filed as Exhibit 10y to the Company's Form 10-K Annual Report for the year ended December 31, 2004) incorporated herein by reference.
- (10ah) Form of 2006 Performance Restricted Share and Performance Share Agreement (filed as Exhibit 10.2 to the Current Report on Form 8-K filed on May 8, 2006), incorporated herein by reference.
- (10ai)\* Form of 2007 Performance Restricted Share and Performance Share Agreement (filed as Exhibit 10.4 to the Current Report on Form 8-K filed on February 13, 2007), incorporated herein by reference.
- (10aj)\* Form of 2006 Appreciation Rights Agreement (filed as Exhibit 10.3 to the Current Report on Form 8-K filed on May 8, 2006), incorporated herein by reference.
- (10ak)\* Form of 2007 Stock Appreciation Rights Agreement (filed as Exhibit 10.5 to the Current Report on Form 8-K filed on February 13, 2007), incorporated herein by reference.
- (10al)\* Supplemental Retirement Plan as amended and restated December 1, 1992 (filed as Exhibit 10n to the Company's Form 10-K Annual Report for the year ended December 31, 1992), incorporated herein by reference.
- (10am)\* Amendment No. 2, adopted January 1, 1996, to Supplemental Retirement Benefit Plan as amended and restated December 1, 1992 (filed as Exhibit 10o to the Company's Form 10-K Annual Report for the year ended December 31, 1995), incorporated herein by reference.
- (10an)\* Amendment No. 3, adopted May 5, 1998, to Supplemental Retirement Benefit Plan as amended and restated December 1, 1992 (filed as Exhibit 10s to the Company's Form 10-K Annual Report for the year ended December 31, 1998), incorporated herein by reference.
- (10ao)\* Amendment No. 4, adopted December 1, 1998, to Supplemental Retirement Benefit Plan as amended and restated December 1, 1992 (filed as Exhibit 10t to the Company's Form 10-K Annual Report for the year ended December 31, 1998), incorporated herein by reference.

- (10ap)\* Amendment No. 5, adopted December 31, 1998, to Supplemental Retirement Benefit Plan as amended and restated December 1, 1992 (filed as Exhibit 10u to the Company's Form 10-K Annual Report for the year ended December 31, 1998), incorporated herein by reference.
- (10aq)\* Amendment No. 6, adopted September 1999, to Supplemental Retirement Benefit Plan as amended and restated December 1, 1992 (filed as Exhibit 10u to the Company's Form 10-K Annual Report for the year ended December 31, 2000), incorporated herein by reference.
- (10ar)\* Amendment No. 7, adopted May 2000, to Supplemental Retirement Benefit Plan as amended and restated December 1, 1992 (filed as Exhibit 10v to the Company's Form 10-K Annual Report for the year ended December 31, 2000), incorporated herein by reference.
- (10as)\* Amendment No. 8, adopted December 21, 2001, to Supplemental Retirement Benefit Plan as amended and restated December 1, 1992 (filed as Exhibit 10u to the Company's Form 10-K Annual Report for the year ended December 31, 2000), incorporated herein by reference.
- (10at)\* Amendment No. 9, adopted December 22, 2003, to Supplemental Retirement Benefit Plan as amended and restated December 1, 1992 (filed as Exhibit 10s to the Company's Form 10-K Annual Report for the year ended December 31, 2000), incorporated herein by reference.
- (10au)\* Key Employee Share Option Plan (filed as Exhibit 4.1 to the Registration Statement on Form S-8 No. 333-52141 filed by Brush Wellman Inc. on May 5, 1998, incorporated herein by reference.
- (10av)\* Amendment No. 1 to the Key Employee Share Option Plan, (effective May 16, 2005) (filed as Exhibit 4b to Post-Effective Amendment No. 1 to Registration Statement on Form S-8, No. 333-52141), incorporated herein by reference.
- (10aw)\*# Amendment No. 2 to the Key Employee Share Option Plan dated June 10, 2005.
- (10ax)\* 1997 Stock Incentive Plan for Non-employee Directors, (As Amended and Restated as of May 1, 2001) (filed as Appendix B to the Company's Proxy Statement dated March 19, 2001), incorporated herein by reference.
- (10ay)\* Amendment No. 1 to the 1997 Stock Incentive Plan for Non-employee Directors, (filed as Exhibit 10gg to the Company's Form 10-K Annual Report for the year ended December 31, 2003), incorporated herein by reference.
- (10az)\* Form of Nonqualified Stock Option Agreement for Non-employee Directors (filed as Exhibit 10mm to the Company's Form 10-K Annual Report for the year ended December 31, 2004), incorporated herein by reference.
- (10ba)\* 1992 Deferred Compensation Plan for Non-employee Directors (As Amended and Restated as of December 2, 1997) (filed as Exhibit 4d to the Registration Statement on Form S-8, No. 333-63353, filed by Brush Wellman Inc.), incorporated herein by reference.
- (10bb)\* 2000 Reorganization Amendment, dated May 16, 2000, to the 1997 Deferred Compensation Plan for Non-employee Directors (filed as Exhibit 4b to Post-Effective Amendment No. 1 to Registration Statement No. 333-63353), incorporated herein by reference.
- (10bc)\* Amendment No. 1 (effective September 11, 2001) to the 1997 Deferred Compensation Plan for Non-employee Directors (filed as Exhibit 4c to the Company's Post-Effective Amendment No. 1 to Registration Statement No. 333-74296), incorporated herein by reference.
- (10bd)\* Amendment No. 2 (effective September 13, 2004) to the 1997 Deferred Compensation Plan for Non-employee Directors (filed as Exhibit 10.1 to the Company's Form 10-Q Quarterly Report for the quarter ended October 1, 2004), incorporated herein by reference.
- (10be)\* Amendment No. 3 (effective January 1, 2005) to the 1997 Deferred Compensation Plan for Nonemployee Directors (filed as Exhibit 10rr to the Company's Form 10-K Annual Report for the year ended December 31, 2004) incorporated herein by reference.
- (10bf)\* 2005 Deferred Compensation Plan for Non-employee Directors (effective January 1, 2005) (filed as Exhibit 10.2 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on December 13, 2004), incorporated herein by reference.
- (10bg)\* 2006 Non-employee Director Equity Plan (filed as Exhibit 10.6 to the Current Report on Form 8-K filed 8, 2006), incorporated herein by reference.
- (10bh)\*# Amendment No. 1 (effective January 1, 2007) to the Brush Engineered Materials Inc. 2006 Non-employee Director Equity Plan.

(10bi)*#	Amendment No. 2 (effective February 8, 2007) to the Brush Engineered Materials Inc. 2006 Non-employee Director Equity Plan.
(10bj)*	Executive Deferred Compensation Plan II (effective January 1, 2005) (filed as Exhibit 10.21 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on December 13, 2004), incorporated herein by reference.
(10bk)*	Amendment No. 1 to the Executive Deferred Compensation Plan II (effective January 1, 2005) (filed as Exhibit 10.3 to the Current Report on Form 8-K filed by Brush Engineered Materials Inc. on February 8, 2006), incorporated herein by reference.
(10bl)*# (10bm)*	Amendment No. 2 to the Executive Deferred Compensation Plan II (effective January 1, 2005). Trust Agreement between the Company and Fidelity Investments dated September 26, 2006 for certain deferred compensation plans for Non-employee Directors of the Company (filed as Exhibit 99.4 to the Current Report on Form 8-K filed on September 29, 2006), incorporated herein by reference.
(10bn)*	Trust Agreement between the Company and Fifth Third, dated March 10, 2005 relating to the 2005 Executive Deferred Compensation Plan II (filed as Exhibit 10ww to the Company's Form 10-K Annual Report for the year ended December 31, 2004), incorporated herein by reference.
(10bo)	Trust Agreement between the Company and Fifth Third Bank dated September 25, 2006 relating to the Key Employee Share Option Plan (filed as Exhibit 99.3 to the Current Report on Form 8-K filed on September 29, 2006), incorporated herein by reference.
(10bp)	Lease dated as of October 1, 1996, between Brush Wellman Inc. and Toledo-Lucas County Port Authority (filed as Exhibit 10v to the Company's Form 10-K Annual Report for the year ended December 31, 1996), incorporated herein by reference.
(10bq)	Amended and Restated Inducement Agreement with the Prudential Insurance Company of America dated May 30, 2003 (filed as Exhibit 10 to the Company's Form 10-Q Quarterly Report for the quarter ended June 27, 2003), incorporated herein by reference.
(10br)	Amended and Restated Supply Agreement between RWE Nukem, Inc. and Brush Wellman Inc. for the sale and purchase of beryllium products (filed as Exhibit 10 to the Company's Form 10-Q Quarterly Report for the quarter ended September 26, 2003), incorporated herein by reference.
(10bs)	Supply Agreement between the Defense Logistics Agency and Brush Wellman Inc. for the sale and purchase of beryllium products (filed as Exhibit 10tt to the Company's Form 10-K Annual Report for the year ended December 31, 2004), incorporated herein by reference.
(13)	Annual report to shareholders for the year ended December 31, 2006.
(21)	Subsidiaries of the Registrant
(23)	Consent of Ernst & Young LLP
(24) (31.1)	Power of Attorney Certification of Chief Executive Officer required by Rule 13a-14(a) or 15d-14(a)
(31.1)	Certification of Chief Financial Officer required by Rule 13a-14(a) or 15d-14(a)  Certification of Chief Financial Officer required by Rule 13a-14(a) or 15d-14(a)
(32.1)	Certification of Chief Executive Officer and Chief Financial Officer required by 18 U.S.C. Section 1350

<sup>\*</sup> Denotes a compensatory plan or arrangement.

<sup>#</sup> Filed herewith

## **SIGNATURES**

Pursuant to the requirements of Section 13 of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

## BRUSH ENGINEERED MATERIALS INC.

By: /s/ RICHARD J. HIPPLE	By: /s/ JOHN D. GRAMPA	
Richard J. Hipple Chairman of the Board, President and Chief Executive Officer	John D. Grampa Sr. Vice President Finance and Chief Financial Officer	
March 15, 2007		
Pursuant to the requirements of the Securitie following persons on behalf of the registrant and	es Exchange Act of 1934, this report has been sign in the capacities and on the dates indicated.	ed below by the
/s/ RICHARD J. HIPPLE* Richard J. Hipple*	Chairman of the Board, President, Chief Executive Officer and Director (Principal Executive Officer)	March 15, 2007
/s/ JOHN D. GRAMPA John D. Grampa	Sr. Vice President Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	March 15, 2007
/s/ ALBERT C. BERSTICKER* Albert C. Bersticker*	Director	March 15, 2007
/s/ JOSEPH P. KEITHLEY* Joseph P. Keithley*	Director	March 15, 2007
/s/ WILLIAM B. LAWRENCE* William B. Lawrence*	Director	March 15, 2007
William P. Madar	Director	March 15, 2007
/s/ WILLIAM G. PRYOR* William G. Pryor*	Director	March 15, 2007
/s/ N. MOHAN REDDY* N. Mohan Reddy*	Director	March 15, 2007
/s/ WILLIAM R. ROBERTSON* William R. Robertson*	Director	March 15, 2007
/s/ JOHN SHERWIN, JR.* John Sherwin, Jr.*	Director	March 15, 2007
	to, does sign and execute this report on behalf of ed Materials Inc., pursuant to Powers of Attorney ea and Exchange Commission.	
By: /s/ JOHN D. GRAMPA  John D. Grampa Attorney-in-Fact		March 15, 2007

## SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

# BRUSH ENGINEERED MATERIALS INC. AND SUBSIDIARIES Years ended December 31, 2006, 2005 and 2004

COL. A	COL. B	COL. C ADDITIONS		COL. D	COL. E		
DESCRIPTION	Balance at Beginning of Period		(1) arged to Costs nd Expenses	Ch	(2) narged to Other ounts — Describe	Deduction — Describe	Balance at End of Period
Year ended December 31, 2006							
Deducted from asset accounts:							
Allowance for doubtful accounts receivable	\$1,315,000	\$	856,000	\$	0	\$ 349,000 <sup>(B)</sup>	\$1,822,000
Inventory reserves and obsolescence	\$2,711,000	\$	1,348,000	\$	1,554,000 <sup>(A)</sup>	\$1,158,000 <sup>(C)</sup>	\$4,455,000
Year ended December 31, 2005							
Deducted from asset accounts:							
Allowance for doubtful accounts receivable	\$1,555,000	\$	161,000	\$	0	\$ 401,000 <sup>(B)</sup>	\$1,315,000
Inventory reserves and obsolescence	\$3,166,000	\$	1,709,000	\$	0	\$2,164,000 <sup>(C)</sup>	\$2,711,000
Year ended December 31, 2004							
Deducted from asset accounts:							
Allowance for doubtful accounts receivable	\$1,427,000	\$	532,000	\$	0	\$ 404,000 <sup>(B)</sup>	\$1,555,000
Inventory reserves and obsolescence	\$4,301,000	\$	870,000	\$	0	\$2,005,000 <sup>(C)</sup>	\$3,166,000

Note A — Beginning balance from acquisition.

Note B — Bad debts written-off, net of recoveries.

Note C — Inventory write-off.

## AMENDMENT NO. 1 TO BRUSH ENGINEERED MATERIALS INC. 2006 STOCK INCENTIVE PLAN

### **Recitals**

WHEREAS, Brush Engineered Materials Inc. (the "Company") has adopted the Brush Engineered Materials Inc. 2006 Stock Incentive Plan (the "Plan").

WHEREAS, the Company now desires to amend the Plan (this "Amendment No. 1") to change the definition of Market Value per Share.

WHEREAS, the Compensation Committee (formerly named the Organization and Compensation Committee) of the Board of Directors of the Company has approved this Amendment No. 1 pursuant to Section 19 of the Plan.

### **Amendment**

NOW, THEREFORE, the Plan is hereby amended by this Amendment No. 1, effective as of December 8, 2006, as follows:

1. The definition of Market Value per Share in Section 2 of the Plan is hereby amended to read as follows:

"Market Value per Share" means, as of any particular date, [unless otherwise determined by the Committee,] the per share closing price of a Common Share on the New York Stock Exchange on the day such determination is being made (as reported in <a href="The Wall Street Journal">The Wall Street Journal</a>) or, if there was no closing price reported on such day, on the next day on which such a closing price was reported; or if the Common Shares are not listed or admitted to trading on the New York Stock Exchange on the day as of which the determination is being made, the amount determined by the Committee to be the fair market value of a Common Share on such day.

2. Except as amended by this Amendment No. 1, the Plan shall remain unchanged and in full force and effect.

/s/ Michael C. Hasychak Michael C. Hasychak Vice President, Secretary and Treasurer

# AMENDMENT NO. 2 TO BRUSH ENGINEERED MATERIALS INC. KEY EMPLOYEE SHARE OPTION PLAN

Brush Engineered Materials Inc., an Ohio corporation, hereby adopts this Amendment No. 2 to the Brush Engineered Materials Inc. Key Employee Share Option Plan (the "Plan"), pursuant to the transition rules set forth in IRS Notice 2005-I with respect to Section 409A of the Internal Revenue Code of 1986, as amended.

I.

All elective deferrals of compensation and non-elective deferrals relating to foregone matching contributions made under the Plan in connection with the grant of options on September 30, 2004 and on December 31, 2004, and all Options granted under the Plan with respect to those deferrals are cancelled effective as of June 10, 2005. Each Participant who made any such a deferral or had such a deferral made on his behalf shall receive payment of the amount of such deferrals upon the cancellation, less application withholding taxes, and any such Participant shall have no further rights under the Options granted with respect to such deferrals. Notwithstanding the foregoing, a Participant who exercised any such Option shall not receive payment of the amount of his deferral with respect to the cancellation of the exercised Option.

II.

No option shall be issued under the Plan after December 31, 2004.

Executed at Cleveland, Ohio this 10 th day of June, 2005.

/s/ Michael C. Hasychak Michael C. Hasychak Vice President, Secretary and Treasurer

# AMENDMENT NO. 1 TO BRUSH ENGINEERED MATERIALS INC. 2006 NON-EMPLOYEE DIRECTOR EQUITY PLAN

### **Recitals**

WHEREAS, Brush Engineered Materials Inc. (the "Company") has adopted the Brush Engineered Materials Inc. 2006 Non-employee Director Equity Plan (the "Plan").

WHEREAS, the Company now desires to amend the Plan (this "Amendment No. 1") to increase the minimum value of a participant account requiring distribution in the form of an immediate lump sum payment (regardless of whether a participant has elected installment payments) in order to create uniformity with the Company's 1992 Deferred Compensation Plan for Non-employee Directors and 2005 Deferred Compensation Plan for Non-employee Directors.

WHEREAS, the Governance and Organization Committee (formerly named the Governance Committee) of the Board of Directors of the Company has approved this Amendment No. 1 pursuant to Section 12 of the Plan.

#### **Amendment**

NOW, THEREFORE, the Plan is hereby amended by this Amendment No. 1, effective as of January 1, 2007, as follows:

- 1. Section 8(d)(i) of the Plan is hereby amended by changing "\$10,000" to "\$17,500".
- 2. Except as amended by this Amendment No. 1, the Plan shall remain in full force and effect.

/s/ Michael C. Hasychak Michael C. Hasychak Vice President, Treasurer and Secretary

# AMENDMENT NO. 2 TO BRUSH ENGINEERED MATERIALS INC. 2006 NON-EMPLOYEE DIRECTOR EQUITY PLAN

#### **Recitals**

WHEREAS, Brush Engineered Materials Inc. (the "Company") has adopted the Brush Engineered Materials Inc. 2006 Non-employee Director Equity Plan (the "Plan").

WHEREAS, with the approval of the Governance and Organization Committee (formerly named the Governance Committee) of the Board of Directors of the Company (the "Committee") on September 12, 2006 the Plan was amended by Amendment No. 1, effective January 1, 2007.

WHEREAS, the Company now desires to further amend the Plan (this "Amendment No. 2") to change the definition of Fair Market Value. WHEREAS, the Committee has approved this Amendment No. 2 pursuant to Section 12 of the Plan.

#### **Amendment**

NOW, THEREFORE, the Plan is hereby amended by this Amendment No. 2, effective as of December 8, 2006, as follows:

1. Section 9(b) of the Plan is hereby amended to read as follows:

"Fair Market Value" means, as of any particular date, [unless otherwise determined by the Committee,] the per share closing price of a Common Share on the New York Stock Exchange on the day such determination is being made (as reported in <a href="The Wall Street Journal">The Wall Street Journal</a>) or, if there was no closing price reported on such day, on the next day on which such a closing price was reported; or if the Common Shares are not listed or admitted to trading on the New York Stock Exchange on the day as of which the determination is being made, the amount determined by the Committee to be the fair market value of a Common Share on such day.

2. Except as amended by this Amendments No. 1 and No. 2, the Plan shall remain unchanged and in full force and effect.

/s/ Michael C. Hasychak Michael C. Hasychak Vice President, Secretary and Treasurer

# AMENDMENT NO. 2 TO BRUSH ENGINEERED MATERIALS INC. EXECUTIVE DEFERRED COMPENSATION PLAN II

The Brush Engineered Materials Inc. Executive Deferred Compensation Plan II (the "Plan"), established and maintained for the purpose of providing deferred compensation to a select group of management and highly compensated employees for years beginning after December 31, 2004, which is intended to meet the requirements of Section 409A of the Internal Revenue Code, is hereby amended in the following respect.

1. The last sentence of Section 6.3 of the Plan is amended to provided as follows:

In the case of any key employee (as defined in Section 416(i) of the Code without regard to paragraph (5) thereof) of an Employer, distributions may not be made before the date which is six months after the date of separation from service (or, if earlier, the date of death of the Participant), provided that in the case of any distribution which would be made on an earlier date but for this restriction, such distribution shall be made as soon as practicable on or after the first day of the month following the date which is six months after the date of the key employee's separation from service.

\* \* \*

WITNESS WHEREOF, Brush Engineered Materials Inc. has caused this Amendment to be executed by its duly authorized officer this 5 th day of December, 2006.

#### BRUSH ENGINEERED MATERIALS INC.

By /s/ Michael C. Hasychak Name: Michael C. Hasychak

Title: Vice President, Secretary and Treasurer

#### **OVERVIEW**

We are an integrated producer of engineered materials used in a variety of electrical, electronic, thermal and structural applications. Our products are sold into numerous markets, including telecommunications and computer, data storage, aerospace and defense, automotive electronics, industrial components and appliance.

We continued to make significant improvements in our sales and earnings in 2006. Sales of \$763.1 million in 2006 established a record high, eclipsing the previous record of \$563.7 million set in 2000 by 35%. Following significant declines in 2001 and 2002 due largely to softer market conditions, sales have grown in each of the past four years and sales in 2006 were more than double the sales of \$372.8 million in 2002. This growth resulted from a combination of improved conditions in our key markets, market share gains, new product and market development, geographic expansion, acquisitions and higher metal prices.

Margins grew in 2006 as a result of the higher volumes and improved performance. Our pricing also improved and, by year end, changes in our pricing structure implemented during 2006 had essentially mitigated the impact of the unprecedented increase in the cost of copper, a key raw material used by portions of our business. Expenses increased in 2006 due to higher compensation and retirement costs, costs associated with, and in support of, the expanding level of business and other factors.

Operating profit of \$43.8 million was more than double the profit of \$19.5 million in 2005 and was a \$66.4 million improvement over the \$22.6 million operating loss in 2002.

We reversed \$21.8 million of the deferred tax valuation allowance to income during 2006. The allowance was initially recorded in 2002 as a result of the then three-year cumulative loss position. As a result of the actual earnings over the prior three years, the projected earnings trend and an analysis of our deferred tax assets, we concluded that it is more probable than not that the existing deferred tax assets will be utilized. This \$21.8 million reversal was a non-cash gain that will not repeat in future years as only an immaterial allowance remains on the balance sheet.

As a result, diluted earnings per share was \$2.45 in 2006 compared to \$0.92 in 2005 and \$0.85 in 2004.

Our balance sheet strengthened during 2006 as well. The cash balance increased \$5.0 million while debt declined \$8.2 million in 2006 from year-end 2005 despite making a \$26.2 million acquisition in January 2006 and a significant increase in inventories and receivables as a result of the higher level of sales. Cash flow from operations totaled \$38.8 million in 2006, an increase of \$35.3 million over 2005. The total borrowing costs were reduced and various leverage ratios, including debt to total debt plus equity, also improved during 2006.

## **RESULTS OF OPERATIONS**

(Millions, except for share data)	2006	2005	2004
Net sales	\$ 763.1	\$ 541.3	\$ 496.3
Operating profit	43.8	19.5	25.0
Income before income taxes	39.7	13.1	16.7
Net income	49.6	17.8	15.5
Diluted E.P.S.	2.45	0.92	0.85

**Sales** of \$763.1 million in 2006 were 41% higher than sales of \$541.3 million in 2005 while sales in 2005 were 9% higher than sales in 2004. Sales have grown over the comparable quarter in the prior year for 16 consecutive quarters and sales in each quarter of 2006 and 2005 were higher than the preceding quarter.

Domestic sales increased 38% while international sales increased 47% in 2006 over 2005. The growth in international sales came from Asia (largely China) and Western Europe. Domestic and international sales both improved 9% in 2005 over 2004.

The sales growth in 2006 and 2005 was across the majority of our key markets. Sales into the data storage market grew 40% in 2006 after growing 30% in 2005 while sales into the telecommunications and computer market increased 49% in 2006 after improving modestly in 2005, primarily in the second half of that year. Portions of the improvement in these two markets were due to the increasing demand for consumer electronic products, including cell phones, MP3 players, gaming systems and PDAs. The drive toward higher power and increased miniaturization in these devices may result in the increased demand for our higher performing materials.

Automotive electronics market sales improved 37% in 2006 after declining 10% in 2005. Sales for defense applications improved in the second half of 2006 after softening in 2005 and the first half of 2006. Sales into the medical market, while still relatively small, grew 79% in 2006 and 63% in 2005 over the respective prior periods.

One of our subsidiaries, Williams Advanced Materials Inc. (WAM), acquired three small businesses between the second quarter 2005 and the first quarter 2006. The acquired businesses contributed \$29.5 million to the sales increase in 2006 over 2005 and \$4.9 million of the increase in sales in 2005 over 2004. These operations offer complementary products and services that have helped create additional market opportunities for WAM's existing materials.

The development of new products and applications into existing and/or emerging markets has also been a key part of the sales growth in 2006 and 2005. A portion of the sales growth in each of our main businesses was due to new products or applications.

Sales are affected by metal prices as changes in precious metal and a portion of the changes in base metal prices, primarily copper, are passed on to our customers. Metal prices increased significantly in the first half of 2006 and on average were higher throughout 2006 compared to 2005. Average metal prices were also higher in 2005 than in 2004. We estimate that the higher metal prices accounted for \$72.0 million, or 32%, of the \$221.8 million growth in 2006 sales and \$9.9 million of the \$45.0 million growth in 2005 sales.

Gross margin was \$162.2 million, or 21% of sales in 2006, \$110.2 million, or 20% of sales, in 2005 and \$111.1 million, or 22% of sales, in 2004. The higher volumes generated an estimated \$58.2 million of additional margin in 2006 over 2005. The change in product mix was favorable in that sales of products that generate higher margins increased more than sales of lower margin products. Margins were reduced in the first three quarters of 2006 by the increased cost of raw materials, primarily copper and nickel, which could not be passed through to the customer. Improvements in our pricing structure helped to mitigate the impact of the higher metal costs in the fourth quarter 2006. Manufacturing yields and performance also improved at various facilities. Manufacturing overhead costs increased \$10.0 million in 2006, with the WAM acquisitions accounting for \$8.5 million of this increase.

The gross margin declined slightly in 2005 from 2004, as the benefits from the higher sales volume were more than offset by the impact of the increased cost of copper and an unfavorable product mix shift. The cost of copper increased throughout 2005 and the higher cost that could not be passed through to customers in all cases reduced margins by approximately \$2.7 million compared to 2004. The cost of other commodities, including nickel, was higher in 2005 than in 2004 as well. The change in product mix was unfavorable in that sales of products that generate lower margins increased more than the higher margin products. Manufacturing overhead expenses were slightly lower in 2005 than 2004.

**Selling, general and administrative expenses** (SG&A) were \$111.0 million in 2006 (15% of sales), \$78.5 million in 2005 (14% of sales), and \$77.3 million (16% of sales) in 2004. The increase in SG&A expense was due to a combination of our efforts to invest in and support the growth of the business, increased compensation costs (including pension and other retirement plans, stock-based compensation and incentive compensation) and higher corporate administrative expenses.

The three businesses acquired by WAM in 2006 and 2005 added \$4.9 million to SG&A expense in 2006 compared to 2005 and \$1.4 million in 2005 over 2004. Overseas expenses incurred by Brush International, Inc., a wholly owned subsidiary, were \$1.2 million higher in 2006 than 2005 and \$1.8 million higher in 2005 than 2004 due to increased efforts to penetrate the Asian and European markets. New subsidiaries and overseas selling and marketing offices created by WAM added \$0.7 million in expenses in 2006. Domestic selling and marketing costs grew in 2006 and 2005 in order to support the double-digit sales growth, while various sales-related expenses, including commissions, also have grown in 2005 and 2006.

Incentive compensation expense was \$15.5 million higher in 2006 than in 2005 and \$8.5 million lower in 2005 than in 2004. The changes in the annual expense are caused by the performance of the individual businesses relative to their plans' objectives. The higher cost in 2006 resulted from the significant improvement in the current year operating profit as well as from the increase in the price of our common shares as the payouts under certain employee compensation plans are share-based.

Included within SG&A expenses were compensation costs of \$0.6 million in 2006 associated with outstanding unvested stock options and stock appreciation rights. Effective January 1, 2006, Statement No. 123 (Revised 2004), "Share-Based Payments" requires that all share-based payments be measured at fair value and charged to income over the vesting period. In previous periods, we had adopted the disclosure only provisions of Statement No. 123 and therefore there was no comparable recorded expense. We used the modified prospective implementation method and, as such, the prior period results were not restated. See Note K to the Consolidated Financial Statements for further information on the share-based compensation plans.

Expenses for the U.S. defined benefit pension plan and certain other domestic retirement plans were \$2.6 million higher in 2006 than in 2005. The major causes for the higher expense in 2006 were the impact of a remeasurement of the defined benefit plan in 2005 resulting from a plan amendment, the impact of the revision to various plan valuation assumptions for 2006, the actual performance of the plan and other factors. This increased cost was charged primarily against SG&A expenses in 2006, although a portion of the cost was included in cost of sales and a much smaller portion in research and development expenses. The comparable expense in 2005 was \$0.4 million higher than in 2004.

Other corporate administrative expenses increased by \$1.9 million in 2006 over 2005. The causes for this increase include higher environmental, health and safety expenses, information technology costs and legal costs. The higher legal cost resulted in part from the cost of the legal action against our former insurers (see Note J to the Consolidated Financial Statements). Corporate administrative expenses in 2005 were \$4.0 million higher than in 2004 due to a combination of factors, including \$0.7 million for additional Sarbanes-Oxley Section 404 compliance-related costs and \$2.0 million for higher corporate legal expenses partially as a result of a one-time favorable adjustment in the legal reserves in 2004.

Research and development expenses (R&D) were \$4.2 million in 2006, \$5.0 million in 2005 and \$4.5 million in 2004. R&D expenses were less than 1% of sales in each of the last three years. In the fourth quarter 2006, Specialty Engineered Alloys consolidated its R&D laboratory that was in Cleveland, Ohio into the existing laboratory in Elmore, Ohio in order to improve efficiencies and response times. R&D efforts are focused on developing new products and applications as well as continuing improvements in our existing products.

Other-net expense for each of the last three years is summarized in the following table:

		Income (expense)	
(Millions)	2006	2005	2004
Foreign exchange gains (losses)	\$ 1.4	\$ (1.1)	\$ (1.8)
Directors' deferred compensation	(1.3)	0.2	(0.4)
Metal consignment fees	(2.1)	(1.3)	(1.3)
Derivative ineffectiveness	0.2	0.8	(0.4)
Debt prepayment costs	<del>-</del>	(4.4)	· —

 Other items
 (1.4)
 (1.5)
 (0.4)

 Total
 \$ (3.2)
 \$ (7.3)
 \$ (4.3)

Foreign currency exchange gains and losses result from movements in value of the U.S. dollar against the euro, yen and sterling and the maturity of hedge contracts. The gains in 2006 were caused by the dollar being stronger on average versus these currencies and helped to offset the negative impact of the translation of our foreign currency denominated sales. The income or expense on the directors' deferred compensation plan is a function of the outstanding shares in the plan and movements in the market price of our stock. In 2006 and 2004, the share price increased, which increased our liability to the plan and created a higher expense. In 2005, the share price declined which reduced our liability to the plan and generated income. Metal financing fees were higher in 2006 due to an increase in the quantity and price of the metals held on consignment. Derivative ineffectiveness represents changes in the fair value of a derivative financial instrument that does not qualify for the favorable hedge accounting treatment. The debt prepayment cost of \$4.4 million in 2005 included the penalty and write-off of associated deferred financing costs as a result of the prepayment of \$30.0 million of subordinated debt in the fourth quarter and \$18.6 million of term notes in the first quarter 2005.

Other-net expense also includes bad debt expense, cash discounts, gains and losses on the sale of fixed assets and other non-operating items.

**Operating profit** was \$43.8 million in 2006, an improvement of \$24.3 million over the \$19.5 million of profit earned in 2005. The higher profit resulted from the margin earned on the higher sales volume and from an improved product mix reduced in part by higher manufacturing overhead and SG&A expenses. The 2005 operating profit was \$5.5 million lower than the profit of \$25.0 million generated in 2004. The higher cost of copper, the unfavorable changes in product mix, the slightly higher SG&A expenses and the debt prepayment charge more than offset the margin benefit of the higher sales volumes in that year.

Interest expense was \$4.1 million in 2006, \$6.4 million in 2005 and \$8.4 million in 2004. The lower expense in 2006 was largely due to a lower effective borrowing rate. The high rate \$30.0 million subordinated debt was paid off in December 2005 with a combination of excess cash and borrowings under the lower rate revolving credit agreement. The decline in interest expense in 2005 resulted from a reduction in the average level of debt outstanding, as the average borrowing rate was higher in 2005 than in 2004. The declining interest expense also resulted from lower amortization of deferred financing costs each year. The amortization expense was \$0.5 million in 2006, \$1.1 million in 2005 and \$1.5 million in 2004.

*Income before income taxes* was \$39.7 million in 2006, an improvement of \$26.6 million over 2005 while the income before income taxes of \$13.1 million in 2005 was \$3.6 million lower than 2004.

The income tax expense (benefit) for 2006, 2005 and 2004, including the movement in the deferred tax valuation allowance, is summarized as follows:

	Expense (benefit)	
(Millions)	<b>2006</b> 2005 200	14
Tax prior to valuation allowance	<b>\$ 11.9</b>	4
Deferred tax valuation allowance	<b>(21.8)</b> (8.1) (9.	3)
Total tax expense (benefit)	<b>\$ (9.9)</b> \$ (4.7) \$ 1.	1

In calculating the tax expense prior to movements in the valuation allowance, the effects of foreign source income and percentage depletion were major causes of the differences between the effective and statutory rates for all three years. In 2004, the effects of terminating the company-owned life insurance program also increased the effective rate. See Note O to the Consolidated Financial Statements for a reconciliation of the statutory and effective tax rates.

The existing valuation allowance was reduced for the use of deferred tax assets in 2004 and 2005. In 2005, in addition to reducing the valuation allowance \$2.2 million for the use of net operating losses, we also reduced the valuation allowance by \$5.9 million as, based upon the earnings trend at that time as well as various projections, we determined that it was more likely than not that we would utilize this additional portion of our deferred tax assets in future periods.

In 2006, as a result of the improved actual and projected earnings and the actual and projected use of deferred tax assets, we determined it was more likely than not that substantially all of the deferred tax assets would be utilized and we reversed \$21.8 million of the valuation allowance through the income tax provision. The only portion of the valuation allowance that remains as of December 31, 2006 is \$0.3 million associated with our U.K. subsidiary. The valuation allowance did not affect taxes for state, local and certain foreign jurisdictions in any of the three years presented. The tax expense also included minor amounts for the alternative minimum tax in each of the three years presented.

As a result, *net income* was \$49.6 million, or \$2.45 per share, in 2006, \$17.8 million, or \$0.92 per share, in 2005 and \$15.5 million, or \$0.85 per share, in 2004.

The movement in the deferred tax valuation allowance had a significant impact on net income and earnings per share in each of the last three years, making it difficult to assess changes in net income caused by operations. However, the initial recording of the allowance and the reversal of all but an immaterial portion of the allowance had no bearing on cash flow, the ultimate usage of our deferred tax assets or other aspects of our business over this time period. Since the recording of the valuation allowance did not represent an actual loss, we believe it is appropriate to compare net income and diluted net income per share excluding the beneficial effect of the reversal of the valuation allowance. These non-GAAP measures allow for a comparison of net income and diluted earnings per share had the valuation allowance not been recorded in the first place.

(Millions, except for per share data)	2006	2005	2004
Net income, as reported	\$ 49.6	\$ 17.8	\$ 15.5
Deferred tax valuation allowance	(21.8)	(8.1)	(9.3)
Net income, excluding deferred tax valuation allowance (non-GAAP)	\$ 27.8	\$ 9.7	\$ 6.2
Diluted earnings per share, as reported	\$ 2.45	\$ 0.92	\$ 0.85
Earnings per share impact of deferred tax valuation allowance (non-GAAP)	(1.07)	(0.42)	(0.51)
Diluted earnings per share excluding deferred tax valuation allowance (non-GAAP)	\$ 1.38	\$ 0.50	\$ 0.34

## **Segment Disclosures**

Previously, we aggregated our businesses into two reportable segments. The Metal Systems Group included Alloy Products, Beryllium Products and Technical Materials, Inc. (TMI) and the Microelectronics Group included WAM and Electronic Products. Beginning with year-end 2006, we will report our four largest operating segments separately. WAM and its subsidiaries are reported as Advanced Material Technologies and Services. Alloy Products, including Brush Resources Inc., is reported as Specialty Engineered Alloys. Beryllium Products is now known as Beryllium and Beryllium Composites while TMI is reported as Engineered Material Systems.

In addition, Brush Ceramic Products Inc., a wholly owned subsidiary that previously was part of Electronic Products, has been merged into the Beryllium Products operating segment and is part of the Beryllium and Beryllium Composites reporting segment. Brush Ceramic Products is a small operation that is under common management with and has similar operating concerns as Beryllium Products. The remaining portions of Electronic Products, due to their immateriality and in compliance with the quantitative thresholds of Statement No. 131, are now included in the All Other column of our segment reporting. The All Other column also includes our parent company expenses, other corporate charges and the operating results of BEM Services, Inc., a wholly owned subsidiary that provides administrative and financial oversight services to our other businesses on a cost-plus basis.

With the appointment of our new chief executive officer in 2006, we believe these changes to our segment reporting are consistent with how the Company is currently being managed and will provide greater insight to the operating results of our businesses. Prior-year data has been re-cast to be consistent with the 2006 reporting format.

# Advanced Material Technologies and Services

(Millions)	2006	2005	2004
Net sales	\$ 343.4	\$ 209.5	\$ 165.7
Operating profit	30.5	20.4	18.8

Advanced Material Technologies and Services manufactures precious, non-precious and specialty metal products, including vapor deposition targets, frame lid assemblies, clad and precious metal preforms, high temperature braze materials, ultra-fine wire and specialty inorganic materials. Major markets for these products include data storage, medical and the wireless, semiconductor, photonic and hybrid sectors of the microelectronics market. An in-house refinery allows for the reclaim of precious metals from internally generated or customers' scrap, and metal cleaning operations. Due to the high cost of precious metal products, we emphasize quality, delivery performance and customer service in order to attract and maintain applications. This segment has domestic facilities in New York, California and Wisconsin and international facilities in Asia and Europe.

Advanced Material Technologies and Services' sales have grown significantly in each of the last two years. Sales of \$343.4 million in 2006 were 64% higher than sales of \$209.5 million in 2005 while sales in 2005 were 26% higher than in 2004. We adjust our selling prices daily to reflect the current cost of the precious and non-precious metals sold. The cost of the metal is generally a pass-through to the customer and we generate a margin on our 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 both 2006 and 2005 as compared to the respective prior year and the metal content increased as a percent of sales in both years as well, meaning that the underlying volume growth was less than the growth in the dollar value of sales. The higher metal prices increased sales by \$44.2 million in 2006 over 2005 and \$6.1 million in 2005 over 2004.

Sales of vapor deposition targets grew in each of the last two years largely due to strong demand from the data storage market. Applications for giant magnetic resistance film materials were strong in both 2006 and 2005. Demand from the wireless and photonic segment of the microelectronics market for a variety of products, including targets, frame lids and wire, continued to improve in 2006 and 2005 over the respective prior years.

In the first quarter 2006, our wholly-owned subsidiary, WAM, acquired CERAC, incorporated, a manufacturer of physical vapor deposition materials that serve a variety of industries. This acquisition followed two smaller ones in 2005. In the second quarter 2005, we acquired OMC Scientific Limited (OMC), which provides physical vapor deposition material cleaning and reconditioning services to customers in Europe. In the fourth quarter 2005, we acquired Thin Film Technology, Inc. (TFT), which manufactures precision optical coatings, thin film circuits and coatings and other products. These acquisitions serve to expand our capabilities and add further breadth to the existing product offerings. Prior to the acquisitions, we had a supplier or customer relationship with each of these businesses. The three acquired businesses accounted for approximately 22 percentage points of Advanced

Material Technologies and Services' sales growth in 2006 and 11 percentage points of the sales growth in 2005 over 2004.

Advanced Material Technologies and Services' sales growth in both 2006 and 2005 is partially due to new product development, including materials for advanced semiconductor technologies. We are also offering products that support the emerging perpendicular magnetic recording technology in the data storage market, which, when fully realized, is designed to allow for a ten-fold increase in the amount of data that can be stored on the same size disk. Sales from the Brewster, New York facility

for this new application, primarily ruthenium-based materials, contributed to the growth in sales in 2006 and are potentially a large growth platform for 2007.

We recently established sales and marketing offices in Korea and Japan, which along with the Taiwanese operation created in 2003, are designed to take advantage of the growth opportunities in Asia for Advanced Material Technologies and Services. As of early first quarter 2007, we were in the process of establishing an operation in the Republic of China.

Gross margins generated by Advanced Material Technologies and Services totaled \$65.8 million (19% of sales) in 2006, \$41.6 million (20% of sales) in 2005 and \$37.7 million (23% of sales) in 2004. The higher metal price in sales without a commensurate flow through to margins has the effect of lowering the margin as a percent of sales in 2006 and 2005. The higher sales volumes generated approximately \$31.3 million in additional margins in 2006 over 2005, while the change in product mix had an immaterial impact on the segment's gross margin in 2006. The higher sales volumes were the main cause for the margin improvement in 2005, while the change in product mix effect that year was unfavorable. Manufacturing overhead costs increased \$6.4 million in 2006 over 2005 after increasing \$1.9 million in 2005 over 2004. Overhead expenses incurred by the acquisitions accounted for the majority of the increase in both years, while new product development efforts added to the total expenses as well.

SG&A, R&D and other-net expenses from Advanced Material Technologies and Services were \$35.3 million in 2006, \$21.2 million in 2005 and \$18.9 million in 2004. Expenses were 10% of sales in 2006 and 2005 and 11% of sales in 2004. SG&A expenses increased at the Buffalo and Brewster, New York facilities in order to support the sales growth and to develop new applications. Administrative costs were higher due to the expanding organizational structure. The incremental expenses incurred by the three acquisitions totaled \$4.9 million in 2006 and \$1.4 million in 2005 while the newly created overseas operations added \$0.7 million to expenses in 2006. Incentive compensation expense was \$1.8 million higher in 2006 than 2005 and \$0.3 million lower in 2005 than in 2004. Amortization of intangible assets from the acquisitions increased expenses \$0.7 million in 2006. Metal financing fees were \$0.7 million higher in 2006 than in 2005 due to a combination of higher metal prices and an increased quantity of metal on hand. The fee was relatively unchanged in 2005 from 2004. Legal costs contributed to the higher expense in both 2006 and 2005.

Operating profit from Advanced Material Technologies and Services was \$30.5 million in 2006, an improvement of \$10.1 million over the operating profit of \$20.4 million in 2005. Profit in 2005 was 9% higher than the profit of \$18.8 million in 2004.

## Specialty Engineered Alloys

(Millions)	2006	2005	2004
Net sales	\$ 275.6	\$ 213.8	\$ 207.6
Operating profit (loss)	7.9	(5.4)	(5.2)

# Specialty Engineered Alloys manufactures and sells three main product families:

Strip products, the larger of the product families, include thin gauge precision strip and thin diameter rod and wire. These copper and nickel beryllium alloys 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 are copper and nickel-based alloys manufactured in plate, rod, bar, tube and other customized forms that, depending upon the application, may provide superior strength, corrosion or wear resistance or thermal conductivity. The majority of bulk products contain beryllium. Applications for bulk products include plastic mold tooling, bearings, bushings, welding rods, oil and gas drilling components and telecommunications housing equipment; and,

Beryllium hydroxide is produced by Brush Resources Inc., a wholly owned subsidiary, at its milling operations in Utah from its bertrandite mine and purchased beryl ore. The hydroxide is used primarily as a raw material input for strip and bulk products as well as by the Beryllium and Beryllium Composites segment. External sales of hydroxide from the Utah operations were less than 3% of Specialty Engineered Alloys' total sales in each of the three most recent years.

Strip and bulk products are manufactured at facilities in Ohio and Pennsylvania and are distributed worldwide through a network of company-owned service centers and outside distributors and agents.

Sales from Specialty Engineered Alloys were \$275.6 million in 2006, a growth rate of 29% over sales of \$213.8 million in 2005. Sales in 2005 were 3% higher than sales in 2004. Sales of both strip and bulk products increased in 2006 while the growth in sales in 2005 was due to bulk products as strip product sales declined in that year.

The change in volumes was less than the growth in sales value due to the impact of the higher metal prices in sales in both 2006 and 2005. Strip product shipment volumes grew 6% in 2006 after declining 4% in 2005. Shipments of the higher beryllium-containing strip product and thin diameter rod and wire products increased in 2006 after declining in 2005. Shipments of the lower beryllium-containing alloy strip products, after being flat in 2005, declined in 2006. Bulk product shipment volumes grew 16% in 2006 over 2005 and 9% in 2005 over 2004. Shipments of traditional beryllium-containing alloys and the new non-beryllium-containing alloys increased in both years.

Sales of Specialty Engineered Alloys into the telecommunications and computer market increased 43% in 2006 over 2005 after

declining 13% in 2005 from 2004. Automotive electronic market sales grew by a modest amount in 2006 after declining slightly in 2005; the outlook as of early 2007 for the automotive market is flat to down. Aerospace sales increased significantly in 2006 after growing modestly in the prior year. Non-beryllium-containing alloy sales into the heavy equipment market contributed to the sales increase in both 2006 and 2005. Industrial components market sales also increased in 2006 and 2005 as the higher energy prices have helped spur demand for our products from oil and gas applications. Sales into the appliance market, after growing 33% in 2005, were relatively unchanged in 2006 compared to 2005.

Specialty Engineered Alloys generated a gross margin of \$65.9 million in 2006, an increase of \$22.8 million over the gross margin of \$43.1 million in 2005. The gross margin also improved from 20% of sales in 2005 to 24% of sales in 2006. The segment's gross margin was \$47.2 million, or 23% of sales, in 2004. The higher sales volume in 2006 generated an estimated \$18.2 million of margin over 2005 while the change in product mix also improved margins in 2006, primarily due to the growth in higher beryllium-containing strip and thin diameter rod and wire sales. An improvement in manufacturing yields also contributed to the margin growth in 2006. The benefits of the higher volume in 2005 over 2004 were more than offset by an unfavorable change in the product mix. Yields improved slightly in 2005 as compared to 2004.

The cost of raw materials used by Specialty Engineered Alloys increased significantly in 2006 and 2005. The price of copper reached an all-time high in the first half of 2006. In the second half of 2006, we increased the proportion of these sales subject to a copper price pass-through and the improved pricing helped to increase margins. The higher copper cost that could not be passed through to customers reduced margins by an estimated \$1.8 million in 2006 as compared to 2005 and \$1.9 million in 2005 as compared to 2004.

Total SG&A, R&D and net-other expenses were \$57.9 million in 2006, an increase of \$9.5 million over 2005. Expenses in 2005 were \$4.0 million lower than in 2004. Sales and marketing expenses increased in 2006 in order to support the higher level of sales in 2006. Incentive compensation was \$5.5 million higher in 2006 than in 2005 after declining \$3.4 million in 2005 from 2004. One-time costs associated with the closure of the New Jersey service center added \$1.1 million to SG&A expenses in 2006. Corporate charges increased in 2006 over 2005 and decreased in 2005 from 2004. Foreign exchange gains in 2006 reduced the total expenses in 2006 compared to exchange losses in 2005 and 2004.

Operating profit from Specialty Engineered Alloys was \$7.9 million in 2006, an improvement of \$13.3 million over the operating loss of \$5.4 million in 2005. Specialty Engineered Alloys recorded an operating loss of \$5.2 million in 2004.

## Beryllium and Beryllium Composites

(Millions)	2006	2005	2004
Net sales	\$ 57.6	\$ 53.1	\$ 52.5
Operating profit	7.4	9.8	8.0

Beryllium and Beryllium Composites manufactures beryllium-based metals and metal matrix composites in rod, tube, sheet, foil 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. This segment also manufactures beryllia ceramics through our wholly owned subsidiary Brush Ceramic Products in Tucson, Arizona. Defense and government-related applications, including aerospace, is the largest market for Beryllium and Beryllium Composites, while other markets served include medical, telecommunications and computer, electronics (including acoustics), optical scanning and automotive.

Sales from Beryllium and Beryllium Composites during the 2004 to 2006 timeframe included shipments under two distinct, non-repeating programs – the James Webb Space Telescope (JWST) for NASA and the Joint European Torus (JET), a nuclear fusion reactor. A summary of the segment sales for these two projects and all other customers is as follows:

(Millions)	2006	2005	2004
ĴWST	\$ 28	\$ 121	\$ 59
JET	5 9	_	_
All other	48 9	41 0	46 6
Total net sales	\$ 576	\$ 53 1	\$ 52.5

The initial material supply contract for the JWST was completed in the second quarter 2005, with smaller shipments for other aspects of the project made in subsequent periods. The JET program started in the second half of 2006 with a minor portion remaining and scheduled to be shipped in 2007.

Total Beryllium and Beryllium Composites sales grew 8% in 2006 and 1% in 2005 over the respective prior year. Sales to all customers excluding the JWST and JET grew 19% in 2006 after declining 12% in 2005. Sales for defense platforms, mainly aerospace and missile systems, improved in the second half of 2006 after slowing down in 2005 and early 2006 due to government budget revisions that had diverted funds away from these types of applications. Orders for defense-related applications remained strong in early 2007. Sales to the medical market, including x-ray window applications, also improved in 2006 after softening slightly in 2005. Sales to the electronics market for acoustic components, a smaller application, had a modest impact on the current year sales growth. Shipments from the Fremont facility established a record high in 2006.

The gross margin on sales of Beryllium and Beryllium Composites was \$18.7 million (32% of sales) in 2006, \$19.0 million (36% of sales) in 2005 and \$17.4 million (33% of sales) in 2004. The majority of the margin benefit from the higher sales volume in 2006 was offset by an unfavorable change in the product mix in 2006 as compared to 2005. The unfavorable mix was due to a combination of the lower volume of JWST shipments in 2006 as well as a growth in sales of the lower margin-generating composite materials. In 2005, the higher sales volume generated an estimated \$0.3 million in margin while the change in product mix was a favorable \$1.2 million. Manufacturing overhead costs were \$1.1 million higher in 2006 than 2005 after being relatively unchanged in 2005 compared to 2004.

SG&A, R&D and other net expenses were \$11.3 million (20% of sales) in 2006, \$9.1 million (17% of sales) in 2005 and

\$9.4 million (18% of sales) in 2004. SG&A costs increased in 2006 partially due to investing in people and processes that are designed to improve the timing, coordination and efficiency of the entire order fulfillment process, from application design to order placement to shipment and billing. Legal costs were also higher in 2006 than 2005 as were incentive compensation and commission expenses.

Operating profit from Beryllium and Beryllium Composites was \$7.4 million in 2006, \$9.8 million in 2005 and \$8.0 million in 2004. Profit as a percent of sales was 13% in 2006, 19% in 2005 and 15% in 2004.

# **Engineered Material Systems**

(Millions)	2006	2005	2004
Net sales	\$ 68.7	\$ 50.0	\$ 53.6
Operating profit	2.7	0.7	1.9

Engineered Material Systems include 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. Our cladding and plating capabilities allow for a precious metal or brazing alloy to be applied to a base metal only where it is needed, reducing the material cost to the customer as well as providing design flexibility. Major applications for these products include connectors, contacts and semiconductors. The largest markets for Engineered Material Systems are automotive and telecommunications and computer electronics, while the energy and defense and medical electronic markets offer further growth opportunities. Engineered Material Systems are manufactured at our Lincoln, Rhode Island facility.

Engineered Material Systems' sales of \$68.7 million in 2006 improved \$18.7 million, or 38%, over sales of \$50.0 million in 2005. Sales in 2005 were 7% lower than in 2004. The inlay and plating product lines, which showed the largest declines in 2005, were responsible for the majority of the growth in 2006. Demand from the telecommunications and computer and automotive markets improved during 2006; demand from both of these markets, particularly automotive, was softer in 2005. The domestic automotive electronics market demand weakened in the fourth quarter 2006, although this weakness was partially offset by improvements in overseas applications. We believe this automotive electronics market may soften for these products in the first half of 2007.

The development of new products and applications has also contributed to sales growth for Engineered Material Systems. Materials for disk drive arm applications in computers in particular have grown over the last two years. We continued our development work on new applications for fuses and switches and are pursuing various new applications in the energy and medical markets. We also are developing programs and implementing marketing strategies overseas in order to capture transplant automotive business and further develop micro-motor and other applications in the Asian market.

Gross margin on Engineered Material Systems' sales totaled \$11.3 million in 2006, an improvement of \$4.7 million from 2005, while the gross margin of \$6.6 million in 2005 was \$2.7 million lower than the margin earned in 2004. The major cause for the changes in gross margin in both years was the change in sales. The margin as a percent of sales improved in 2006 over 2005 after declining in 2005 from 2004. The change in product mix, which was unfavorable in 2005, improved during 2006. Margins were reduced in 2005 by manufacturing inefficiencies and lower yields associated with the development of disk drive arm applications. These inefficiencies and yields improved in early 2006. Manufacturing overhead increased \$1.9 million in 2006 over 2005 due to higher manpower and utility costs and in support of the increased production volumes. Manufacturing overhead costs declined \$0.5 million in 2005 from 2004.

SG&A, R&D and other-net expenses from Engineered Material Systems were \$2.6 million higher in 2006 than in 2005 while these expenses were \$1.5 million lower in 2005 than in 2004. Incentive compensation accounted for approximately \$1.0 million of the increase in 2006 while cost allocations from the corporate office were \$0.5 million higher. The balance of the higher expense in 2006 was due to increased costs to support the higher level of sales and additional marketing and administrative costs to develop new applications and markets, including overseas. Expenses were lower in 2005 than in 2004 primarily due to differences in incentive compensation expense and corporate allocations.

Engineered Material Systems' operating profit was \$2.7 million (4% of sales) in 2006, \$0.7 million (1% of sales) in 2005 and \$1.9 million (3% of sales) in 2004.

## International Sales and Operations

We operate in worldwide markets and our international customer base continues to expand due to the development of various foreign nations' economies and the relocation of U.S. businesses overseas. Our international operations are designed to provide a cost-effective method of capturing the growing overseas demand for our products. Brush International has service centers in Germany, England, Japan and Singapore that primarily focus on the distribution of Specialty Engineered Alloys while also providing additional local support to portions of our other businesses. Advanced Material Technologies and Services has operations in Singapore, Taiwan, the Philippines and Ireland. We also have branch sales offices in various countries, including the Republic of China, Korea and Taiwan, and we utilize an established network of independent distributors and agents throughout the world. Total international sales, including sales from international operations as well as direct exports from the U.S., were as follows:

(Millions)	2006	2005	2004
From international operations	\$ 178.3	\$ 132.8	\$119.8
Exports from U.S. operations	<b>85.1</b>	46.3	44.3
Total international sales	\$ 263.4	\$ 179.1	\$ 164.1
Percent of total net sales	35%	33%	33%

The international sales presented in the above table are included in individual segment sales figures previously discussed. The majority of international sales are to the Pacific Rim, Europe and Canada.

The increase in international sales in both 2006 and 2005 was primarily in Asia although sales to Europe grew both years as well. Asian sales grew 51% in 2006 over 2005; this growth resulted from a combination of additional market penetration, the relocation of U.S. production to overseas locations and increased market share. The acquisition of OMC added to our European sales base beginning in the second quarter 2005. The currency effect on the translation of foreign currency sales was an unfavorable \$1.3 million in 2006 compared to 2005 and unfavorable by a negligible amount in 2005 compared to 2004.

We serve many of the same markets internationally as we do domestically. Telecommunications and computer and automotive electronics are the largest international markets for our products. The appliance market for Specialty Engineered Alloys is a more significant market, primarily in Europe, than it is domestically while government and defense applications are not as prevalent overseas as they are in the U.S. Our market share is smaller in the overseas markets than it is domestically and, given the macroeconomic growth potential for the international economies, including the continued transfer of U.S. business to overseas locations, the international markets may present greater long-term growth opportunities. We believe that a large portion of the long-term international growth will come from Asia and we continue to expand our marketing presence, distributor arrangements and customer relationships there.

Sales from the international operations are typically denominated in the local currency, particularly in Europe and Japan. Exports from the U.S. and sales from the Singapore operations are predominately denominated in U.S. 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 exchange rate movements. We have a hedge program with the objective of minimizing the impact of fluctuating currency values on our reported results.

# Legal Proceedings

One of our subsidiaries, Brush Wellman Inc., is a defendant in proceedings in various state and federal courts brought by plaintiffs alleging that they have contracted chronic beryllium disease or other lung conditions as a result of exposure to beryllium. Plaintiffs in beryllium cases seek recovery under negligence and various other legal theories and seek compensatory and punitive damages, in many cases of an unspecified sum. Spouses, if any, claim loss of consortium.

The following table summarizes the associated activity with beryllium cases.

	December 31,					
		2006		2005		2004
Total cases pending		13		13		12
Total plaintiffs (including spouses)		54		54		56
Number of claims (plaintiffs) filed during period ended		2(3)		5(7)		6(42)
Number of claims (plaintiffs) settled during period ended		1(2)		1(1)		6(10)
Aggregate cost of settlements during period ended (dollars in thousands)	\$	20	\$	2	\$	370
Number of claims (plaintiffs) otherwise dismissed		1(1)		3(8)		3(9)

Settlement payment and dismissal for a single case may not occur in the same period.

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 \$2.1 million at December 31, 2006, unchanged from December 31, 2005. A receivable was recorded of \$2.0 million at December 31, 2006 and \$2.2 million at December 31, 2005 from our insurance carriers as recoveries for insured claims. An additional \$0.4 million was reserved at December 31, 2006 and 2005 for insolvencies related 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 our subsidiaries and us, 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 our financial condition or cash flow. However, our results of operations could be materially affected by unfavorable results in one or more of these cases. As of December 31, 2006, four purported class actions were pending.

In the third quarter 2006, the court issued a summary judgment in our favor in our lawsuit against our former insurers. We brought this action against them to settle a dispute over how insurance coverage should have been applied to legal defense costs and indemnity payments. The court agreed with our position and awarded us damages of \$7.8 million. The damage award is based upon amounts previously paid by us and accrued interest on those payments. The initial award was subsequently increased to \$8.8 million as a result of the defendants stipulating to the attorney's fees incurred in pursuing this action. At this time, we believe the defendants will appeal the ruling and, given the uncertainties around the timing and outcome of the appeal process and the possibility that the damage award may be reduced or reversed upon appeal, we have not recorded the impact of this favorable ruling in our financial statements as of December 31, 2006.

**Regulatory Matters.** Standards for exposure to beryllium are under review by the United States Occupational Safety and Health Administration and by other governmental and private standard-setting organizations. One result of these reviews will likely be more stringent worker safety standards. More stringent standards may 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 this 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.

#### **FINANCIAL POSITION**

# **Working Capital**

**Cash flow from operations** totaled \$38.8 million in 2006 compared to \$3.5 million in 2005. Cash flow from operations strengthened significantly late in 2006, totaling \$34.4 million in the fourth quarter. The cash balance was \$15.6 million at December 31, 2006, an increase of \$5.0 million from the balance of \$10.6 million at December 31, 2005 as the cash flow from operations and the proceeds from the exercise of employee stock options were more than enough to fund an acquisition and capital expenditures and reduce debt.

Accounts receivable of \$86.5 million at year-end 2006 was 24% higher than the receivable balance of \$69.9 million at year-end 2005. This increase was primarily due to the increased sales volumes; sales in the fourth quarter 2006 were 48% higher than sales in the fourth quarter 2005. Accounts receivable did not increase as much as sales due to an improvement in the average collection period. The year-end days sales outstanding (DSO), a measure of how quickly receivables are collected, after adjusting for the unearned revenue effect, improved by approximately 7 days from year-end 2005. Accounts receivable increased by \$10.7 million in 2005 as a result of higher sales volumes and a slower DSO.

Accounts written off to bad debt expense remained relatively minor in 2006 and 2005. The filing for bankruptcy protection in the fourth quarter 2005 by Delphi Corporation, the largest U.S. supplier of automotive parts and a customer of several of our business segments, resulted in an immaterial loss as our credit exposure with Delphi was limited at the time of the bankruptcy filing.

**Inventories** totaled \$152.0 million at December 31, 2006 compared to \$104.1 million at December 31, 2005, an increase of \$47.9 million. Inventories also increased \$8.8 million during 2005. Inventory turns, a measure of how efficiently inventory is utilized, declined slightly in 2006, primarily in the fourth quarter of the year, after improving during 2005. Inventories increased steadily throughout 2006 in order to support the growing level of sales. Approximately half of the inventory growth in 2005 occurred in the fourth quarter.

The majority of the inventory increase in 2006 was in Specialty Engineered Alloys and Advanced Material Technologies and Services. Specialty Engineered Alloys' pounds in inventory were 10% higher at year-end 2006 than year-end 2005 after growing 8% during 2005. The 2006 growth in pounds was due in part to supporting the anticipated sales volumes in the first quarter 2007 while the 2005 inventory growth was due largely to purchases of copper beryllium master alloy from the Defense Logistics Agency during the fourth quarter of that year.

Advanced Material Technologies and Services maintains the majority of its precious metals on off-balance sheet arrangements. However, a significant portion of the sales growth for this segment in 2006 was in products that use other metals that are owned and not held on consignment, including ruthenium. Inventories of these materials increased in order to support the growth in those sales and as a result of higher unit costs. The acquisition of CERAC also added \$3.7 million to inventory in 2006.

The higher cost of copper, nickel and precious metals increased the value of the inventory on a first-in, first-out (FIFO) basis in each of the last two years; however, this impact was partially offset by the use of the last-in, first-out (LIFO) valuation method for these metals, limiting the impact on the increase in inventory value. The FIFO value of inventory increased \$74.7 million in 2006 while the LIFO reserve increased \$26.8 million and the net LIFO value only increased \$47.9 million. Approximately \$24.0 million of the increase in the FIFO value was due to higher raw material prices that were offset by an increase in the LIFO reserve. The LIFO method also results in the current cost, which typically is the higher cost, of materials (as well as other costs) being charged to cost of sales in the current period.

**Prepaid expenses** totaled \$14.0 million as of December 31, 2006 compared to \$14.4 million as of December 31, 2005. Included in prepaid expenses was the fair value of the outstanding foreign exchange derivative contracts totaling \$0.6 million as of December 31, 2006, a decline of \$0.9 million from December 31, 2005 due to changes in the year-end exchange rates relative to the strike prices in the outstanding contracts. The fair value of copper hedge contracts was \$1.9 million as of December 31, 2005; there were no copper hedge contracts outstanding as of December 31, 2006. Other prepaid expenses, which include insurance, property taxes and other manufacturing items, totaled \$13.4 million as of year-end 2006 compared to \$11.0 million at year-end 2005. Prepaid expenses, including the fair value of derivative financial instruments, increased \$6.1 million during 2005.

Other assets were \$13.6 million at year-end 2006 compared to \$8.3 million at year-end 2005. The primary cause for this increase was the net change in the value of intangible assets. We acquired \$6.8 million of intangible assets in 2006, the majority of which were part of the purchase of CERAC, while the amortization of intangible assets totaled \$1.5 million. Other assets declined \$6.3 million during 2005 as we wrote off deferred financing costs associated with debt that was prepaid during that year and we reversed out the pension plan prior service cost asset to other comprehensive income (OCI), a component of shareholders' equity, as a result of a plan amendment. Offsetting a portion of the decline in other assets from these two items in 2005 was the addition of intangible assets from the TFT and OMC acquisitions totaling \$2.1 million.

Accounts payable of \$30.7 million at December 31, 2006 was \$9.9 million higher than the payable balance as of December 31, 2005 due to the significant increase in the level of business in 2006 and the timing of payments. The accounts payable balance increased \$7.6 million during 2005. Accrued salaries and wages were \$15.7 million higher at year-end 2006 than year-end 2005 while the year-end 2005 balance was \$7.4 million lower than the previous year-end. The changes in the accrued salaries and wages balance in both years were due to changes in the incentive compensation accruals and other related factors. Unearned revenue, which is a liability representing billings to customers in advance of the shipment of product, was \$0.3 million

as of December 31, 2006, unchanged from the prior year. The unearned revenue liability declined \$7.5 million during 2005 due to the completion of shipments under the JWST supply contract.

Other long-term liabilities of \$11.6 million as of year-end 2006 were \$3.4 million higher than the \$8.2 million balance as of year-end 2005. In 2005, the balance declined \$2.6 million. The increase in 2006 was due to higher accruals under long-term management incentive plans. The fair value of the outstanding interest rate swap derivatives declined in both 2006 and 2005 while the environmental remediation reserve declined in 2005 as well. We paid less than \$0.1 million for legal settlements related to chronic beryllium disease in 2006 and 2005. We received \$0.2 million in each of 2006 and 2005 from our insurance carriers as partial reimbursement for the insured portions of claims paid in the current and prior years (which was credited against other assets).

## **Depreciation and Amortization**

Depreciation, amortization and depletion was \$24.6 million in 2006, \$21.7 million in 2005 and \$21.2 million in 2004. The increased expense in 2006 is due to the current year capital expenditures and the impact of the three recent acquisitions. Amortization of deferred mine development was \$1.2 million in 2004; there was no mine development amortization in either 2006 or 2005 as there was no mining activity due to the amount of available ore previously removed from the pits. 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 \$15.5 million in 2006 and \$13.8 million in 2005. The majority of the spending in both years was on small infrastructure projects, equipment upgrades and discreet pieces of equipment. Spending at the various facilities within Advanced Material Technologies and Services totaled \$6.3 million in 2006 and \$4.0 million in 2005. In 2007, we are planning on expanding our Brewster, New York facility and constructing new small facilities in China and the Czech Republic. Spending within Specialty Engineered Alloys totaled \$4.5 million in 2006 and \$7.1 million in 2005. The 2006 spending included various infrastructure projects at the Elmore, Ohio facility and purchases of mining equipment in Utah in anticipation of increased mining activity in 2007. Spending within Engineered Material Systems and Beryllium and Beryllium Composites in 2006 increased over the prior year. While certain pieces of equipment may have been capacity constrained or operated near their capacity, in general, we had sufficient production capacity to meet the level of demand throughout 2006.

In addition to the above capital expenditure total, we acquired the stock of CERAC in the first quarter 2006 for \$25.7 million, net of cash received. The goodwill from this acquisition totaled \$8.6 million, although this may be subject to further valuation changes in the first quarter 2007. In 2005, we acquired the stock of OMC and TFT for a combined cost of \$11.5 million in cash, net of cash received. Goodwill from the two acquisitions was valued at \$5.2 million.

In the fourth quarter 2005, Brush Wellman Inc. received a \$9.0 million award under the U.S. Department of Defense's (DOD) Defense Production Act, Title III Program for the design of a new facility for the production of primary beryllium, the feedstock material used to manufacture beryllium metal products. It is anticipated that this phase of the project will take two years to complete. Through year-end 2006, we had invoiced the DOD \$3.7 million for reimbursement of costs incurred under this contract, including the development of a business plan and preliminary facility engineering and design work. The incurred costs are not included in the \$15.5 million capital expenditure total since the DOD is reimbursing us. The total cost of the facility will be determined by the design phase. The construction and start-up of the facility, which we will own, is anticipated to take an additional two to three years or so and will require additional Title III approval. A portion of the total cost will be borne by us. Since 2000, all of our metallic beryllium requirements have been supplied from materials purchased from the National Defense Stockpile and international vendors. Successful completion of this project will allow for the creation of the only domestic facility capable of producing primary beryllium.

## **Retirement and Post-employment Benefits**

The liability for the domestic defined benefit pension plan was \$21.0 million as of December 31, 2006 and was included in retirement and post-employment obligations on the Consolidated Balance Sheet. This liability was calculated in accordance with Statement No. 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, an Amendment of FASB Statements 87, 88, 106 and 132(R)" which we adopted in the fourth quarter 2006. The liability was \$27.7 million as of December 31, 2005, with \$1.9 million recorded in other accrued expenses and the balance in retirement and post-employment obligations on the Consolidated Balance Sheet.

The market value of the plan assets was \$102.6 million as of December 31, 2006 compared to \$94.8 million as of December 31, 2005. The present value of the projected benefit obligation was \$123.8 million as of December 31, 2006 and \$123.6 million as of December 31, 2005. In the fourth quarter 2006, we reduced the minimum pension liability and recorded a pretax benefit to OCI of \$9.3 million as a result of the plan performance, changes in plan assumptions, including the discount rate, and the adoption of Statement No. 158.

The plan assets generated a return of 12.5% in 2006 after earning 6.5% in 2005. Disbursements from the plan assets to the participants totaled \$5.2 million in 2006. We contributed \$2.4 million to the plan assets in 2006 and \$5.0 million in 2005 and anticipate contributing \$3.8 million to the plan in 2007. The plan expense was \$5.1 million in 2006 and \$3.1 million in 2005.

We annually remeasure the domestic defined benefit plan assets and liabilities at each year end. However, we also remeasured the plan during the second quarter 2005 as a result of a plan amendment that was deemed to be a significant event as defined by Statement No. 87, "Employers' Accounting for Pensions". The amendment revised the benefit payout formula for the majority of the plan participants, among other changes. Various assumptions, including the expected rate of return and discount

rate, were reviewed and revised at that time as warranted. As a result of the remeasurement, the prior service cost asset of \$5.0 million was charged off against OCI while the minimum pension liability increased \$6.1 million with the offset also charged against OCI in the second quarter 2005.

Brush International's subsidiary in Germany has an unfunded retirement plan for its employees. The minimum pension liability for this plan was \$5.0 million at December 31, 2006 (\$4.1 million as of December 31, 2005) and \$1.3 million was charged against OCI as of December 31, 2006 (\$1.4 million as of December 31, 2005).

A portion of our retirees and current employees are eligible to participate in a retiree medical benefit plan. The liability for this plan, which is unfunded, was \$31.4 million at December 31, 2006 and \$34.8 million at December 31, 2005. The plan expense was \$2.2 million in 2006 and \$2.5 million in 2005. In the fourth quarter 2006, the liability was reduced and a pre-tax benefit of \$2.2 million was recorded against OCI as a result of the adoption of Statement No. 158.

# **Common Stock**

We received \$13.6 million for the exercise of approximately 841,000 stock options in 2006 compared to \$0.4 million for the exercise of approximately 30,000 stock options in 2005. The increased exercises in 2006 were largely due to the market price for our common stock on average being higher relative to the strike price of the vested outstanding options in 2006 than in 2005.

We did not pay any dividends in 2005 or 2006. 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 the use in the operation and expansion of our business.

## **Debt and Off-balance Sheet Obligations**

Total debt was \$49.0 million at year-end 2006, a reduction of \$8.2 million since year-end 2005. Debt declined despite borrowing \$26.2 million to purchase CERAC in January 2006. Short-term debt totaled \$28.1 million as of December 31, 2006 and included \$15.0 million of gold-denominated debt and \$5.2 million of foreign currency denominated debt designed as hedges against assets similarly denominated. The value of the outstanding gold debt increased during 2006 due to the higher price of gold. Short-term borrowings under the revolving credit agreement totaled \$7.9 million. Total short-term debt increased \$4.4 million during 2006. Long-term debt of \$20.9 million declined \$12.6 million during 2006 and included borrowings under the revolving credit agreement and three other variable rate instruments. Long-term debt repayments scheduled for 2007 totaled \$0.6 million and were classified on the Consolidated Balance Sheet accordingly. See Note F to the Consolidated Financial Statements.

During the fourth quarter 2005, we repaid \$30.0 million of subordinated debt with a combination of excess cash and proceeds from borrowings under the revolving credit agreement. The borrowing rate on the revolving credit agreement was significantly lower than the borrowing rate on the subordinated debt. As a result of the repayment, we wrote off the associated remaining unamortized deferred financing costs of \$2.2 million and paid a prepayment penalty of \$1.6 million. During the first quarter 2005, we repaid the \$18.6 million term notes. Only \$2.9 million of these notes were due to be repaid in 2005, but we repaid the notes early due to our cash position. We retain the ability to re-borrow these funds under the revolving credit agreement in accordance with the term loans' original amortization schedules. Deferred financing costs of \$0.6 million associated with the term loans were written off in the first quarter 2005. Total debt was reduced by \$15.3 million during 2005.

Also during the fourth quarter 2005, we renegotiated our revolving credit agreement to increase the borrowing capacity to \$125.0 million and to modify various financial covenants, including the level of allowable acquisitions. The revolving credit agreement was amended again in the fourth quarter 2006 to allow certain transactions. We were in compliance with all of our debt covenants as of December 31, 2006.

We have an off-balance sheet operating lease with a notional value of \$9.9 million as of December 31, 2006 that finances a building at the Elmore facility. Annual payments under this lease are \$2.3 million. See Note G to the Consolidated Financial Statements for further leasing details.

We maintain the majority of our precious metal inventories on a consignment basis in order to reduce our metal price exposure. See Market Risk Disclosures in this Management's Discussion and Analysis. The notional value of this off-balance sheet inventory was \$62.2 million at December 31, 2006 compared to \$43.7 million at December 31, 2005. Approximately \$12.5 million of the \$18.5 million increase in value was due to higher metal prices at year-end 2006 compared to year-end 2005. The remaining portion of the increase was due to additional ounces on hand to support the increase in Advanced Material Technologies and Services' business volume and changes in product mix.

## **Contractual Obligations**

A summary of payments to be made under long-term debt agreements and operating leases, pension plan contributions and material purchase commitments by year is as follows:

						There-	
(Millions)	2007	2008	2009	2010	2011	after	Total
Long-term debt	\$ 0.6	\$ 0.6	\$ 10.6	\$ —	\$ 0.1	\$ 9.0	\$ 20.9
Building lease	2.3	2.3	2.3	2.3	2.5	_	11.7
Other operating lease							
payments	3.7	3.6	3.0	2.2	1.6	14.0	28.1
Subtotal non- cancelable							
leases	6.0	5.9	5.3	4.5	4.1	14.0	39.8

Pension plan contributions	3.8	_	_	_	_	_	3.8
Purchase commitments	<u>7.7</u>	7.4		<u> </u>		<u> </u>	<u>15.1</u>
Total	<u>\$ 18.1</u>	<u>\$ 13.9</u>	<u>\$ 15.9</u>	\$ 4.5	\$ 4.2	\$ 23.0	\$ 79.6

The revolving credit agreement matures in 2009. We anticipate that a new debt agreement will be negotiated prior to the maturation of this agreement. See Note F to the Consolidated Financial Statements 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, 2006. See Note G to the Consolidated Financial Statements.

The pension plan contribution in the above table refers to the domestic defined benefit plan. Contributions to the plan are based upon the plan's funded ratio, which is affected by actuarial assumptions, plan performance, amendments and other factors. Therefore, it is not practical to estimate contributions to the plan beyond one year.

The purchase commitments include \$1.1 million for capital equipment to be acquired in 2007. The balance of these commitments is for raw materials to be acquired under long-term supply agreements that end in 2008, although we have the opportunity to negotiate an extension for one of the agreements. See Note J to the Consolidated Financial Statements.

#### Other

We believe that cash flow from operations plus the available borrowing capacity and the current cash balance are adequate to support operating requirements, capital expenditures, projected pension plan contributions, environmental remediation projects and small acquisitions. Cash flow from operations was positive in 2006 and 2005. Debt declined during 2006, even with the CERAC acquisition, while the cash balance increased. The debt to total debt plus equity ratio, a measure of leverage, improved in each of the last two years. The repayment of the high rate subordinated debt late in the fourth quarter 2005 has reduced our average borrowing rate. In addition to the \$15.6 million cash balance, available borrowings under existing unused lines of credit totaled \$84.8 million as of December 31, 2006.

Portions of the cash balances may be invested in high quality, highly liquid investments with maturities of three months or less.

## **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 \$5.1 million at December 31, 2006 and \$4.9 million at December 31, 2005. There were no new significant remediation projects identified during 2006. Payments against the reserve totaled \$0.1 million in 2006 and \$0.3 million in 2005. See Note J to the Consolidated Financial Statements.

#### ORE RESERVES

Brush Resources' reserves of beryllium-bearing 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 the open-pit method. 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. This ore, which is approximately 4% beryllium, is also processed at Brush Resources' 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. There was no development drilling activity in 2006 or 2005. 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 have decreased slightly in each of the last four years while probable reserves have remained unchanged over the same time period. We own approximately 95% of the proven reserves, with the remaining reserves leased. Based upon average production levels in recent years, proven reserves would last in excess of one hundred years. Ore reserves classified as possible are excluded from the following table.

	2006	2005	2004	2003	2002
Proven bertrandite ore reserves at year end (thousands of dry tons) Grade % beryllium	6,550	6,601	6,640	6,687	6,730
	0.267%	0.268%	0.268%	0.267%	0.267%
Probable bertrandite ore reserves at year end (thousands of dry tons) Grade % beryllium	3,519	3,519	3,519	3,519	3,519
	0.232%	0.232%	0.232%	0.232%	0.232%
Bertrandite ore processed (thousands of dry tons, diluted) Grade % beryllium, diluted	48	38	39	41	40
	0.352%	0.316%	0.248%	0.224%	0.217%

## **CRITICAL ACCOUNTING POLICIES**

The preparation of financial statements requires the inherent use of estimates and management's judgment in establishing those estimates. The following are the most significant accounting policies we use 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 Statement No. 5, "Accounting for Contingencies". Litigation and environmental 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 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 J to the Consolidated Financial Statements.

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.

The accrued legal liability includes the estimated indemnity cost only, 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. Portions of the legal defense costs may also be covered by insurance, in which case payments will be recorded as a prepaid expense on the balance sheet awaiting reimbursement from the insurance carrier.

**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 Statement No. 158. Under this statement, 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 or liability 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. Unrealized gains or losses are recorded in OCI. The actuaries adjust their assumptions to reflect changes in demographics and other factors, including mortality rates and employee turnover, as warranted. Management annually reviews 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 makes adjustments accordingly. These adjustments may then lead to a higher or lower expense in a future period.

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. As a result of our review of various factors, including the short and long-term trends of actual returns, we set the expected rate of return on plan asset assumption to 8.50% at December 31, 2006, unchanged from the prior year end. We believe that an 8.50% return over the long term is reasonable. Should the assets earn an average return less than 8.50% over time, in all likelihood the future pension expense would increase. Investment earnings in excess of 8.50% 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 present value of the projected benefit obligation and future pension expense and, conversely, a lower discount rate would raise the benefit obligation and future pension expense. We elected to use a discount rate of 6.125% as of December 31, 2006, an increase from the discount rate of 5.75% as of December 31, 2005.

We anticipate that the net expense from the domestic defined benefit pension plan will be lower in 2007 than 2006 as a result of the increase in the discount rate, the actual plan performance in 2006 and other factors.

If the expected rate of return assumption was changed by 25 basis points (0.25%) and all other pension assumptions remained constant, the 2007 projected pension expense would change by approximately \$0.3 million. If the December 31, 2006 discount rate were reduced by 25 basis points (0.25%) and all other pension assumptions remained constant, then the 2007 projected pension expense would increase by approximately \$0.4 million.

Cash contributions and funding requirements are governed by ERISA and IRS guidelines and not by Statement No. 158. Based upon these guidelines, current assumptions and estimates and our pension plan objectives, we estimate a cash contribution of approximately \$3.8 million will be made in 2007.

The minimum pension liability under Statement No.158 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 I to the Consolidated Financial Statements for additional details on our pension plans.

The Financial Accounting Standards Board is currently reviewing and may recommend revising the accounting standards for calculating and recording expenses under pension and post-employment benefit plans. The proposed revisions may be more reflective of international pension accounting standards. At the present time, we cannot assess the impact these potential revisions may have on our results of operations or financial condition.

*LIFO Inventory.* The prices of certain major raw materials, including copper, nickel, gold, silver and other precious metals, fluctuate during a given year. The cost of copper increased significantly in 2006, reaching an all-time high. Nickel prices continued to increase throughout 2006 as they did in 2005. The prices of gold and other precious metals used by the Company also were higher in 2006 than in 2005. Where possible, 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 may limit our ability to offset cost increases with higher prices.

We use the last-in, first-out (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 the associated 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 cost is also lower than the current replacement cost of the inventory. The LIFO inventory value tends to be less volatile during years of fluctuating costs than the value would be using other 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 changes in the inventory mix and quantities.

Assuming no change in the quantity or mix of inventory from the December 31, 2006 level, a 1% change in the annual inflation rate would cause a \$0.4 million change in the LIFO inventory value.

**Deferred Tax Assets.** We record deferred tax assets and liabilities in accordance with Statement 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 more likely than not that a deferral will not 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 O to the Consolidated Financial Statements for additional deferred tax details.

In 2006, based upon our current and projected earnings and an analysis of our deferred tax assets, we determined that it is more likely than not that we would utilize substantially all of our deferred tax assets. Therefore, the entire domestic and German valuation allowances totaling \$21.8 million were reversed as a benefit against tax expense in 2006. An immaterial valuation allowance associated with our U.K. subsidiary remained on the balance sheet as of December 31, 2006.

Tax expense will be recorded in 2007 at the effective tax rate and, without a material valuation allowance to be reversed, we will have an expense for the year as compared to a net benefit in 2006.

**Unearned revenue.** Billings under long-term sales contracts in advance of the shipment of the goods are recorded as unearned revenue, which is a liability on the balance sheet. Revenue and the related cost of sales and gross margin are only recognized for these transactions when the goods are shipped, title passes to the customer and all other revenue recognition criteria are met. The unearned revenue liability is reversed when the revenue is recognized. The related inventory also remains on our balance sheet until these criteria are met. Billings in advance of the shipments allow us to collect cash earlier than billing at the time of the shipment and, therefore, the collected cash can be used to help finance the underlying inventory.

**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 OCI 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. During 2006, changes in the pricing of our copper-based products resulted in a reduction of the previously estimated copper price exposure reducing the need to hedge the exposure with derivative contracts. Therefore, we terminated contracts in 2006 that were initially scheduled to mature in 2007. The gain on these contracts of \$2.3 million was deferred into OCI and will be amortized to the income statement according to the terms of the initial contracts. The majority of this gain will be amortized to income during 2007.

See Note H to the Consolidated Financial Statements and the Market Risk Disclosures section in this Management's Discussion and Analysis for more information on 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 the use of natural hedges, which include pricing strategies, borrowings denominated in the same terms as the exposed asset, off-balance sheet arrangements and other methods. Where we cannot use a natural hedge, we may use derivative financial instruments to minimize the effects of these exposures when practical and efficient.

We use gold and other precious metals in manufacturing various products. To reduce the exposure to market price changes, precious metals are maintained on a consigned inventory basis. We purchase the metal out of consignment from our suppliers 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. This inventory is financed and balanced out with 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 equal and offsetting changes in the fair value of the asset and liability recorded on the balance sheet.

## **Management's Discussion and Analysis**

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 that we use increase by 15% from the prices on December 31, 2006, the additional pre-tax cost to us on an annual basis would be approximately \$0.3 million. This calculation assumes no changes in the quantity of inventory or the underlying fee and interest rates and that none of the additional fees are charged to customers.

We also use base metals, including copper, in our production processes. When possible, fluctuations in the purchase price of copper are passed on to customers in the form of price adders or reductions. As previously indicated, copper prices increased significantly during the 2004 to 2006 time frame and we were exposed to adverse price movements on those sales where we could not pass through this increase to customers. In 2005 and 2006, we entered into derivative contracts to hedge portions of this price exposure and gains on the matured contracts helped to mitigate the negative margin impact of the higher copper prices. During 2006, we were able to increase the portion of our copper-based sales that are subject to a copper cost pass through, reducing the price exposure and the need for hedging with derivatives. There were no copper price derivative contracts outstanding as of December 31, 2006.

We use ruthenium in the manufacture of one of our new family of products. The sales volumes of ruthenium-based products increased in the second half of 2006 as did the inventory on hand to support those sales. Ruthenium is not a widely used or traded metal and, therefore, there is no established efficient market for derivative financial instruments that could be used to effectively hedge the ruthenium price exposure. In 2007, our selling price will generally be based upon our cost to purchase the material, limiting our price exposure. However, the inventory carrying value may be exposed to market fluctuations. The inventory value is maintained at the lower of cost or market and if the market value were to drop below the carrying value, the inventory would have to be reduced accordingly and a charge taken against cost of sales. This risk is mainly associated with sludges and scrap materials which generally have longer processing times to be refined into a usable form for further manufacturing. The market price for ruthenium increased significantly during the fourth quarter 2006 and the early portion of the first quarter 2007 and was well above the carrying cost as of December 31, 2006.

We are exposed to changes in interest rates on our debt and cash balances. This interest rate exposure is managed by maintaining a combination of short-term and long-term debt and variable and fixed rate instruments. We may also use interest rate swaps to fix the interest rate on variable rate obligations, as we deem appropriate. Excess cash is typically invested in high quality instruments that mature in ninety days or less. Investments are made in compliance with policies approved by the Board of Directors. We had \$39.0 million in variable rate debt and a variable-to-fixed interest rate swap with a notional value of \$29.6 million outstanding at December 31, 2006. If interest rates were to increase 200 basis points (2.0%) from the December 31, 2006 rates and assuming no changes in debt from the December 31, 2006 levels, the net interest expense would increase by \$0.2 million (net of the impact of the swap).

Portions of 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 U.S. dollars. We are exposed to currency movements in that if the U.S. 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 local competition. To minimize this exposure, we may purchase foreign currency forward contracts, options and collars in compliance with approved policies. Should the dollar strengthen, the decline in the translated value of the margins should be offset by a gain on the hedge 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 \$54.8 million as of December 31, 2006. If the dollar weakened 10% against the currencies in which we sell from the December 31, 2006 exchange rates, the reduced gain and/or increased loss on the outstanding contracts as of December 31, 2006 would reduce pre-tax profits by approximately \$5.2 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 rates, 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.

The fair values of derivatives, which are determined by financial institutions and represent the market price for the instrument between two willing parties, are recorded on the balance sheet as assets or liabilities. Changes in the fair value of outstanding derivatives are recorded in equity or against income as appropriate under the applicable guidelines. The fair value of the outstanding foreign currency contracts was a net liability of \$0.8 million at December 31, 2006, indicating that the average hedge rates were unfavorable compared to the actual year-end market exchange rates. The year-end 2006 fair value of the interest rate swap was a loss of \$0.6 million as the available interest rates were lower than the rate fixed under the swap contract. The net derivative income recorded in OCI, including the deferred copper swap gains, was \$4.9 million before taxes as of December 31, 2006 compared to \$4.0 million as of December 31, 2005.

We are also exposed to the risk of fluctuating utility costs. The cost of natural gas in particular increased during the second half of 2005 and first quarter 2006. Our total utility cost in 2006 was approximately \$21.2 million, an increase of 12% over the prior year. This cost may fluctuate in future periods based upon changes in rates as well as consumption levels, with the consumption level in a given year dependent upon the level of production activity as well as the climate.

# **OUTLOOK**

We entered 2007 with a growing backlog and a positive sales order entry trend. Demand from our key markets, including telecommunications and computer, data storage and aerospace and defense, was strong. Conditions in many of our smaller markets were positive as well, although the automotive electronics market was showing signs of softening. Our new products continued to gain acceptance in the market place and offer additional growth opportunities. We were also encouraged by the growth in sales in Asia in 2006 and will continue to target that region for further market penetration. The breadth of our product offerings and market penetration has increased, which has helped to provide a more stable sales base.

As a result of our development efforts, changes in technology and market requirements, the demand for ruthenium-based targets for the data storage market increased late in 2006 and into early 2007. We anticipate that this new and emerging application will significantly impact our sales in 2007. In addition to higher volumes, sales will increase due to the higher price of ruthenium as the market price was approximately five times higher in early 2007 than it was in early 2006. In 2007, we will price our ruthenium products in the same manner as our precious metals; the selling price to our customers will be based upon the current purchase price of ruthenium, eliminating the price exposure. However, inventory that was purchased at the lower prices during 2006, including additional amounts due to the excess scrap and other production inefficiencies as part of the product ramp up and development efforts, will be sold at current (and more than likely) higher market prices during 2007. The additional margin on the sale of this material will contribute to higher than normal margins and profits in the first two quarters of 2007 as the inventory turns. The higher margin as a result of the sale of the currently lower cost inventory will not repeat in future periods after the inventory turns.

While the global macro-economic conditions are relatively strong, an overall weakening of the economy or a downstream inventory correction in our key markets could adversely affect our sales.

Specialty Engineered Alloys made significant improvements in the pricing of copper-based products in the second half of 2006. Entering 2007, the copper price exposure has essentially been mitigated, which should, in turn, lead to improved margins.

As we develop new applications and increase our market penetration, we face increasing competition that puts pressure on prices and service levels. We will continue our Lean Sigma and other efforts to lower costs, improve manufacturing efficiencies and maximize inventory utilization. We will continue to expand our investment in sales and marketing, not only to support the current level of sales, but also to develop new markets and applications.

Our balance sheet is stronger than it was a year ago. Debt and associated borrowing costs are down. Capital expenditures should increase in 2007 over the 2006 level, approaching and perhaps exceeding the depreciation level for the first time in a number of years. Advanced Material Technologies and Services is expanding its domestic and international operations while Specialty Engineered Alloys will be increasing its investment in its existing operations. We will also be developing a new bertrandite pit at our Utah mine site, targeting early 2008 to begin extracting ore. We have significant available borrowing capacity and with the anticipated strong cash flow in 2007, we believe we will have the capability to make the necessary investments to grow the business in 2007 and going forward.

The effective tax rate should be close to the statutory rate in 2007 as legislative changes have eliminated a foreign tax credit that provided us a benefit in prior years. The tax provision will also be recorded without regard to the deferred tax valuation allowance in 2007 as all but an immaterial portion of the allowance has been reversed out.

## FORWARD-LOOKING STATEMENTS

Portions of the narrative set forth in this document that are not statements of historical or current facts are forward-looking statements. Our actual future performance may materially differ from that contemplated by the forward-looking statements as a result of a variety of factors. These factors include, in addition to those mentioned elsewhere herein:

- The global economy;
- The condition of the markets which we serve, whether defined geographically or by segment, with the major market segments being telecommunications and computer, data storage, aerospace and defense, automotive electronics, industrial components and appliance;
- Changes in product mix and the financial condition of customers;
- Actual sales, operating rates and margins for 2007;
- Our success in developing and introducing new products and new product ramp-up rates;
- Our success in passing through the costs of raw materials to customers or otherwise mitigating fluctuating prices for those materials;
- Our success in integrating newly acquired businesses;
- Our success in implementing our strategic plans and the timely and successful completion of any capital projects;
- The availability of adequate lines of credit and the associated interest rates;
- Other financial factors, including cost and availability of raw materials (both base and precious metals), tax rates, exchange
  rates, pension and other employee benefit costs, energy costs, regulatory compliance costs, and the cost and availability of

# insurance;

- The uncertainties related to the impact of war and terrorist activities;
- Changes in government regulatory requirements and the enactment of new legislation that impacts our obligations; and,
- The conclusion of pending litigation matters in accordance with our expectation that there will be no material adverse effects.

# Reports of Independent Registered Public Accounting Firm and Management

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

## The Board of Directors and Shareholders of Brush Engineered Materials Inc.

We have audited the accompanying consolidated balance sheets of Brush Engineered Materials Inc. and subsidiaries as of December 31, 2006 and 2005, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2006. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Brush Engineered Materials Inc. and subsidiaries at December 31, 2006 and 2005, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Note K to the financial statements, effective January 1, 2006, the Company adopted Statement of Financial Accounting Standards No. 123 (Revised 2004), Share Based Payment. Also, as discussed in Note I to the financial statements, the Company adopted Statement of Financial Accounting Standards No. 158, Employers' Accounting for Defined Benefit Pensions and Other Postretirement Plans.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Brush Engineered Materials Inc.'s internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control –Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 12, 2007 expressed an unqualified opinion thereon.

Ernet + Young ILP

Cleveland, Ohio March 12, 2007

#### REPORT OF MANAGEMENT

The management of Brush Engineered Materials Inc. and subsidiaries is responsible for the contents of the financial statements, which are prepared in conformity with generally accepted accounting principles. The financial statements necessarily include amounts based on judgments and estimates. Financial information elsewhere in the annual report is consistent with that in the financial statements.

The Company maintains a comprehensive accounting system, which includes controls designed to provide reasonable assurance as to the integrity and reliability of the financial records and the protection of assets. However, there are inherent limitations in the effectiveness of any system of internal controls and, therefore, it provides only reasonable assurance with respect to financial statement preparation. An internal audit staff is employed to regularly test and evaluate both internal accounting controls and operating procedures, including compliance with the Company's Statement of Policy regarding ethical and lawful conduct. The role of the independent registered public accounting firm is to provide an objective review of the financial statements and the underlying transactions in accordance with generally accepted auditing standards.

The Audit Committee of the Board of Directors, comprised solely of Directors who are not members of management, meets regularly with management, the independent registered public accounting firm, and the internal auditors to ensure that their respective responsibilities are properly discharged. The independent registered public accounting firm and the internal audit staff have full and free access to the Audit Committee.

John M. rompa

## Reports on Internal Control Over Financial Reporting

## MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Brush Engineered Materials Inc. and subsidiaries is responsible for establishing and maintaining adequate internal controls over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Brush Engineered Materials Inc. and subsidiaries' internal control system was designed to provide reasonable assurance to the Company's management and Board of Directors regarding the preparation and fair presentation of published financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Richard J. Hipple

Chairman, President and Chief Executive Officer

Brush Engineered Materials Inc. and subsidiaries' management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2006. In making this assessment, it used the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria) in Internal Control-Integrated Framework. Based on our assessment, we believe that, as of December 31, 2006, the Company's internal control over financial reporting is effective.

Management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2006 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report herein.

John D. Grampa

Senior Vice President Finance and Chief Financial Officer

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have audited management's assessment, included in the accompanying Management's Report on Internal Control over Financial Reporting, that Brush Engineered Materials Inc. and subsidiaries maintained effective internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Brush Engineered Materials Inc. and subsidiaries' management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Brush Engineered Materials Inc. and subsidiaries maintained effective internal control over financial reporting as of December 31, 2006, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Brush Engineered Materials Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2006, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States),

the consolidated balance sheets of Brush Engineered Materials Inc. and subsidiaries as of December 31, 2006 and 2005, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2006 of Brush Engineered Materials Inc. and subsidiaries and our report dated March 12, 2007 expressed an unqualified opinion thereon.

Ernet + Young LLP
Cleveland, Ohio
March 12, 2007

# **Consolidated Statements of Income**

Brush Engineered Materials Inc. and Subsidiaries, Years ended December 31, 2006, 2005 and 2004 (Dollars in thousands except share and per share amounts)

		2006		2005		2004
Net sales	\$	763,054	\$	541,267	\$	496,276
Cost of sales		600,882		431,024		385,202
Gross profit		162,172		110,243		111,074
Selling, general and administrative expense		111,002		78,457		77,267
Research and development expense		4,166		4,990		4,491
Other — net		3,164		7,287		4,282
Operating profit		43,840		19,509		25,034
Interest expense		4,135		6,372		8,377
Income before income taxes		39,705		13,137		16,657
Income taxes (benefit):						
Currently payable		2,761		1,163		1,349
Deferred		(12,65 <u>9</u> )		(5,851)		(208)
		(9,898)		(4,688)		1,141
Net income	\$	49,603	\$	17,825	\$	15,51 <u>6</u>
					-	
Net income per share of common stock — basic	\$	2.52	\$	0.93	\$	0.87
Weighted-average number of shares of common stock outstanding — basic	19	,665,000	19	9,219,000	17	7,865,000
		,,	-	-,-:-,		,,
Net income per share of common stock — diluted	\$	2.45	\$	0.92	\$	0.85
			_			
Weighted-average number of shares of common stock outstanding — diluted	20	,234,000	19	9,371,000	18	3,164,000
and to	_•	,_ 3 ., • • •		-,,000		-,,
See Notes to Consolidated Financial Statements.						

# **Consolidated Statements of Cash Flows**

Brush Engineered Materials Inc. and Subsidiaries, Years ended December 31, 2006, 2005 and 2004 (Dollars in thousands)

	2006	2005	2004
Cash flows from operating activities:			
Net income	\$ 49,603	\$ 17,825	\$ 15,516
Adjustments to reconcile net income to net cash provided from operating activities:			
Depreciation, depletion and amortization	24,602	21,675	21,173
Amortization of mine development	´ —	´ —	1,188
Amortization of deferred financing costs in interest expense	539	1,115	1,465
Stock-based compensation expense	1,717	85	75
Deferred financing cost write-off	_	2,738	_
Deferred tax (benefit) expense	(12,659)	(5,851)	(208)
Derivative financial instruments ineffectiveness	(214)	(801)	368
Proceeds from early termination of 2007 derivative contracts	2,297	_	_
Decrease (increase) in accounts receivable	(10,853)	(10,032)	(3,624)
Decrease (increase) in inventory	(41,634)	(9,562)	(6,830)
Decrease (increase) in prepaid and other current assets	(5,236)	(386)	(1,806)
Increase (decrease) in accounts payable and accrued expenses	20,718	(5,516)	223
Increase (decrease) in unearned revenue	60	(7,535)	7,789
Increase (decrease) in interest and taxes payable	4,493	(2,494)	2,101
Increase (decrease) in long-term liabilities	2,316	1,921	(1,925)
Other — net	3,056	283	3,415
Net cash provided from operating activities	38,805	3,465	38,920
Cash flows from investing activities:			
Payments for purchase of property, plant and equipment	(15,522)	(13,775)	(9,093)
Payments for purchase of business less cash received	(25,694)	(11,497)	
Payments for mine development	` _		(57)
Purchase of equipment previously held under operating lease	_	(448)	(880)
Proceeds from sale of property, plant and equipment	56	60	711
Other investments — net	46	(48)	(62)
Net cash (used in) investing activities	(41,114)	(25,708)	(9,381)
Cash flows from financing activities:			
Proceeds from issuance (repayment) of short-term debt	3,924	11,679	(274)
Proceeds from issuance of long-term debt	26,000	22,000	2,881
Repayment of long-term debt	(38,634)	(49,618)	(29,346)
Debt issuance costs	`	(125)	(250)
Issuance of common stock	_	` <u> </u>	38,711
Issuance of common stock under stock option plans	13,612	372	3,236
Tax benefit from the exercise of stock options	2,620	_	_
Net cash provided from (used in) financing activities	7,522	(15,692)	14,958
Effects of exchange rate changes on cash and cash equivalents	(211)	(1,066)	84
Net change in cash and cash equivalents	5,002	(39,001)	44,581
Cash and cash equivalents at beginning of year	10,642	49,643	5,062
Cash and cash equivalents at beginning of year			
Cash and cash equivalents at end of year	<u>\$ 15,644</u>	<u>\$ 10,642</u>	\$ 49,643

See Notes to Consolidated Financial Statements.

# **Consolidated Balance Sheets**

Brush Engineered Materials Inc. and Subsidiaries, as of December 31, 2006 and 2005 (Dollars in thousands)

	2006	2005
Assets		
Current assets		
Cash and cash equivalents	\$ 15,644	\$ 10,642
Accounts receivable (less allowance of \$1,822 for 2006, and \$1,315 for 2005)	86,461	69,938
Inventories	151,950	104,060
Prepaid expenses	13,988	14,417
Deferred income taxes	3,541	1,118
Total current assets	271,584	200,175
Total culterit assets	271,504	200,173
Other assets	13,577	8,252
Related-party notes receivable	98	358
Long-term deferred income taxes	15,575	4,109
	10,010	1,100
Property, plant, and equipment	557,861	540,420
Less allowances for depreciation, amortization and depletion	(381,932)	(363,358)
Property, plant, and equipment — net	175,929	177,062
Goodwill	21,843	12,746
Total Assets	\$ 498,606	\$ 402,702
Total Assets	<del>\$ 490,000</del>	<del>\$ 402,702</del>
Liabilities and Shareholders' Equity		
Current liabilities		
Short-term debt	\$ 28,076	\$ 23,634
Current portion of long-term debt	632	636
Accounts payable	30,744	20,872
Salaries and wages	32,029	16,307
Taxes other than income taxes		2,294
	2,244	
Other liabilities and accrued items Unearned revenue	17,888 314	19,921 254
Income taxes	4,515	726
Total current liabilities	116,442	84,644
Other long-term liabilities	11,642	8,202
Retirement and post-employment benefits	59,089	65,290
Deferred income taxes	151	172
		32,916
Long-term debt	20,282	32,910
Shareholders' equity		
Serial preferred stock, no par value; 5,000,000 authorized shares, none issued	_	_
Common stock, no par value; 60,000,000 authorized shares; 26,398,000 issued shares		
(25,557,000 in 2005)	155,552	137,665
Retained income	264,100	214,497
Common stock in treasury, 6,293,000 shares (6,315,000 in 2005)	(105,765)	(105,795)
Other comprehensive income (loss)	(23,320)	(35,037)
Other equity transactions	433	148
Total shareholders' equity	291,000	211,478
Total Liabilities and Shareholders' Equity	\$ 498,606	\$ 402,702

See Notes to Consolidated Financial Statements.

# Consolidated Statements of Shareholders' Equity

Brush Engineered Materials Inc. and Subsidiaries, Years ended December 31, 2006, 2005 and 2004 (Dollars in thousands except for share amounts)

	Common Stock	Warrants	Retained Income	Common Stock in Treasury	Other Comprehensive Income (loss)	Other	Total
Balances at January 1, 2004	\$ 93,336	\$ 1,616	\$181,156	\$(105,633)	\$ (16,794)	\$ (108)	\$153,573
Net income	_	_	15,516	_	_	_	15,516
Foreign currency translation			10,510				13,310
adjustment	_	_	_	_	849	_	849
Derivative and hedging activity	_	_	_	_	(809)	_	(809)
Minimum pension liability	_	_	_	_	(3,179)	_	(3,179)
Comprehensive income							12,377
Proceeds from exercise of 228,000							
shares under option plans	3,236	_	_	_	_	_	3,236
Proceeds from stock offering of	00.744						00.744
2,250,000 shares	38,711	(4.04.0)	_	_	_	_	38,711
Exercise of 115,000 warrants Other equity transactions	1,616 348	(1,616)	_	141	_	(131)	358
Forfeiture of restricted stock	340			(183)		66	(117)
1 Officials of restricted stock				(100)			(117)
Balances at December 31, 2004	137,247	_	196,672	(105,675)	(19,933)	(173)	208,138
Net income	_	_	17,825	_	_	_	17,825
Foreign currency translation			,				,
adjustment	_	_	_	_	(2,055)	_	(2,055)
Derivative and hedging activity	_	_	_	_	8,006	_	8,006
Minimum pension liability	_	_	_	_	(21,055)	_	(21,055)
Comprehensive income							2,721
Day and the factor of the of 00,000							
Proceeds from exercise of 30,000	270						070
shares under option plans Other equity transactions	372 46			 27		 321	372 394
Forfeiture of restricted stock	<del>40</del>	_	_	(147)		JZ 1 —	(147)
1 official of Festiloted Stook				(141)			(147)
Balances at December 31, 2005	137,665	_	214,497	(105,795)	(35,037)	148	211,478
				,	,		
Net income	_	_	49,603	_	_	_	49,603
Foreign currency translation							
adjustment	_	_	_	_	605	_	605
Derivative and hedging activity, net of taxes of \$322					623	_	623
Minimum pension and post-	<del>_</del>			_	023	<del>_</del>	023
employment benefit liability, net of							
taxes of \$4,013	_	_	_	_	7,840	_	7,840
Comprehensive income					•		58,671
•							
Impact from adoption of Statement No. 158, net of tax benefit of							
\$2,905	_	_	_	<del>-</del>	2,649	_	2,649
Proceeds from exercise of 841,000 shares under option plans	13,612	_	_	_	_	_	13,612
Income tax benefit from exercise of stock options	2,620	<u></u>		_		<u></u>	2,620
Stock-based compensation expense	1.717				_		1,717
Other equity transactions	(62)	_	_	30	_	285	253
1. 7							
Balances at December 31, 2006	\$155,552	<u>\$</u>	\$264,100	<u>\$(105,765</u> )	<u>\$ (23,320)</u>	\$ 433	\$291,000

See Notes to Consolidated Financial Statements.

Brush Engineered Materials Inc. and Subsidiaries, December 31, 2006

# **NOTE A - Significant Accounting Policies**

**Organization:** The Company is a holding company with subsidiaries that have operations in the United States, Europe and Asia. These operations manufacture engineered materials used in a variety of markets, including telecommunications and computer, data storage, aerospace and defense, automotive electronics, industrial components, appliance and medical. Beginning in the fourth quarter 2006, the Company has four reportable segments:

Advanced Material Technologies and Services manufactures precious and non-precious vapor deposition targets, frame lid assemblies, other precious and non-precious metal products and specialty inorganic materials;

Specialty Engineered Alloys manufactures high precision strip and bulk products from copper and nickel based alloys;

Beryllium and Beryllium Composites produces beryllium metal, beryllium composites and beryllia ceramics in a variety of forms; and,

Engineered Material Systems manufactures clad inlay and overlay metals, precious and base metal electroplated systems and other related products.

The Company is vertically integrated and distributes its products through a combination of company-owned facilities and independent distributors and agents.

**Use of Estimates:** The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates.

**Consolidation:** The consolidated financial statements include the accounts of Brush Engineered Materials Inc. and its subsidiaries. All of the Company's subsidiaries are wholly owned as of December 31, 2006. Inter-company accounts and transactions are eliminated in consolidation.

**Cash Equivalents:** All highly liquid investments with a maturity of three months or less when purchased are considered to be cash equivalents.

**Accounts Receivable:** An allowance for doubtful accounts is maintained for the estimated losses resulting from the inability of customers to pay the amounts due. The allowance is based upon identified delinquent accounts, customer payment patterns and other analyses of historical data and trends. The Company extends credit to customers based upon their financial condition and generally collateral is not required.

*Inventories:* Inventories are stated at the lower of cost or market. The cost of the majority of domestic inventories is determined using the last-in, first-out (LIFO) method. The remaining inventories are stated principally at average cost.

**Property, Plant and Equipment:** Property, plant and equipment is stated on the basis of cost. Depreciation is computed principally by the straight-line method, except certain facilities for which depreciation is computed by the sum-of-the-years digits or units-of-production method. Depreciable lives that are used in computing the annual provision for depreciation by class of asset are as follows:

	Years
Land improvements	5 to 25
Buildings	10 to 40
Leasehold improvements	Term of lease
Machinery and equipment	3 to 15
Furniture and fixtures	4 to 15
Automobiles and trucks	2 to 8
Research equipment	6 to 12
Computer hardware	3 to 10
Computer software	3 to 10

Leasehold improvements will be depreciated over the life of the improvement if it is shorter than the term of the lease. Repair and maintenance costs are expensed as incurred.

*Mineral Resources and Mine Development:* Property acquisition costs are capitalized as mineral resources on the balance sheet and are depleted using the units-of-production method based upon recoverable proven reserves. Overburden, or waste rock, is removed prior to the extraction of the ore from a particular open pit. The removal cost is capitalized and amortized as the ore is extracted using the units-of-production method based upon the proven reserves in that particular pit. Exploration and development expenses, including development drilling, are charged to expense in the period in which they are incurred.

Intangible Assets: Goodwill is not amortized, but instead reviewed annually at December 31, or more frequently under certain circumstances, for impairment. Goodwill is assigned to the lowest level reporting unit that the associated cash flows can be appropriately measured. Intangible assets with finite lives are amortized using the straight-line method or effective interest

method, as applicable, over the periods estimated to be benefited, which is generally twenty years or less. Finite-lived intangible assets are also reviewed for impairment if facts and circumstances warrant.

**Asset Impairment:** In the event that facts and circumstances indicate that the carrying value of long-lived and finite-lived intangible assets may be impaired, an evaluation of recoverability is performed. If an evaluation is required, the estimated future undiscounted cash flow associated with the asset or asset group would be compared to the carrying amount to determine if a write-down is required.

**Derivatives:** The Company recognizes all derivatives on the balance sheet at their fair values. If the derivative is a hedge, depending upon the nature of the hedge, changes in the fair value of the derivative are either offset against the change in fair value of the hedged asset, liability or firm commitment through earnings or recognized in other comprehensive income (loss) until the hedged item is recognized in earnings. The ineffective portion of a derivative's change in fair value, if any, is recognized in earnings immediately. If a derivative is not a hedge, changes in its fair value are adjusted through income.

**Asset Retirement Obligation:** The Company records a liability to recognize the legal obligation to remove an asset at the time the asset is acquired or when the legal liability arises. The liability is recorded for the

present value of the ultimate obligation by discounting the estimated future cash flows using a credit-adjusted risk-free interest rate. The liability is accreted over time, with the accretion charged to expense. An asset equal to the fair value of the liability is recorded concurrent with the liability and depreciated over the life of the underlying asset.

**Revenue Recognition:** The Company recognizes revenue when the goods are shipped and title passes to the customer. The Company requires persuasive evidence that a revenue arrangement exists, delivery of the product has occurred, the selling price is fixed or determinable and collectibility is reasonably assured before revenue is realized and earned. Billings under long-term sales contracts in advance of the shipment of the goods are recorded as unearned revenue, which is a liability on the balance sheet. Revenue is only recognized for these transactions when the goods are shipped and all other revenue recognition criteria are met.

**Shipping and Handling Costs:** The Company records shipping and handling costs for products sold to customers in cost of sales on the Consolidated Statements of Income.

**Advertising Costs:** The Company expenses all advertising costs as incurred. Advertising costs were \$1.3 million in 2006, \$0.8 million in 2005 and \$1.0 million in 2004.

**Income Taxes:** The Company uses the liability method in measuring the provision for income taxes and recognizing deferred tax assets and liabilities on the balance sheet. The Company records a valuation allowance to reduce the deferred tax assets to the amount that is more likely than not to be realized.

**Net Income Per Share:** Basic earnings per share (EPS) is computed by dividing income available to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted EPS reflects the assumed conversion of all dilutive common stock equivalents as appropriate under the treasury stock method.

**Reclassification:** Certain amounts in prior years have been reclassified to conform to the 2006 consolidated financial statement presentation.

**New Pronouncements:** The Financial Accounting Standards Board (FASB) issued Statement No. 151, "Inventory Costs", in November 2004, which amends ARB No. 43. The statement requires idle facility expense, excessive spoilage, double freight and rehandling costs to be treated as current period charges regardless of whether they meet the ARB No. 43 criteria of "so abnormal". The statement is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company adopted this statement effective in the first quarter 2006 and its adoption did not have an impact on the results of operations or financial condition.

The FASB issued Statement No. 123 (Revised 2004), "Share-Based Payment", in December 2004 that revises Statement No. 123, "Accounting for Stock-Based Compensation", and supercedes APB Opinion No. 25, "Accounting for Stock Issued to Employees". The revised statement requires compensation cost for all share-based payments, including employee stock options, to be measured at fair value and charged against income. Compensation cost would be determined at the date of the award through the use of a pricing model and charged against income over the vesting period for each award. The revised statement is effective for fiscal years beginning after June 15, 2005. The Company adopted this statement effective January 1, 2006. The proforma effects on net income and income per share for 2005 and 2004 of using the Black-Scholes model to calculate the fair value of outstanding stock options had the provisions of Statement No. 123 been applied in those years are set forth in Note K to the Consolidated Financial Statements.

The FASB issued FIN 47, "Accounting for Conditional Asset Retirement Obligations", in March 2005. The interpretation clarified that the term "conditional asset retirement obligation", as used in Statement No. 143, "Accounting for Asset Retirement Obligations", refers to a legal obligation to perform an asset retirement activity in which the timing and/or method of settlement are conditional on a future event that may or may not be within the control of the entity. The interpretation also clarified when an entity would have sufficient information to reasonably estimate the fair value of an asset retirement obligation. The interpretation is effective no later than the end of fiscal years ending after December 31, 2005 for calendar-year enterprises. The adoption of this interpretation did not have an impact on the results of operations or financial condition.

The FASB issued Statement No. 154, "Accounting Changes and Error Corrections", which replaces APB Opinion No. 20, "Accounting Changes", and Statement No. 3. "Reporting Accounting Changes in Interim Financial Statements", in May 2005. The statement changes the requirements for the accounting and reporting of a change in accounting principle and is applicable to all voluntary changes in accounting principle. It also applies to changes required by an accounting pronouncement if that pronouncement does not include specific transition provisions. The statement requires retrospective application to prior periods' financial statements of changes in accounting principle, unless it is impractical to determine the period-specific effects or the cumulative effect of the change (in which case the statement provides additional guidance). The statement requires that retrospective application of a change in accounting principle be limited to the direct effect of the change. The correction of an error by the restatement of previously issued financial statements is also addressed by the statement. The statement is effective for accounting changes and correction of errors made in fiscal years commencing after December 31, 2005. The Company adopted this statement effective in the first quarter 2006 and its adoption did not have an impact on results of operations or financial condition.

The FASB issued Statement No. 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, an amendment of FASB Statements 87, 88, 106 and 132(R)", in September 2006. The statement requires an entity to recognize on its balance sheet an asset for a defined benefit postretirement plan's overfunded status or a liability for a plan's underfunded status, measure a plan's assets and obligations as of the end of the employer's fiscal year and recognize changes in the funded

status of a plan in comprehensive income (a component of shareholders' equity) in the year in which the changes occur. The statement also expands the disclosure requirements associated with defined benefit postretirement

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plans. The statement does not change the calculation of the net periodic benefit cost to be included in net income. The statement is effective for fiscal years ending after December 15, 2006, except for the provision that a plan's assets and obligations be measured as of the end of the employer's fiscal year which is effective for fiscal years ending after December 15, 2008. The Company adopted this statement as proscribed. The impact of adopting this statement is set forth in Note I to the Consolidated Financial Statements.

The FASB issued Interpretation No. 48 (FIN No. 48), "Accounting for Uncertainty in Income Taxes – an Interpretation of FASB Statement No. 109" in July 2006. FIN No. 48 clarifies the financial statement recognition threshold and measurement attribute of a tax position taken or expected to be taken in a tax return. This interpretation also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transition. FIN No. 48 is effective for fiscal years beginning after December 31, 2006. The Company will adopt the interpretation as required in 2007 and is in the process of determining the impact the adoption will have on its Consolidated Financial Statements.

# NOTE B – Acquisitions

In January 2006, Williams Advanced Materials Inc. (WAM), a wholly owned subsidiary, acquired the stock of CERAC, incorporated for \$26.2 million in cash, including advisor fees. CERAC provides physical vapor deposition and specialty inorganic materials for the precision optics, semiconductor and other industries. CERAC employs approximately 120 people at its Milwaukee, Wisconsin facility. Goodwill assigned to the transaction totaled \$8.6 million.

In October 2005, WAM purchased the stock of Thin Film Technology, Inc. (TFT) of Buellton, California for \$7.9 million in cash. As of December 31, 2006, an additional \$0.2 million remained in escrow pending final determination of the value of various assets assumed. TFT manufactures precision optical coatings, photolithography, thin film hybrid circuits and specialized thin film coatings. TFT's products are used in the defense, medical and other commercial markets. Goodwill assigned to this transaction totaled \$3.5 million.

In May 2005, WAM, through its wholly owned subsidiary in the Netherlands, purchased the stock of OMC Scientific Holdings Limited (OMC) of Limerick, Ireland for \$4.0 million in cash. OMC provides physical vapor deposition material cleaning and reconditioning services for customers in the data storage, semiconductor and other markets in Europe. Goodwill assigned to this transaction totaled \$1.7 million.

The results of the above-acquired businesses were included in the Company's financial statements since their respective acquisition dates. The acquisitions are part of the Advanced Material Technologies and Services segment. Sales and pre-tax earnings from CERAC, OMC and TFT were individually and in the aggregate immaterial to the total Company sales and pre-tax earnings in 2006 and 2005. See Note E to the Consolidated Financial Statements for additional information on the intangible assets associated with these acquisitions.

## **NOTE C – Inventories**

Inventories on the Consolidated Balance Sheets are summarized as follows:

	Decem	nber 31,
(Dollars in thousands)	2006	2005
Principally average cost:		
Raw materials and supplies	\$ 36,390	\$ 24,050
Work in process	124,670	88,480
Finished goods	56,721	30,553
Gross inventories	217,781	143,083
Excess of average cost over LIFO inventory value	65,831	39,023
Net inventories	\$151,950	\$104,060

Average cost approximates current cost. Gross inventories accounted for using the LIFO method totaled \$130.5 million at December 31, 2006 and \$97.0 million at December 31, 2005. The liquidation of LIFO inventory layers reduced cost of sales by \$0.6 million in 2006 and \$0.6 million in 2005.

# NOTE D - Property, Plant and Equipment

Property, plant and equipment on the Consolidated Balance Sheets is summarized as follows:

	Decer	nber 31,
(Dollars in thousands)	2006	2005
Land	\$ 7,845	\$ 6,954
Buildings	104,286	101,074
Machinery and equipment	411,469	402,517
Software	22,012	20,608

Construction in progress	7,220	4,238
Allowances for depreciation	(379,882)	(361,308)
	172,950	174,083
Mineral resources	5,029	5,029
Allowances for amortization and depletion	(2,050)	(2,050)
	2,979	2,979
Property, plant and equipment — net	\$ 175,929	\$ 177,062

Depreciation expense was \$23.6 million in 2006, \$21.5 million in 2005 and \$21.1 million in 2004.

# **NOTE E – Intangible Assets**

# **Assets Acquired**

The Company acquired the following intangible assets in 2006:

		Weighted-average
(Dollars in thousands)	Amount	Amortization Period
Customer relationship	\$4,700	10.0 Years
Technology	1,600	20.0 Years
Customer contract	283	3.0 Years
License	220	5.0 Years
Deferred financing costs	32	1.0 Years
Total assets subject to amortization	<u>\$6,835</u>	11.8 Years
Goodwill	<u>\$9,097</u>	Not Applicable

The customer relationship, technology and customer contract intangible assets and \$8.6 million of the goodwill were acquired as part of the first quarter 2006 purchase of the stock of CERAC, incorporated.

# **Assets Subject to Amortization**

The cost, accumulated amortization and net book value of intangible assets subject to amortization as of December 31, 2006 and 2005 and the amortization expense for each year then ended is as follows:

(Dollars in thousands)	2006	2005
Deferred finance costs		
Cost	\$ 3,134	\$ 3,284
Accumulated amortization	(1,946)	(1,588)
Net book value	1,188	1,696
Customer relationship		
Cost	6,350	1,650
Accumulated amortization	<u>(863</u> )	(157)
Net book value	5,487	1,493
Technology		
Cost	2,020	420
Accumulated amortization	(133)	(11)
Net book value	1,887	409
Patents		
Cost	690	690
Accumulated amortization	(569)	(520)
Net book value	121	170
Customer contract		
Cost	283	_
Accumulated amortization	(94)	_
Net book value	189	
License		
Cost	220	_
Accumulated amortization	(30)	<del>_</del>
Net book value	190	
Total		
Cost	\$12,697	\$ 6,044
Accumulated amortization	(3,635)	(2,276)
Net book value	<u>\$ 9,062</u>	\$ 3,768
Aggregate amortization expense	<b>\$ 1,540</b>	\$ 1,331

The aggregate amortization expense is estimated to be \$1.4 million in 2007, \$1.4 million in 2008, \$1.2 million in 2009, \$0.9 million in 2010 and \$0.9 million in 2011.

Intangible assets are included in other assets on the Consolidated Balance Sheets.

# **Assets Not Subject to Amortization**

The Company's only intangible asset not subject to amortization is goodwill. A reconciliation of the goodwill activity for 2005 and 2006 is as follows:

(Dollars in thousands)	2006	2005
Balance at the beginning of the year	\$12,746	\$ 7,992
Current-year acquisitions	8,609	4,754
Adjustments to goodwill from prior-year acquisitions	488	_
Impairment	_	_
Balance at the end of the year	\$21,843	\$12,746

Goodwill of \$21.7 million was assigned to Advanced Material Technologies and Services and \$0.1 million to Engineered Material Systems. None of the goodwill acquired in 2006 or 2005 was deductible for tax purposes.

# **NOTE F – Debt**

A summary of long-term debt follows:

	Decer	mber 31,
(Dollars in thousands)	2006	2005
Senior Credit Agreement:		
Revolving credit agreement	\$10,000	\$22,000
Variable rate demand bonds payable in installments beginning in 2005	1,800	2,400
Variable rate promissory note — Utah land purchase payable in 20 annual installments through		
2021	809	847
Variable rate industrial development revenue bonds payable in 2016	8,305	8,305
	20,914	33,552
Current portion of long-term debt	(632)	(636)
Total	\$20,282	\$32,916
Maturities on long-term debt instruments as of December 31, 2006 are as follows:		
2007		\$ 632
2008		640
2009		10,642
2010		44
2011		46
Thereafter		8,910
Total		\$20,914

The Company has a senior secured credit agreement with five financial institutions that expires in December 2009. At December 31, 2006, the maximum availability under this facility was \$125.0 million. It consisted of a \$125.0 million revolving credit line secured by the Company's working capital, real estate, machinery and equipment and included a total of \$45.0

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million availability on a declining basis to compensate for any shortfall in the basis of the collateral. Additionally, the facility was secured by a first lien on the stock of certain of the Company's direct and indirect subsidiaries. The credit agreement allows the Company to borrow money at a premium over LIBOR or prime rate and at varying maturities. The premium resets quarterly according to the terms and conditions available under the agreement. At December 31, 2006, there was \$17.8 million outstanding against the revolving credit line at an average rate of 7.40%. The Company pays a commitment fee of 0.25% of the available and unborrowed amounts under the revolving credit line. In January 2007, the credit facility was amended to revise certain allowable transactions, including the addition of a revolving line of credit for the Company's subsidiary in the Netherlands, increased limits on precious metal agreements and indebtedness from leasing transactions and other miscellaneous items. In December 2005, the facility was amended to, among other things, revise collateral amounts and increase the commitment from \$105.0 million to \$125.0 million. In October 2005, the credit facility was amended to revise certain items including pricing, definitions, reporting and allowable transactions. The credit agreement is subject to restrictive covenants including leverage, fixed charges and capital expenditures.

The following table summarizes the Company's short-term lines of credit. Amounts shown as outstanding are included in short-term debt on the Consolidated Balance Sheets.

		December 31, 2006	
(Dollars in thousands)	Total	Outstanding	Available
Domestic	\$ 87,616	\$ 7,843	\$79,773
Foreign	10,274	5,204	5,070
Precious metal	15,029	15,029	· —
Total	\$112,919	\$28,076	\$84,843
	<del></del>	<del></del>	<del></del>
		December 31, 2005	
(Dollars in thousands)	Total	Outstanding	Available
Domestic	\$76,930	\$ 5,123	\$71,807
Foreign	9,932	6,204	3,728
Precious metal	12,307	12,307	
Total	\$99,169	\$ 23,634	\$75,535

The domestic line is committed and included in the \$125.0 million maximum borrowing under the revolving credit agreement. The Company has various foreign lines of credit, one of which for 4 million euros is committed and secured. The remaining foreign lines are uncommitted, unsecured and renewed annually. The precious metal facility is secured and renewed annually. The average interest rate on short-term debt was 4.74% and 3.83% as of December 31, 2006 and 2005, respectively.

In November 1996, the Company entered into an agreement with the Lorain Port Authority, Ohio to issue \$8.3 million in variable rate industrial revenue bonds, maturing in 2016. The variable rate ranged from 3.17% to 4.23% in 2006 and from 1.74% to 3.80% in 2005.

In 1994, the Company re-funded its \$3.0 million industrial development revenue bonds into variable rate demand bonds. The variable rate ranged from 3.01% and 4.05% in 2006 and from 1.55% to 3.60% during 2005.

## **NOTE G – Leasing Arrangements**

The Company leases warehouse and manufacturing space, and manufacturing and computer equipment under operating leases with terms ranging up to 25 years. Rent expense amounted to \$7.4 million, \$6.6 million, and \$7.6 million, during 2006, 2005, and 2004, respectively. The future estimated minimum lease payments under non-cancelable operating leases with initial lease terms in excess of one year at December 31, 2006, are as follows: 2007 — \$6.0 million; 2008 - \$5.9 million; 2009 — \$5.3 million; 2010 -\$4.5 million; 2011 — \$4.1 million and thereafter — \$14.0 million.

The Company has an operating lease for one of its major production facilities. This facility is owned by a third party and cost approximately \$20.3 million to build. Occupancy of the facility began in 1997. Lease payments for the facility continue through 2011 with options for renewal. The estimated minimum payments are included in the preceding paragraph. The facility lease is subject to certain restrictive covenants including leverage, fixed charges and annual capital expenditures.

## **NOTE H – Derivative Financial Instruments and Fair Value Information**

The Company is exposed to interest rate, commodity price and foreign currency exchange rate differences and attempts to minimize the effects of these exposures through a combination of natural hedges and the use of derivative financial instruments. The Company has policies approved by the Board of Directors that establish the parameters for the allowable types of derivative instruments to be used, the maximum allowable contract periods, aggregate dollar limitations and other hedging guidelines. The Company will only secure a derivative if there is an identifiable underlying exposure that is not otherwise covered by a natural hedge. In general, derivatives will be held until maturity. A derivative may be terminated early if there is a change in the underlying exposure.

The following table summarizes the fair value of the Company's outstanding derivatives and debt as of December 31, 2006 and 2005.

	Decembe	December 31, 2006		r 31, 2005
Asset/(liability)	Notional	Carrying	Notional	Carrying
(Dollars in thousands)	_Amount_	Amount	Amount	Amount
Foreign currency contracts				
Forward contracts				
Yen	\$12,767	\$ 547	\$ 7,720	\$ 579
Euro	32,763	(1,229)	9,473	658
Sterling	3,367	(125)	1,803	116
Total	<u>\$48,897</u>	<u>\$ (807</u> )	\$18,996	\$ 1,353
Options				
Yen	\$ 1,454	\$ 90	\$ 1,743	\$ 17
Euro	4,487	(96)	11,381	106
Total	<u>\$ 5,941</u>	<u>\$ (6)</u>	<u>\$13,124</u>	<u>\$ 123</u>
Copper price contracts				
Floating to fixed swaps	\$ <del>_</del>	\$ —	\$ 6,983	\$ 1,420
Floating to fixed options	<del>-</del>	_	1,776	493
Total	<u>\$</u>	<u> </u>	\$ 8,759	\$ 1,913
Interest rate exchange contracts				
Floating to fixed	\$29,552	\$ (576)	\$36,959	\$ (1,241)
Short and long—term debt	\$ <b>—</b>	\$(48,990)	\$ —	\$(57,186)

The fair values equal the carrying amounts in the Consolidated Balance Sheets as of December 31, 2006 and 2005. The fair value is defined as the amount at which an instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. The fair values of the foreign currency, copper price and interest rate derivative contracts were calculated by third parties on behalf of the Company using the applicable market rates at December 31, 2006 and December 31, 2005. The fair value of the Company's debt was estimated using a discounted cash flow analysis based on the Company's current incremental borrowing rates for similar types of borrowing arrangements. The derivative fair values were included in the Consolidated Balance Sheet as follows:

Debit/(credit) balance	Decer	nber 31,
(Dollars in thousands)	2006	2005
Prepaid expenses	\$ 637	\$ 3,389
Other assets	19	_
Other liabilities and accrued items	(1,757)	(414)
Other long-term liabilities	(288)	(827)
Total	\$(1,38 <del>9</del> )	\$ 2,148

The balance sheet classification of the fair values is dependent upon the Company's rights and obligations under each derivative and the remaining term to maturity. Changes in fair values of derivatives are recorded in income or other comprehensive income (loss) (hereafter "OCI") as appropriate. A reconciliation of the changes in fair values and other derivative activity recorded in OCI on a pre-tax basis for 2006 and 2005 is as follows:

(Dollars in thousands)	2006	2005
Balance in other comprehensive income (loss) at January 1	\$ 3,981	\$(4,025)
Changes in fair values and other current period activity	(112)	7,555
Matured derivatives — charged to expense	1,057	631
Derivative ineffectiveness — (credited) to expense		<u>(180</u> )
Balance in other comprehensive income at December 31	\$ 4,926	\$ 3,981

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All of the foreign currency, copper price and interest rate derivative contracts were designated as cash flow hedges at inception. The outstanding foreign currency contracts qualified for hedge accounting treatment as of December 31, 2006 while the outstanding interest rate swap as of December 31, 2006 does not qualify for hedge accounting as the designated hedged item, the variable rate portion of an operating lease, was terminated in December 2003. Changes in the swap's fair value subsequent to that time are charged to income or expense in the current period.

Hedge ineffectiveness, including amounts charged from OCI and other adjustments to the fair values of derivatives that did not flow through OCI, was income of \$0.2 million in 2006 and \$0.8 million in 2005 and an expense of \$0.4 million in 2004 and was included in other-net expense on the Consolidated Statements of Income.

Assuming no change from the applicable December 31, 2006 exchange rates or applicable inventory turnover period, \$4.7 million will be reversed out of OCI and credited to income in 2007.

# Foreign Exchange Hedge Contracts

The Company uses forward and option contracts to hedge anticipated foreign currency transactions, primarily foreign sales. The purpose of the program is to protect against the reduction in value of the foreign currency transactions from adverse exchange rate movements. Should the dollar strengthen significantly, the decrease in the translated value of the foreign currency transactions should be partially offset by gains on the hedge contracts. Depending upon the method used, the contract may limit the benefits from a weakening of the dollar. The Company's policy limits contracts to maturities of two years or less from the date of issuance. The outstanding contracts as of year-end 2006 had maturities ranging up to 15 months while the outstanding contracts as of year-end 2005 all had maturities of one year or less. Realized gains and losses on foreign exchange contracts are recorded in other-net on the Consolidated Statements of Income. The total exchange gain (loss), which includes realized and unrealized gains and losses, was \$1.4 million in 2006, \$(1.1) million in 2005 and \$(1.8) million in 2004.

# **Copper Price Contracts**

The Company purchases and manufactures products containing copper. Purchases are exposed to price fluctuations in the copper market. However, for a significant portion of its copper-based products, the Company will adjust its selling prices to customers to reflect the change in its copper purchase price. This program is designed to be profit neutral; i.e., any changes in copper prices, either up or down, will be directly passed on to the customer.

Historically, the Company uses copper price contracts (i.e., swaps and options) to hedge the copper purchase price for those volumes where price fluctuations cannot be passed on to the customer. Under the swaps, which are purchased from financial institutions, the Company makes or receives payments based on a difference between a fixed price (as specified in each individual contract) and the market price of copper. These payments will offset the change in prices of the underlying purchases and effectively fix the price of copper at the swap rate for the contracted volume. Under the options, the Company will receive a payment if the market price exceeds the contract strike price at the maturity date. If the market price is below the strike price, the contract will expire worthless and the Company will not have to make a payment to the financial institution. The Company's policy limits commodity hedge contracts, including copper price contracts, to maturities of 27 months or less from the original date of issuance. Realized gains and losses on copper hedge contracts are deferred into OCI and then amortized to cost of sales on the Consolidated Statements of Income over the inventory turnover period.

During the second half of 2006, the Company increased the percentage of its sales of copper-based products that are subject to the copper price pass-through, thereby reducing the underlying copper price exposure and the need for hedging with derivative contracts. Therefore, the outstanding contracts that were initially scheduled to mature in 2007 were terminated early in 2006 at a gain of \$2.3 million. This gain was deferred in OCI and will be amortized to cost of sales over the inventory turnover period in accordance with the maturity dates of the original contracts.

# **Interest Rate Hedge Contracts**

The Company attempts to minimize its exposure to interest rate variations by using combinations of fixed and variable rate instruments with varying lengths of maturities. Depending upon the interest rate yield curve, credit spreads, projected borrowing requirements and rates, cash flow considerations and other factors, the Company may elect to secure interest rate swaps, caps, collars, options or other related derivative instruments to hedge portions of its interest rate exposure. Both fixed-to-variable and variable-to-fixed interest rate instruments may be used.

The Company terminated a five-year variable-to-fixed interest rate swap with a notional value of \$10.0 million concurrent with the prepayment of the associated variable rate debt in December 2005. The termination resulted in a gain of \$0.2 million, which was included in the hedge ineffectiveness total stated above.

While the outstanding interest rate swap does not qualify for the favorable hedge accounting treatment, cash payments made or received under this swap will tend to offset changes in the interest payments made on portions of the Company's outstanding variable rate debt not otherwise hedged. The swap's notional value declines over time and it matures in 2008. Gains and losses on the swap's valuation are recorded as derivative ineffectiveness within other-net on the Consolidated Statements of Income.

# NOTE I - Pensions and Other Post-retirement Benefits

# **PART I: DOMESTIC PLANS**

The obligation and funded status of the Company's domestic pension and other post-retirement benefit plans are shown below. The Pension Benefits column includes the domestic defined benefit pension plan and unfunded supplemental retirement plan. The retiree medical and life insurance plan is shown in the Other Benefits column.

	Pension	Benefits	Other B	enefits
(Dollars in thousands)	2006	2005	2006	2005
Change in benefit obligation				
Benefit obligation at beginning of year	\$124,192	\$122,520	\$ 34,456	\$ 42,890
Service cost	5,014	4,747	295	299
Interest cost	7,002	6,497	1,903	2,243
Amendments	_	(14,741)	_	697
Actuarial (gain) loss	(6,223)	10,749	(1,906)	(8,710)
Benefit payments from fund	(5,240)	(4,917)	_	_
Benefit payments directly by Company	(65)	(83)	(3,311)	(2,963)
Expenses paid from assets	(342)	(580)		
Benefit obligation at end of year	124,338	124,192	31,437	34,456
Change in plan assets				
Fair value of plan assets at beginning of year	94,756	89,383	_	_
Actual return on plan assets	11,032	5,865	_	_
Employer contributions	2,432	5,005	_	_
Benefit payments from fund	(5,240)	(4,917)	_	_
Expenses paid from assets	(342)	(580)	_	_
Fair value of plan assets at end of year	102,638	94,756		
Funded status at end of year	<u>\$ (21,700</u> )	<u>\$ (29,436)</u>	<u>\$(31,437</u> )	<u>\$(34,456</u> )
Amounts recognized in the Consolidated Balance Sheets				
consist of:				
Other liabilities and accrued items	\$ —	\$ (1,861)	\$ (2,748)	\$ (3,200)
Retirement and post-employment benefits	(21,700)	(26,554)	(28,689)	(31,612)
	<u>\$ (21,700)</u>	\$ (28,415)	<u>\$(31,437</u> )	\$(34,812)
Amounts recognized in accumulated other comprehensive income (before tax) consist of:				
Net actuarial (gain) loss	\$ 34,546		\$ (2,224)	
Net prior service (credit) cost	(8,371)		21	
	\$ 26,175		<b>\$ (2,203</b> )	
Amortizations expected to be recognized during next fiscal				
year (before tax):	A 1		•	
Amortization of net loss	\$ 1,755		\$ —	
Amortization of prior service credit	(711)		(36)	
Additional information				
Accumulated benefit obligation for all domestic pension plans	122,815	123,077		

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# Components of Net Periodic Benefit Cost and Other Amounts Recognized in Other Comprehensive Income

		Pension Benefits			Other Benefits	
	2006	2005	2004	2006	2005	2004
(Dollars in thousands)						
Net periodic benefit cost	<b>6</b> 5 04 4	Φ 4 7 4 7	<b>0</b> 4 0 4 0	<b>#</b> 005	Φ 000	Φ 000
Service cost	\$ 5,014	\$ 4,747	\$ 4,242	\$ 295	\$ 299	\$ 280
Interest cost	7,002	6,497	6,900	1,903	2,243	2,572
Expected return on plan assets	(8,314)	(8,754)	(9,069)	_	_	_
Amortization of prior service	(700)	(070)	0.45	(0.0)	(05)	(440)
(benefit) cost	(709)	(670)	645	(36)	(85)	(112)
Recognized net actuarial (gain) loss	2,064	1,276	(10)			255
Net periodic benefit cost	\$ 5,057	\$ 3,096	\$ 2,708	\$ 2,162	\$ 2,457	\$ 2,995
Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Income						
Total cost (benefit) recognized in other comprehensive income prior to adoption of Statement No. 158	<b>\$(10,701)</b>	\$19,67 <u>5</u>	\$ 3,179	<b>s</b> —	<b>s</b> —	<u>\$</u>
Total cost (benefit) recognized in net periodic benefit cost and other comprehensive income prior to adoption of Statement No. 158	\$ (5,644)	\$22,771	\$ 5,887	\$ 2,162	\$ 2,457	\$ 2,995
	<u></u> /	<del>. ,</del>	<del></del>	<del></del>	<del></del>	<del></del>
		Pension Benefits			Other Benefits	
	2006	2005	2004	2006	2005	2004
Assumptions						
Weighted-average assumptions used to determine benefit obligations at fiscal year end						
Discount rate	6.125%	5.750%		6.125%	5.750%	
Rate of compensation increase	4.500%	4.500%		4.500%	4.500%	
Weighted-average assumptions used to determine net cost for the fiscal year						
Discount rate	5.750%	6.125%	6.375%	5.750%	6.125%	6.375%
Expected long-term return on plan						
assets	8.500%	8.750%	9.000%	N/A	N/A	N/A
Rate of compensation increase	4.500%	3.500%	2.750%	4.500%	3.500%	2.750%

The Company uses a December 31 measurement date for the above plans. The Company amended the defined benefit plan during 2005. The amendment, among other items, revised the benefit payout formula for the majority of the plan participants. The plan amendment was deemed to be a significant event and the plan was remeasured accordingly during 2005. The discount rate assumption was changed at the time of the remeasurement. Therefore, a discount rate of 6.125% was used for part of the year and 5.875% was used for the remainder of the year to determine the net cost in 2005. The expected long-term rate of return on plan assets and the rate of compensation increase assumptions did not change for the remeasurement.

Effective January 1, 2006, the Company revised the expected long-term rate of return assumption used in calculating the annual expense for its domestic pension plan in accordance with Statement No. 87, "Employers' Accounting for Pensions". The assumed expected long-term rate of return was decreased to 8.50% from 8.75%, with the impact being accounted for as a change in estimate. Effective January 1, 2005, the Company revised the expected long-term rate of return to 8.75% from 9.0%, with the impact being accounted for as a change in estimate.

Management establishes the expected long-term rate of return assumption by reviewing its historical trends and analyzing the current and projected market conditions in relation to the plan's asset allocation and risk management objectives. Management consults with outside investment advisors and actuaries when establishing the rate and reviews their assumptions with the Retirement Plan Review Committee of the Board of Directors. The actual return on plan assets was 12.5% in 2006, 6.5% in 2005 and 10.6% in 2004. The 10-year average annualized return was 7.8% as of both year-end 2006 and year-end 2005. Management

believes that the 8.50% expected long-term rate of return assumption is achievable and reasonable given current market conditions and forecasts, asset allocations, investment policies and investment risk objectives.

The rate of compensation increase assumption was changed to a flat 4.5% as of January 1, 2006. Previously, a graded assumption was used, with the rate of increase beginning at 2% for the 2003 fiscal year and increasing 0.75% per year until it would have reached 5% for the 2007 fiscal year and later.

	2006	2005
Assumed health care trend rates at fiscal year end		
Health care trend rate assumed for next year	8.00%	9.00%
Rate that the trend rate gradually declines to (ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2010	2010

Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects:

		age-point ease	1-Percenta Decre	0 1
(Dollars in thousands)	 2006	2005	2006	2005
Effect on total of service and interest cost components	\$ 59	\$ 84	<del>\$ (52</del> )	\$ (74)
Effect on post-retirement benefit obligation	666	1,034	(602)	(907)

## Plan Assets

The Company's domestic defined benefit pension plan weighted-average asset allocation at fiscal year-end 2006 and 2005 and target allocation are as follows:

	Target	Percentage Plan As Fiscal Ye	sets at
	Allocation	2006	2005
Asset Category			
Equity securities	40-60%	56%	61%
Debt securities	15-25%	24%	24%
Real estate	5-15%	10%	8%
Other	15-30%	10%	7%
Total	100%	100%	100%

The Company's pension plan investment strategy, as approved by the Retirement Plan Review Committee, is to optimize cash contributions to meet funding requirements and provide flexibility for future funding, and provide an asset allocation mix commensurate with acceptable risk and the projected liability. The allocation of investments is designed to maximize the advantages of diversification while mitigating the risk to achieve the return objective. Risk is defined as the annual variability in value and is measured in terms of the standard deviation of investment return. Under the Company's investment policies, allowable investments include domestic equities, international equities, fixed income securities and alternative securities (which include real estate, private venture capital investments and hedge funds). Ranges, in terms of a percentage of the total assets, are established for each allowable class of security. Derivatives may be used to hedge an existing security or as a risk reduction strategy. Management reviews the asset allocation on an annual or more frequent basis and makes revisions as deemed necessary.

None of the plan assets noted above are invested in the Company's common stock.

## Cash Flows

## **Employer Contributions**

The Company contributed \$3.8 million to its domestic pension plans in the first quarter of 2007 and expects to contribute \$2.7 million to its other benefit plans in 2007.

# **Estimated Future Benefit Payments**

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

		Other Be	Other Benefits	
During Fiscal Years (Dollars in thousands)	Pension Benefits	Gross Benefit Payment	Net of Medicare Part D Subsidy	
2007	\$ 5,098	\$ 3,282	\$ 2,748	
2008	5,247	3,330	2,758	
2009	5,540	3,401	2,786	
2010	6,017	3,415	2,765	
2011	6,421	3,417	2,738	
2012 through 2016	40,615	16,372	12,500	

# **PART II: FOREIGN PLAN**

The obligation and funded status of the Company's German defined benefit pension plan are as follows:

	Pension	Benefits
(Dollars in thousands)	2006	2005
Change in benefit obligation		
Benefit obligation at beginning of year	\$ 5,132	\$ 3,673
Service cost	234	131
Interest cost	216	162
Actuarial (gain) loss	(1,089)	1,764
Benefit payments directly by Company	(41)	(34)
Translation changes	536	(564)
Benefit obligation at end of year	4,988	5,132
Funded status at end of year	\$(4,988)	\$(5,132)
Amounts recognized in the Consolidated Balance Sheets consist of:		
Retirement and post-employment benefits	\$(4,988)	\$(4,082)
Amounts recognized in accumulated other comprehensive income (before tax) consist of:		
Net actuarial loss	\$ 1,262	
Net actualial 1055	<b>Ф 1,202</b>	
Amounts expected to be recognized during next fiscal year (before tax):		
Amortization of net loss	\$ 65	
	·	
Additional information		
Accumulated benefit obligation for the foreign pension plan	\$ 3,932	\$ 4,082
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Brush Engineered Materials Inc. and Subsidiaries, December 31, 2006

# Components of Net Periodic Benefit Cost and Other Amounts Recognized in Other Comprehensive Income

	2006	2005	2004
(Dollars in thousands)			
Net periodic benefit cost			
Service cost	<b>\$ 234</b>	\$ 131	\$ 104
Interest cost	216	162	142
Recognized net actuarial loss	135	26	2
Net periodic benefit cost	\$ 585	\$ 319	\$ 248
Other Changes in Benefit Obligations Recognized in Other Comprehensive Income			
Total cost (benefit) recognized in other comprehensive income prior to adoption of Statement No. 158	\$(1,174)	\$ 1,380	\$ —
Total cost (benefit) recognized in net periodic benefit cost and other comprehensive income prior to adoption of Statement No. 158	<u>\$ (589</u> )	\$ 1,699	\$ 248
	2006	2005	2004
Assumptions			
Weighted-average assumptions used to determine benefit obligations at fiscal year end			
Discount rate	4.50%	4.00%	
Rate of compensation increase	3.00%	3.00%	
Weighted-average assumptions used to determine net cost for the fiscal year			
Discount rate	4.00%	5.00%	5.50%
Rate of compensation increase	3.00%	3.00%	3.00%

The Company uses a December 31 measurement date for the German defined benefit plan. The German plan does not have any assets, as the plan is unfunded. The discount rate assumption for the German plan is determined separately from the U.S. plan assumptions. The rate of compensation increase is also dependent upon assumptions for that operation separate from the U.S.

## **Estimated Future Benefit Payments**

The following pension benefit payments, which reflect expected future service, as appropriate, are expected to be paid from the German plan:

# **During Fiscal Years**

(Dollars in thousands)	
2007	\$ 45
2008	58
2009	77
2010	90
2011	100
2012 through 2016	865

# PART III: INCREMENTAL EFFECT OF APPLYING FASB STATEMENT NO. 158 ON INDIVIDUAL LINE ITEMS IN THE CONSOLIDATED BALANCE SHEET AS OF DECEMBER 31, 2006

	Before		After
	Application of		Application of
(Dollars in thousands)	Statement 158	<u>Adjustments</u>	Statement 158
Long-term deferred income taxes	\$ 12,670	\$ 2,905	\$ 15,575
Other liabilities and accrued items	21,673	(3,785)	17,888
Retirement and post-employment benefits	55,048	4,041	59,089
Other comprehensive income (loss)	(25,969)	2,649	(23,320)

Other comprehensive loss of \$23.3 million includes foreign currency translation adjustment, change in the fair value of derivative financial instruments, minimum retirement and post-employment benefits liability and the related tax impact thereon.

# PART IV: OTHER BENEFIT PLANS

The Company also has accrued unfunded retirement arrangements for certain directors. The projected benefit obligation was

\$0.1 million at December 31, 2006 and \$0.1 million at December 31, 2005. A corresponding accumulated benefit obligation of equal amounts has been recognized as a liability and is included in retirement and post-employment benefits as of the respective year ends. Certain foreign subsidiaries have funded and accrued unfunded pension and other post-employment arrangements. The liability for these plans was \$3.3 million at December 31, 2006 and \$2.6 million at December 31, 2005 and was included in retirement and post-employment benefits on the Consolidated Balance Sheets.

The Company also sponsors defined contribution plans available to substantially all U.S. employees. Company contributions to the plans are based on matching a percentage of employee savings up to a specified savings level. The Company's annual contributions were \$2.5 million in 2006, \$2.3 million in 2005 and \$1.0 million in 2004. The Company doubled its matching percentage effective January 1, 2005.

# **NOTE J – Contingencies and Commitments**

# **CBD Claims**

The Company is a defendant in proceedings in various state and federal courts by plaintiffs alleging that they have contracted chronic beryllium disease (CBD) or related ailments as a result of exposure to beryllium. Plaintiffs in CBD cases seek recovery under theories of negligence and various other legal theories and seek compensatory and punitive damages, in many cases of an unspecified sum. Spouses, if any, claim loss of consortium. Additional CBD claims may arise.

The Company believes it has 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 the Company. Third-party plaintiffs (typically employees of customers) face a lower burden of proof than do the Company's employees, but these cases are generally covered by varying levels of insurance.

Although it is not possible to predict the outcome of the litigation pending against the Company and its subsidiaries, the Company provides 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 the actions could be decided unfavorably in amounts exceeding the Company's reserves. An unfavorable outcome or settlement of a pending CBD case or additional adverse media coverage could encourage the commencement of additional similar litigation. The Company is unable to estimate its potential exposure to unasserted claims. The Company recorded a reserve for CBD litigation of \$2.1 million at December 31, 2006 and December 31, 2005. The reserve is included in other long-term liabilities on the Consolidated Balance Sheets. An asset of \$2.0 million was recorded in other assets on the Consolidated Balance Sheets at December 31, 2006 and \$2.2 million at December 31, 2005 for recoveries from insurance carriers for outstanding insured claims and for prior settlements initially paid directly by the Company to the plaintiff on insured claims. An additional \$0.4 million was reserved at December 31, 2006 and 2005 for insolvencies related to claims still outstanding as well as for claims for which partial payments have been received.

While the Company is unable to predict the outcome of the current or future CBD proceedings, based upon currently known facts and assuming collectibility of insurance, the Company does not believe that resolution of these proceedings will have a material adverse effect on the financial condition or cash flow of the Company. However, the Company's results of operations could be materially affected by unfavorable results in one or more of these cases.

In the third quarter 2006, the court issued a summary judgment in the Company's favor and awarded the Company damages of \$7.8 million to be paid by the Company's former insurance providers. The initial award was subsequently increased to \$8.8 million as a result of the defendants stipulating to the attorney's fees incurred in pursuing this action. The Company originally filed a lawsuit against its former insurers in attempts to resolve a dispute over how insurance coverage should be applied to incurred legal defense costs and indemnity payments. The court ruling agreed with the Company's position. The damages, which were stipulated to by the defendants, represent costs previously paid by the Company over a number of years that were not reimbursed by the insurance providers. The damages also include accrued interest on those costs. The Company believes that the defendants will appeal this ruling and therefore a portion or all of the \$8.8 million may not be realized by the Company. Given the uncertainty surrounding the timing and outcome of the appeal process and the possibility for a portion or all of the award to be reversed, the Company has not recorded the impact of the award in its Consolidated Financial Statements as of December 31, 2006.

## **Environmental Proceedings**

The Company has an active program for environmental compliance that includes the identification of environmental projects and estimating their impact on the Company's financial performance and available resources. Environmental expenditures that relate to current operations, such as waste-water treatment and control of airborne emissions, are either expensed or capitalized as appropriate. The Company records reserves for the probable costs for environmental remediation projects. The Company's environmental engineers perform routine ongoing analyses of the remediation sites and will use outside consultants to assist in their analyses from time to time. Accruals are based upon their analyses and are established at either the best estimate or, absent a best estimate, at the low end of the estimated range of costs. The accruals are revised for the results of ongoing studies and for differences between actual and projected costs. The accruals are also affected by rulings and negotiations with regulatory agencies. The timing of payments often lags the accrual, as environmental projects typically require a number of years to complete. The undiscounted reserve balances at December 31, 2006 and 2005 were as follows:

	Decen	December 31,	
	2006	2005	
(Dollars in thousands)			
Current	\$ 547	\$ 656	
Long-term	4,513	4,246	
Total reserve	\$ 5,060	\$ 4,902	

These reserves cover existing or currently foreseen projects. It is possible that additional environmental losses may occur beyond the current reserve, the extent of which cannot be estimated.

In 2006, the Company paid \$0.1 million against the reserve and expensed \$0.3 million for changes in estimates. There were no new significant environmental sites or projects identified in 2006. In 2005, the Company obtained updated detailed quotes on various remediation projects that estimated a lower remediation cost than previously reserved. In addition, the Company received notification that further remediation efforts on a particular project at the Elmore facility were no longer required. As a result of these and other minor factors, the Company reversed \$0.5 million of the reserve to income in 2005. Payments against the reserve totaled \$0.3 million in 2005. In 2004, the Company sold property that was subject to a Voluntary Action Plan. This property had been formerly used as a manufacturing site by one of the Company's subsidiaries. Under the terms of the sale, the buyer assumed the environmental remediation responsibilities and agreed to indemnify the Company against any environmental claims arising from this property. This transaction enabled the Company to reverse a previously recorded environmental remediation reserve associated with this property of \$1.0 million to income.

Brush Engineered Materials Inc. and Subsidiaries, December 31, 2006

## Long-term Obligation

The Company has a long-term supply arrangement with Ulba/Kazatomprom of the Republic of Kazakhstan and their marketing representative, Nukem, Inc. of Connecticut. The agreement was signed in 2000 and amended from time to time. An amendment in 2003 reduced the previous purchase commitments for copper beryllium master alloy, added commitments to purchase beryllium vacuum cast billets and extended the contract period to 2012. All materials under the arrangement are sourced from Ulba/Kazatomprom. The annual base purchase commitments total approximately \$6.6 million in 2007 and \$7.4 million in 2008. A new price will be renegotiated for the years 2008 through 2012. If a new price cannot be agreed to by December 31, 2007, then the material purchases will terminate with the 2008 delivery volumes. The contract allows for the Company to purchase additional quantities of copper beryllium master alloy up to an annual maximum of 150,000 pounds of beryllium contained in the master alloy. The purchase of beryllium vacuum cast billets can be plus or minus 10% of the annual base quantity. The contract was amended in 2005 to provide an additional quantity of 120,000 pounds for the years 2005 to 2007 above the existing quantities. Purchases of beryllium-containing materials from Nukem were \$9.1 million in 2006, \$7.8 million in 2005 and \$5.9 million in 2004.

The Company has agreements to purchase stated quantities of beryl ore, beryllium metal and copper beryllium master alloy from the Defense Logistics Agency of the U.S. Government. The agreements expire in 2007. The Company had purchased the remaining quantities of beryl ore and copper beryllium master by December 31, 2006 and had minor purchases of beryllium metal in 2006. There are no remaining fixed commitments under these agreements. Purchases under these agreements totaled approximately \$0.7 million in 2006, \$7.5 million in 2005 and \$6.6 million in 2004. The purchased material serves as a raw material input for operations within Specialty Engineered Alloys and Beryllium and Beryllium Composites.

## Other

One of the Company's subsidiaries, WAM, is a defendant in a U.S. legal case where the plaintiff is alleging patent infringement by WAM and a small number of WAM's customers. WAM has provided an indemnity agreement to certain of those customers, under which WAM will pay any damages awarded by the court. WAM believes it has numerous and strong defenses applicable to both WAM and the indemnified customers and is contesting this action. WAM earlier filed suit against this plaintiff in the U.S. for wrongful intimidation of its customers and requested that certain of the plaintiff's patents be invalidated. WAM also filed a suit in Australia to revoke a corresponding patent. The Australian court has ruled in WAM's favor while the U.S. action is ongoing. A trial date for the patent infringement action has been set for the third quarter 2007. WAM has not made any indemnification payments on behalf of any of its customers as of December 31, 2006, nor have they recorded a reserve for losses under these indemnification agreements as of December 31, 2006. WAM does not believe a range of potential losses, if any, can be estimated at the present time.

The Company is subject to various other legal or other proceedings that relate to the ordinary course of its business. The Company believes that the resolution of these proceedings, individually or in the aggregate, will not have a material adverse impact upon the Company's consolidated financial statements.

The Company has outstanding letters of credit totaling \$16.6 million related to workers' compensation, consigned precious metal guarantees, environmental remediation issues and other matters that expire in 2007.

## NOTE K - Common Stock and Stock-based Compensation

The Company has 5 million shares of Serial Preferred Stock authorized (no par value), none of which has been issued. Certain terms of the Serial Preferred Stock, including dividends, redemption and conversion, will be determined by the Board of Directors prior to issuance.

A reconciliation of the changes in the number of shares of common stock issued is as follows (in thousands):

Issued as of January 1, 2004	22,920
Issuance of new shares	2,250
Exercise of stock options	228
Exercise of stock warrants	115
Restricted stock grant	14
Issued as of December 31, 2004	14 25,527
Exercise of stock options	30
Issued as of December 31, 2005	30 25,557
Exercise of stock options	841
Issued as of December 31, 2006	26,398

On January 27, 1998 the Company's Board of Directors adopted a new share purchase rights plan and declared a dividend distribution of one right for each share of Common Stock outstanding as of the close of business on February 9, 1998. The plan allows for new shares issued after February 9, 1998 to receive one right subject to certain limitations and exceptions. Each right entitles the shareholder to buy one one-hundredth of a share of Serial Preferred Stock, Series A, at an initial exercise price of

\$110. A total of 450,000 unissued shares of Serial Preferred Stock will be designated as Series A Preferred Stock. Each share of Series A Preferred Stock will be entitled to participate in dividends on an equivalent basis with one hundred shares of common stock and will be entitled to one vote. The rights will not be exercisable and will not be evidenced by separate right certificates until a specified time after any person or group acquires beneficial ownership of 20% or more (or announces a tender offer for 20% or more) of common stock. The rights expire on January 27, 2008, and can be redeemed for 1 cent per right under certain circumstances.

New stock incentive plans (the 2006 Stock Incentive Plan and the 2006 Non-employee Director Equity Plan) were approved at the May 2, 2006 annual meeting of shareholders. These plans authorize the granting of option rights, stock appreciation rights, performance restricted shares, performance shares, performance units and restricted shares. These new plans replaced the 1995 Stock Incentive Plan and the 1997 Stock Incentive Plan for Non-employee Directors, although there are still options outstanding under these plans.

# Stock Options

Stock options may be granted to employees or non-employee directors of the Company. Option rights entitle the optionee to purchase common shares at a price equal to or greater than the market value on the date of the grant. Option rights granted to employees generally become exercisable (i.e., vest) over a four-year period and expire ten years from the date of the grant. Options granted to employees may also be issued with shorter vesting periods. Options granted to non-employee directors vest in six months and expire ten years from the date of the grant. The number of options available to be issued is established in plans approved by shareholders.

Prior to January 1, 2006, the Company had adopted the disclosure only provisions of Statement No. 123, "Accounting for Stock-Based Compensation" and applied the intrinsic value method in accordance with APB Opinion No. 25, "Accounting for Stock Issued to Employees" and related interpretations in accounting for its stock incentive plans. Accordingly, no expense was recorded for stock options in the Company's financial statements prior to 2006.

Effective January 1, 2006, the Company adopted Statement No. 123 (Revised), "Share-Based Payment", hereinafter referred to as Statement 123 (R), that revises Statement No. 123 and supersedes APB No. 25. The revised statement requires compensation cost for all share-based payments, including employee stock options, to be measured at fair value and charged against income. Compensation cost is determined at the date of the award through the use of a pricing model and charged against income over the vesting period for each award. The Company adopted this statement using the modified prospective method and, as such, the prior period results do not reflect any restated amounts. The Company recorded compensation cost on the outstanding stock options of \$0.3 million for 2006. The expense was recorded within selling, general and administrative expense on the Consolidated Statement of Income. Operating profit and income before income taxes were reduced by this same amount accordingly. Earnings per share was reduced \$0.01 in 2006 as a result of recording compensation expense for the stock options that vested in 2006. There were no options issued during 2006 and the recorded expense was associated with the outstanding unvested options issued in previous periods.

Compensation cost for stock options is recorded on a straight-line basis over the remaining vesting period of the options. The remaining unvested value to be expensed on the outstanding options totaled \$31,000 as of December 31, 2006 and is expected to be expensed during 2007.

The following table presents the pro forma effect on net income and earnings per share for 2005 and 2004 had compensation cost for the Company's stock plans been determined consistent with Statement No. 123 (R).

	2005	2004
(Dollars in thousands except per share amounts)		
Net income, as reported	\$17,825	\$15,516
Less stock-based compensation expense determined under fair value method for all stock options, net of related income tax benefit	1,947	1,882
Pro forma net income	\$15,878	\$13,634
		<u> </u>
Basic earnings per share, as reported	\$ 0.93	\$ 0.87
Diluted earnings per share, as reported	0.92	0.85
Basic earnings per share, pro forma	0.83	0.76
Diluted earnings per share, pro forma	0.82	0.75

The fair value of stock options was estimated on the grant date using the Black-Scholes option-pricing model with the following weighted-average assumptions for options issued:

	2005	2004
Risk-free interest rates	4.72%	3.26%
Dividend yield	0%	0%
Volatility	42.0%	41.8%
Expected lives (in years)	6	6

The following table summarizes the Company's stock option activity during 2006:

	Weighted-		Weighted-
	average		average
Number of	Exercise Price	Aggregate	Remaining
Options	Per Share	Intrinsic Value	Term

Outstanding at December 31, 2005	1,508	\$16.24		
Granted	_	_		
Exercised	(841)	16.22		
Expired	<u>(3</u> )	17.98		
Outstanding at December 31, 2006	664	16.30	\$11,613	5.5 Years
Vested and expected to vest as of December 31, 2006	639	16.33	11,145	5.5 Years
Exercisable at December 31, 2006	605	16.63	10,376	5.4 Years

#### **Notes to Consolidated Financial Statements**

Brush Engineered Materials Inc. and Subsidiaries, December 31, 2006

Cash received from the exercise of stock options totaled \$13.6 million for 2006 and \$0.4 million for 2005. The total intrinsic value of options exercised during the year ended December 31, 2006, 2005 and 2004 was \$8.2 million, \$0.2 million and \$1.3 million, respectively.

The weighted-average grant date fair value of options granted was \$17.12 and \$17.01 per option during the years ended December 31, 2005 and 2004, respectively. There were no stock options granted in 2006.

#### Restricted Stock

The Company may grant restricted stock to employees and non-employee directors of the Company. These shares must be held and not disposed for a designated period of time as defined at the date of the grant and are forfeited should the holder's employment terminate during the restriction period. The fair market value of the restricted shares is determined on the date of the grant and is amortized over the restriction period. The restriction period is typically three years.

The fair value of the restricted stock units is determined based upon the average of the high and low stock prices on the date of grant. The weighted-average grant date fair value for 2006 and 2004 was \$24.77 and \$17.28, respectively. There were no grants in 2005.

Compensation cost was \$0.3 million in 2006, \$0.1 million in 2005 and \$0.1 million in 2004. The unamortized compensation cost on the outstanding restricted stock was \$0.5 million as of December 31, 2006 and is expected to be amortized over a weighted-average period of 16 months.

The following table summarizes the restricted stock activity during 2006:

	Number	Weighted-average
	of Shares	Grant Date
	(thousands)	Fair Value
Outstanding at December 31, 2005	13	\$17.28
Granted	38	24.77
Vested	_	_
Forfeited	<u>(1</u> )	23.64
Outstanding at December 31, 2006	<u>50</u>	22.45

## Long-term Incentive Plans

Under long-term incentive compensation plans, executive officers and selected other employees receive cash or stock awards based upon the Company's performance over the defined period, typically three years. Awards may vary based upon the degree to which actual performance exceeds the pre-determined threshold, target and maximum performance levels at the end of the performance periods. Payouts may be subjected to attainment of threshold performance objectives.

Under the 2005 to 2007 long-term incentive plan, awards will be paid in cash based upon the share price of the Company's common stock at the end of the performance period. Costs are accrued based upon the current performance projections for the three-year period relative to the plan performance levels, the percentage of requisite service rendered and changes in the value of the Company's stock. Adoption of Statement 123 (R) did not have a material impact on the calculation of the accrual under this plan and the accrual remained classified as a liability on the Consolidated Balance Sheet.

Under the 2006 to 2008 long-term incentive plan, awards will be settled in shares of the Company's common stock. Compensation expense is based upon the current performance projections for the three-year period, the percentage of requisite service rendered and the fair market value of the Company's common stock on the date of the grant. The offset to the compensation expense is recorded within shareholders' equity. The Company recorded an expense for this plan of \$0.7 million for 2006. The balance in shareholders' equity was also \$0.7 million as of December 31, 2006.

# **Directors Deferred Compensation**

Non-employee directors may defer all or part of their fees into shares of the Company's common stock. The fair value of the deferred shares is determined at the share acquisition date and is recorded within shareholders' equity. Subsequent changes in the fair value of the Company's common stock do not impact the recorded values of the shares.

Prior to December 31, 2004, the non-employee directors had the election to defer their fees into shares of the Company's common stock or other specific investments. The directors may also transfer their deferred amounts between election choices. The fair value of the deferred shares is determined at the acquisition date and recorded within shareholders' equity with the offset recorded as a liability. Subsequent changes in the fair market value of the Company's common stock are reflected as a change in the liability and an increase or decrease to expense.

The following table summarizes the stock activity for the directors' deferred compensation plan during 2006:

	of Shares (thousands)	Grant Date Fair Value
Outstanding at December 31, 2005	90	\$17.39
Granted	9	22.81
Distributions	(11)	21.65
Outstanding at December 31, 2006	88	17.92

The Company recorded an expense of \$1.3 million on the directors' deferred compensation plan in 2006, income of \$0.2 million for 2005 and an expense of \$0.4 million in 2004. During the years ended December 31, 2006, 2005 and and 2004, the weighted-average grant date fair value of shares granted was \$22.81, \$17.08 and \$17.94, respectively.

## Stock Appreciation Rights

The Company may grant stock appreciation rights (SARs) to certain employees and non-employee directors. Upon exercise of vested SARs, the participant will receive a number of shares of common stock equal to the spread (the difference between the market price of the Company's common stock at the time of the exercise and the strike price established in the SARs agreement) divided by the common stock price. The strike price of the SARs is equal to or greater than the market value of the Company's common shares on the day of the grant. The number of SARs available to be issued is established by plans approved by the shareholders. The vesting period and the life of the SARs are established in the SARs agreement at the time of the grant. The exercise of the SARs is satisfied by the issuance of treasury shares.

In the second quarter 2006, the Company issued approximately 117,000 SARs at a strike price of \$24.03 per share. The SARs vest three years from the date of grant and expire in ten years. There were no forfeitures of SARs during 2006 and all of the SARs granted were still outstanding as of December 31, 2006. There were no grants of SARs in 2005 or 2004.

The fair value of the SARs granted was \$11.84. The fair value will be amortized to compensation cost on a straight-line basis over the three-year vesting period. Compensation cost for 2006 was \$0.3 million, which is included in selling, general and administrative expense. The unamortized compensation cost balance was \$1.1 million as of December 31, 2006.

The fair value of the SARs was estimated on the grant date using the Black-Scholes pricing model with the following assumptions:

	2006
Risk-free interest rate	4.69%
Dividend yield	0%
Volatility	44.2%
Expected lives (in years)	6

The risk-free rate of return was based upon the three-month Treasury bill rate at the time the SARs were granted. The Company has not paid a dividend since 2001. The share price volatility was calculated based upon the actual closing prices of the Company's shares at month end over a period of approximately ten years prior to the granting of the SARs. This approach to measuring volatility is consistent with the approach used to calculate the volatility assumption in the valuation of stock options under the disclosure only provisions of Statement 123 prior to 2006. Prior analyses indicated that the Company's employee stock options have an average life of approximately six years. While the Company has not granted SARs in a significant number of years, management believes that the SARs have similar features and should function in a similar manner to employee stock options and therefore a six-year average expected life was assigned to the SARs granted in 2006.

#### NOTE L - Other Comprehensive Income

The following table summarizes the cumulative net gain/(loss) by component, net of tax, within other comprehensive income as of December 31, 2006, 2005 and 2004.

	December 31,		
	2006	2005	2004
(Dollars in thousands)			
Foreign currency translation adjustment	\$ (1,583)	\$ (2,188)	\$ (133)
Change in the fair value of derivative financial instruments (net of taxes of \$322 in			
2006, \$0 in 2005 and \$0 in 2004)	4,604	3,981	(4,025)
Minimum pension and other retirement plan liability (net of taxes of \$1,108 in 2006,			
\$0 in 2005 and \$0 in 2004)	(26,341)	(36,830)	(15,775)
Total	<del>\$(23,320</del> )	\$(35,037)	\$(19,933)
	<u></u> /	<u>···</u>	<del>```</del>

#### **Notes to Consolidated Financial Statements**

Brush Engineered Materials Inc. and Subsidiaries, December 31, 2006

# NOTE M - Segment Reporting and Geographic Information

Beginning in the fourth quarter 2006 and largely because the Company has a new chief operating decision maker, the operating segments will no longer be aggregated and the Company will report its four material segments separately. WAM is reported as Advanced Material Technologies and Services, Alloy Products reported as Specialty Engineered Alloys, Beryllium Products is now Beryllium and Beryllium Composites and TMI is Engineered Material Systems. Brush Ceramic Products Inc., a wholly owned subsidiary that formerly was part of Electronic Products, has been merged into the Beryllium and Beryllium Composites operating segment. The remaining portions of Electronic Products, due to their insignificance, are reported in the reconciling All Other column in the table below.

	Advanced Material Technologies	Specialty Engineered Alloys	Beryllium and Beryllium Composites	Engineered Material Systems	Subtotal	All Other	Total
(Dollars in thousands)	-		-	-			
2006							
Revenues from external							
customers	\$343,448	\$275,641	\$57,627	\$68,734	\$745,450	\$17,604	\$763,054
Intersegment revenues	4,332	5,572	732	3,000	13,636	27	13,663
Operating profit (loss)	30,536	7,948	7,448	2,742	48,674	(4,834)	43,840
Depreciation, depletion							
and amortization	5,770	12,540	1,040	2,436	21,786	2,816	24,602
Expenditures for long-lived							
assets	6,283	4,530	1,920	1,756	14,489	1,033	15,522
Assets	149,451	234,366	33,042	26,232	443,091	55,515	498,606
2005							
Revenues from external							
customers	209,540	213,805	53,070	49,956	526,371	14,896	541,267
Intersegment revenues	2,752	3,832	728	2,251	9,563	_	9,563
Operating profit (loss)	20,417	(5,351)	9,845	663	25,574	(6,065)	19,509
Depreciation, depletion							
and amortization	2,903	12,230	969	2,460	18,562	3,113	21,675
Expenditures for long-lived							
assets	4,002	7,140	965	1,060	13,167	608	13,775
Assets	90,902	211,664	32,160	25,923	360,649	42,053	402,702
2004							
Revenues from external							
customers	165,695	207,556	52,530	53,631	479,412	16,864	496,276
Intersegment revenues	2,619	3,410	978	2,077	9,084	_	9,084
Operating profit (loss)	18,793	(5,181)	8,034	1,876	23,522	1,512	25,034
Depreciation, depletion							
and amortization	2,310	13,400	1,035	2,410	19,155	3,206	22,361
Expenditures for long-lived							
assets	2,023	4,160	1,327	930	8,440	710	9,150
Assets	57,648	213,725	34,860	25,283	331,516	82,665	414,181

Intersegment revenue is eliminated in consolidation. The revenues from external customers are presented net of intersegment revenues. Segments are evaluated using earnings before interest and taxes.

The All Other column includes the operating results of Zentrix Technologies Inc., Circuits Processing Technology, Inc. (CPT) and BEM Services, Inc., all wholly owned subsidiaries, and other corporate expenses. Zentrix manufactures electronic packages and other components for sale to the telecommunications and computer and automotive electronics market while CPT manufactures circuitry for defense and commercial applications. BEM Services, Inc. provides administrative and financial services to the other business in the Company on a cost-plus basis. The All Other assets include the assets used by the aforementioned subsidiaries as well as cash and long-term deferred income taxes.

Sales from U.S. operations to external domestic and foreign customers were \$585.8 million in 2006, \$409.3 million in 2005 and \$376.5 million in 2004. Revenues attributed to countries based upon the location of customers and long-lived assets, which include property, plant and equipment, intangible assets and goodwill, deployed by country are as follows:

	2006	2005	2004
(Dollars in thousands)			-
Revenues			
United States	\$499,681	\$362,160	\$332,193
All other	263,373	179,107	164,083
Total	\$763,054	\$541,267	\$496,276
Long-lived Assets			
United States	\$196,328	\$183,127	\$184,410
All other	10,506	10,449	6,567
Total	\$206,834	\$193,576	\$190,977

No individual country, other than the United States, or customer accounted for 10% or more of the Company's revenues for the years presented. Revenues from outside the United States are primarily from Asia and Europe.

#### **NOTE N – Interest**

Interest expense associated with active construction and mine development projects is capitalized and amortized over the future useful lives of the related assets. The following chart summarizes the interest incurred, capitalized and paid, as well as the amortization of capitalized interest for 2006, 2005 and 2004.

	2006	2005	2004
(Dollars in thousands)			
Interest incurred	\$ 4,271	\$ 6,631	\$ 8,553
Less capitalized interest	136	259	<u> 176</u>
Total expense	\$ 4,135	\$ 6,372	176 \$ 8,377
Interest paid	\$ 3,874	\$ 7,345	\$ 6,103
Amortization of capitalized interest included in cost of sales	<u>\$ 525</u>	\$ 587	\$ 593

The difference in expense among 2006, 2005 and 2004 was due to changes in the level of outstanding debt and the average borrowing rate. Amortization of deferred financing costs within interest expense was \$0.5 million in 2006, \$1.1 million in 2005, and \$1.5 million in 2004. The amortization was lower in 2006 due to the early termination of debt and the write-off of \$2.8 million of associated deferred financing costs in 2005.

## **NOTE O - Income Taxes**

Income before income taxes and income taxes (benefit) are comprised of the following components, respectively:

(Dollars in thousands)	2006	2005	2004
Income before income taxes:			
Domestic	\$ 34,001	\$10,866	\$14,030
Foreign	5,704	2,271	2,627
Total income before income taxes	\$ 39,705	\$13,137	\$16,657
Income taxes (benefit):			
Current income taxes:			
Domestic	\$ 1,159	\$ 720	\$ 528
Foreign	1,602	443	821
Total current	2,761	1,163	1,349
Deferred income taxes:			
Domestic	\$ 9,259	\$ 2,213	\$ 9,280
Foreign	(160)	66	(208)
Valuation allowance	(21,758)	(8,130)	(9,280)
Total deferred	(12,659)	(5,851)	(208)
Total income taxes (benefit)	<u>\$ (9,898)</u>	<u>\$ (4,688)</u>	<u>\$ 1,141</u>

The reconciliation of the federal statutory and effective income tax rates follows:

	2006	2005	2004
Federal statutory rate	34.0%	34.0%	34.0%
State and local income taxes, net of federal tax effect	2.0	3.0	0.7
Effect of excess of percentage depletion over cost depletion	(2.7)	(6.1)	(4.7)
Company-owned life insurance	_	(0.1)	34.1
Officers' compensation	1.0	1.5	3.1
Stock warrants	_	0.8	0.2
Extraterritorial income exclusion	(3.5)	(6.6)	(5.4)
Taxes on foreign source income	(1.3)	(1.8)	(1.8)
Valuation allowance	(54.8)	(61.9)	(55.7)
Other items	0.4	<u>1.5</u>	2.4
Effective tax rate (benefit)	(24.9)%	(35.7)%	6.9%

In accordance with the provisions of Statement No. 109, "Accounting for Income Taxes," the Company recorded a \$21.8 million reversal of valuation allowance reflected as a reduction to tax expense in 2006. This amount is comprised of a \$0.2 million current year utilization of net operating losses and a \$21.6 million reversal of the valuation allowance associated with the Company's determination that it is more likely than not that the deferred tax assets will be realized.

#### **Notes to Consolidated Financial Statements**

Brush Engineered Materials Inc. and Subsidiaries, December 31, 2006

The Company intends to maintain a valuation allowance on the deferred tax assets at its subsidiary in the U.K. until a realization event occurs to support reversal of all or a portion of the allowance.

Included in current domestic income taxes, as shown in the Consolidated Statements of Income, are \$1.2 million, \$0.6 million, and \$0.2 million of state and local income taxes in 2006, 2005 and 2004, respectively.

The Company made domestic and foreign income tax payments of \$1.8 million, \$2.1 million and \$1.1 million in 2006, 2005 and 2004, respectively.

Deferred tax assets and liabilities are determined based on temporary differences between the financial reporting bases and the tax bases of assets and liabilities. Deferred tax assets and (liabilities) recorded in the Consolidated Balance Sheets consist of the following at December 31, 2006 and 2005:

	2006	2005
(Dollars in thousands)		
Post-retirement benefits other than pensions	\$ 13,484	\$ 11,827
Alternative minimum tax credit	11,147	10,981
Other reserves	5,818	4,445
Environmental reserves	1,715	1,662
Pensions	7,838	12,549
Tax credit carryforward	2,092	2,092
Net operating loss carryforward	14,771	20,905
Capitalized interest expense	_	351
	56,865	64,812
Valuation allowance	(316)	(22,074)
Total deferred tax assets	56,549	42,738
Depreciation	(30,397)	(33,242)
Amortization	(3,898)	(1,507)
Inventory	(781)	(1,145)
Derivative instruments and hedging activities	(830)	(264)
Capitalized interest expense	(686)	`
Mine development	(833)	(1,184)
Miscellaneous	(159)	(341)
Total deferred tax liabilities	(37,584)	(37,683)
Net deferred tax asset	<u>\$ 18,965</u>	\$ 5,055

At December 31, 2006, for income tax purposes, the Company had domestic net operating loss carryforwards of \$38.0 million, which are scheduled to expire in calendar years 2022 through 2026. The Company also had foreign net operating loss carryforwards for income tax purposes totaling \$5.5 million that do not expire.

At December 31, 2006, the Company had alternative minimum tax loss carryforwards of \$20.2 million that do not expire. Utilization of these loss carryforwards is limited, on an annual basis, to 90% of alternative minimum taxable income. This limitation required the Company to record a \$0.2 million tax liability in 2006.

At December 31, 2006, the Company had research and experimentation tax credit and foreign tax credit carryforwards of \$2.1 million that are scheduled to expire in calendar years 2008 through 2020.

A provision has not been made with respect to \$17.2 million of unremitted earnings at December 31, 2006 that have been invested by foreign subsidiaries. It is not practical to estimate the amount of unrecognized deferred tax liability for undistributed foreign earnings.

#### **NOTE P – Earnings Per Share**

The following table sets forth the computation of basic and diluted net earnings per share (EPS):

		2006		2005		2004
Numerator for basic and diluted EPS:						
Net income (in thousands)	\$	49,603	\$	17,825	\$	15,516
Denominator:						
Denominator for basic EPS:						
Weighted-average shares outstanding	19	,665,000	19	,219,000	17	,865,000

Effect of dilutive securities:			
Stock options and SARs	542,000	137,000	205,000
Restricted stock	27,000	15,000	37,000
Warrants	_	_	57,000
Diluted potential common shares	569,000	152,000	299,000
·			<del></del>
Denominator for diluted EPS:			
Adjusted weighted-average shares outstanding	20,234,000	19,371,000	18,164,000
Basic EPS	\$ 2.52	\$ 0.93	\$ 0.87
	<u> </u>		
Diluted EPS	\$ 2.45	\$ 0.92	\$ 0.85
Photos El G	<u> </u>	ψ 0.02	ψ 0.00

Options to purchase common stock with exercise prices in excess of the average annual share price totaling 53,000 at December 31, 2006, 817,000 at December 31, 2005 and 361,000 at December 31, 2004 were excluded from the diluted EPS calculations as their effect would have been anti-dilutive.

## **NOTE Q** — Related Party Transactions

The Company had outstanding loans of \$0.1 million with five employees, including one executive officer, at December 31, 2006 and \$0.4 million with six employees, including two executive officers, as of December 31, 2005. The loans were made in the first quarter 2002 pursuant to life insurance agreements between the Company and the employees. The portion of the premiums paid by the Company is treated as a loan from the Company to the employees and the loans are secured by the insurance policies, which are owned by the employees. The agreements require each employee to maintain the insurance policy's cash surrender value in an amount at least equal to the outstanding loan balance. The loans are payable from the insurance proceeds upon the employee's death or at an earlier date due to the occurrence of specified events. The loans bear an interest rate equal to the applicable federal rate. There have been no modifications to the loan terms since the inception of the agreements. The outstanding loan balance was reduced in 2006 as a result of the repayment of a loan in full by an executive officer upon his retirement.

# **NOTE** R – Quarterly Data (Unaudited)

The following tables summarize selected quarterly financial data for the years ended December 31, 2006 and 2005:

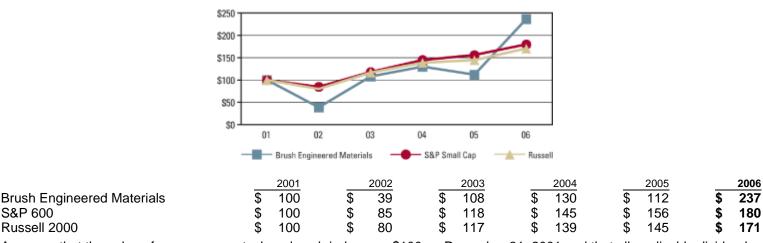
			2006		
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
(Dollars in thousands except per share data)	Quarter	Quarter	Quarter	Quarter	Total
Net sales	\$167,723	\$187,078	\$200,426	\$207,827	\$763,054
Gross profit	34,143	39,819	39,711	48,499	162,172
Percent of sales	20.4%	21.3%	19.8%	23.3%	21.3%
Net income	5,227	6,968	7,087	30,321	49,603
Net income per share of common stock:					
Basic	0.27	0.36	0.36	1.52	2.52
Diluted	0.27	0.35	0.35	1.48	2.45
Stock price range:					
High	21.53	26.37	28.53	36.36	
Low	16.10	18.01	20.38	23.40	
			2005		
	<del></del>		2005		
	First	Second	Third	Fourth	Total
(Dollars in thousands except per share data)	First Quarter	Second Quarter		Fourth Quarter	Total
(Dollars in thousands except per share data)  Net sales	Quarter	Quarter	Third Quarter	Quarter	
Net sales	Quarter \$130,372	Quarter \$134,651	Third Quarter \$135,614	Quarter \$140,630	\$541,267
, , , , ,	Quarter	Quarter	Third Quarter	Quarter	
Net sales Gross profit	Quarter \$130,372 28,577 21.9%	\$134,651 29,106 21.6%	Third Quarter \$135,614 25,940 19.1%	\$140,630 26,620 18.9%	\$541,267 110,243 20.4%
Net sales Gross profit Percent of sales Net income	Quarter \$130,372 28,577	Quarter \$134,651 29,106	Third Quarter \$135,614 25,940	Quarter \$140,630 26,620	\$541,267 110,243
Net sales Gross profit Percent of sales	Quarter \$130,372 28,577 21.9%	\$134,651 29,106 21.6%	Third Quarter \$135,614 25,940 19.1%	\$140,630 26,620 18.9%	\$541,267 110,243 20.4%
Net sales Gross profit Percent of sales Net income Net income per share of common stock:	\$130,372 28,577 21.9% 4,286	\$134,651 29,106 21.6% 5,530	Third Quarter  \$135,614 25,940 19.1% 3,908	\$140,630 26,620 18.9% 4,101	\$541,267 110,243 20.4% 17,825
Net sales Gross profit Percent of sales Net income Net income per share of common stock: Basic	\$130,372 28,577 21.9% 4,286	\$134,651 29,106 21.6% 5,530	Third Quarter \$135,614 25,940 19.1% 3,908	\$140,630 26,620 18.9% 4,101	\$541,267 110,243 20.4% 17,825
Net sales Gross profit Percent of sales Net income Net income per share of common stock: Basic Diluted	\$130,372 28,577 21.9% 4,286	\$134,651 29,106 21.6% 5,530	Third Quarter \$135,614 25,940 19.1% 3,908	\$140,630 26,620 18.9% 4,101	\$541,267 110,243 20.4% 17,825

Fourth quarter 2006 results include a \$21.3 million benefit related to the reversal of the Company's deferred tax valuation allowance. Fourth quarter 2005 results include a \$3.8 million pre-tax charge for costs related to the prepayment of subordinated debt and a \$5.9 million benefit related to the reversal of a portion of the Company's domestic deferred tax valuation allowance.

# **Performance Graph (Unaudited)**

The following graph sets forth the cumulative shareholder return on our common stock as compared to the cumulative total return of the S&P Small-cap 600 Index and the Russell 2000 Index. Brush Engineered Materials Inc. is a component company of the S&P Small-cap Index and the Russell 2000 Index.

#### Performance Comparison for 2007 Proxy-Brush Engineered Materials



Assumes that the value of our common stock and each index was \$100 on December 31, 2001 and that all applicable dividends were reinvested.

The Performance Graph is not intended to be part of the Notes to the Consolidated Financial Statements.

#### **Selected Financial Data**

Brush Engineered Materials Inc. and Subsidiaries (Dollars in thousands except for share data)

		2006		2005		2004		2003		2002
For the year										
Net sales	\$	763,054	\$	541,267	\$ 496	,276	\$	401,046	\$	372,829
Cost of sales		600,882	•	431,024		,202		328,008	_	324,932
Gross profit		162,172		110,243		,074		73,038		47,897
Operating profit (loss)		43,840		19,509		,034		(8,944)		(22,636)
Interest expense		4,135		6,372		,377		3,751		3,219
Income (loss) from continuing operations		,		-,-		, -		-,		-, -
Before income taxes		39,705		13,137	16	,657		(12,695)		(25,855)
Income taxes (benefit)		(9,898)		(4,688)		,141		576		9,749
Net income (loss)		49,603		17,825		,516		(13,226)		(35,604)
Earnings per share of common stock:		ĺ		,		•		, , ,		, , ,
Basic net income (loss)		2.52		0.93		0.87		(0.80)		(2.15)
Diluted net income (loss)		2.45		0.92		0.85		(0.80)		(2.15)
Dividends per share of common stock		_		_		_				
Depreciation and amortization		25,141		22,790	23	.826		20,731		20,640
Capital expenditures		15,522		13,775	9	,093		6,162		5,248
Mine development expenditures		´ —		· —		57		157		166
Year-end position										
Working capital		155,142		115,531	108	,799		85,141		82,645
Ratio of current assets to current liabilities		2.3 to 1		2.4 to 1	2.0	to 1		2.2 to 1		2.1 to 1
Property and equipment:										
At cost		557,861		540,420	540	,937		535,421		476,283
Cost less depreciation and impairment		175,929		177,062	177	,619		190,846		152,544
Total assets		498,606		402,702	414	,181		371,616		334,879
Other long-term liabilities		70,731		73,492	60	,527		64,097		65,977
Long-term debt		20,282		32,916	41	,549		85,756		36,219
Shareholders' equity		291,000		211,478	208	,138		153,573		159,094
Book value per share:										
Basic		14.80		11.00	1	1.65		9.27		9.61
Diluted		14.38		10.92	1	1.46		9.21		9.58
Weighted-average number of shares of stock										
outstanding:										
Basic		9,665,000		9,219,000	17,865			5,563,000		5,557,000
Diluted	2	0,234,000	1	9,371,000	18,164	,000	16	5,672,000	16	6,609,000
Shareholders of record		1,530		1,572		,683		1,791		1,864
Number of employees		2,185		1,970	1	,912		1,833		1,862

Minority interest of \$45,000 decreased the net loss for 2003.

In addition to the capital expenditures shown above, the Company purchased \$0.4 million of assets in 2005, \$0.9 million of assets in 2004 and \$51.8 million of assets in 2003 that were previously held under operating leases and used by the Company.

Changes in deferred tax valuation allowances decreased income tax expense by \$21.8 million, \$8.1 million and \$9.3 million in 2006, 2005 and 2004, respectively, and increased income tax expense by \$5.3 million and \$19.9 million in 2003 and 2002, respectively.

A special charge reduced net income by \$16.5 million in 1998.

See Notes to Consolidated Financial Statements.

	2001	2000	1999	1998	1997		1996
\$	472,569	\$ 563,690	\$ 455,707	\$ 409,892	\$ 433,801	•	376,279
	404,574	444,951	363,773	325,173	324,463		271,149
	67,995	118,739	91,934	84,719	109,338		105,130
	(14,069)	22,986	10,558	(10,313)			34,305
	3,327	4,652	4,173	1,249	553		1,128
	(17,396)	18,334	6,385	(11,562)	35,471		33,177
	(7,122)	4,169	(54)	(4,430)			8,686
	(10,274)	14,165	6,439	(7,132)	25,597	•	24,491
	(0.62)	0.87	0.40	(0.44)	1.58		1.55
	(0.62)	0.86	0.40	(0.44)	1.56		1.53
	0.24	0.48	0.48	0.48	0.46		0.42
	21,609	22,664	27,037	24,589	19,329		22,954
	23,130	21,306	16,758	36,732	53,155		26,825
	154	332	288	433	9,526	i	3,663
	110,894	143,387	124,831	100,992	100,599		128,172
	2.4 to 1	2.3 to 1	2.3 to 1	2.1 to 1	2.3 to 1		2.9 to 1
	469,663	449,697	440,234	421,467	463,689		404,127
	171,296	170,460	170,939	164,469	173,622		130,220
	403,653	452,506	428,406	403,690	383,852		355,779
	62,473	55,454	53,837	49,955	48,025		47,271
	47,251	43,305	42,305	32,105	17,905		18,860
	214,350	229,907	220,638	221,811	236,813	i	219,257
	12.98	14.11	13.62	13.63	14.60		13.84
	12.87	13.98	13.55	13.50	14.41		13.72
	6,519,000	16,292,000	16,199,000	16,268,000	16,215,000		5,846,000
1	6,651,000	16,449,000	16,280,000	16,425,000	16,429,000	1	5,980,000
	1,981	2,101	2,330	2,313	2,329		2,407
	1,946	2,500	2,257	2,167	2,160		1,926

Directors, Officers, Facilities and Subsidiaries

# Board of Directors and Committees of the Board

**Albert C. Bersticker** <sup>2, 4, 5</sup> Retired Chairman and CEO Ferro Corporation

Richard J. Hipple <sup>3</sup>
Chairman,
President and CEO
Brush Engineered
Materials Inc.

Joseph P. Keithley <sup>1, 3, 4, 5</sup> Chairman, President and CEO Keithley Instruments, Inc.

William B. Lawrence 1, 3, 4
Former Executive
Vice President,
General Counsel and
Secretary
TRW, Inc.

William P. Madar <sup>2, 3, 4</sup> Retired Chairman and Former CEO Nordson Corporation

William G. Pryor <sup>1, 4, 5</sup> Retired President Van Dorn Demag Corporation Former President and CEO Van Dorn Corporation

N. Mohan Reddy <sup>2, 3, 4</sup>
Dean
The Weatherhead School of
Management

Case Western Reserve
University

William R. Robertson <sup>1, 4</sup>
Retired Partner
Kirtland Capital Partners

John Sherwin, Jr. <sup>2, 3, 4, 5</sup> Lead Director President

Mid-Continent Ventures, Inc. 1 Audit Committee

2 Compensation Committee

3 Executive Committee

4 Governance and Organization

Committee

5 Retirement Plan Review Committee

Corporate and Executive Officers

Richard J. Hipple <sup>1, 2</sup> Chairman, President and CEO

John D. Grampa 1, 2 Senior Vice President Finance and Chief Financial Officer

**Daniel A. Skoch** <sup>1, 2</sup> Senior Vice President Administration

**Michael C. Hasychak** <sup>1</sup> *Vice President, Treasurer and Secretary* 

James P. Marrotte <sup>1</sup> Vice President, Controller

John J. Pallam <sup>1</sup> Vice President, General Counsel

Gary W. Schiavoni <sup>1</sup>
Assistant Treasurer and
Assistant Secretary

1 Corporate Officers 2 Executive Officers

### **Operating Groups**

Alloy Products

Donald G. Klimkowicz,

President

Beryllium Products
Michael D. Anderson,
President

Brush International, Inc.

Mark M. Comerford, President

Brush Resources Inc.

Alex C. Boulton, President

Alex O. Boulton, I reside

Technical Materials, Inc.

Alfonso T. Lubrano. President

Williams Advanced Materials

Richard W. Sager, President

#### Offices and Facilities

# **Manufacturing Facilities**

Brewster, New York Buellton, California Buffalo, New York Delta, Utah Elmore, Ohio Fremont, California Limerick, Ireland Lincoln, Rhode Island Lorain, Ohio Milwaukee, Wisconsin Newburyport, Massachusetts Oceanside, California Reading, Pennsylvania Santa Clara, California Singapore Suhic Ray Philinnings

Taipei, Taiwan - 62 -Tucson, Arizona Wheatfield, New York

# **Corporate Offices**

Cleveland, Ohio

# **Domestic Service Centers**

Elmhurst, Illinois Warren, Michigan

# **International Service Centers and Sales Offices**

Fukaya, Japan Maastricht, The Netherlands Singapore Stuttgart, Germany Theale, England Tokyo, Japan

# International Representative Offices

Hong Kong Shanghai, China Taipei, Taiwan Incheon, Korea

# Subsidiaries of Registrant

The Company has the following subsidiaries, all of which are wholly owned and included in the consolidated financial statements.

State or Country

Name of Subsidiary of Incorporation

BEM Services, Inc. Ohio

Brush Wellman Inc. Ohio

Brush International, Inc. Ohio

Brush Resources Inc. Utah

Brush Wellman GmbH Germany

Brush Wellman (Japan), Ltd. Japan

Brush Wellman Limited England

Brush Wellman (Singapore) Pte Ltd. Singapore

CERAC, incorporated Wisconsin

OMC Scientific Holdings Limited Ireland

Technical Materials, Inc.

Ohio

Thin Film Technology, Inc.

California

Williams Advanced Materials Inc. New York

Williams Advanced Materials Pte Ltd. Singapore

Zentrix Technologies Inc. Arizona

## Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Annual Report (Form 10-K) of Brush Engineered Materials Inc. and subsidiaries of our reports dated March 12, 2007, with respect to the consolidated financial statements of Brush Engineered Materials Inc. and subsidiaries, Brush Engineered Materials Inc. and subsidiaries' management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Brush Engineered Materials Inc. and subsidiaries, included in the 2006 Annual Report to Shareholders of Brush Engineered Materials Inc.

Our audits also included the financial statement schedule of Brush Engineered Materials Inc. and subsidiaries listed in Item 15(a). This schedule is the responsibility of Brush Engineered Materials Inc.'s management. Our responsibility is to express an opinion based on our audits. In our opinion, as to which the date is March 15, 2007, the financial statement schedule referred to above, when considered in relation to the basic financial statements taken as a whole, present fairly in all material respects the information set forth therein.

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement Number 333-88994 on Form S-8 dated May 24, 2002;
- (2) Post-Effective Amendment Number 1 to Registration Statement Number 333-74296 on Form S-8 dated November 30, 2001;
- (3) Post-Effective Amendment Number 5 to Registration Statement Number 2-64080 on Form S-8 dated May 17, 2000;
- (4) Post-Effective Amendment Number 1 to Registration Statement Number 333-63355 on Form S-8 dated May 17, 2000;
- (5) Post-Effective Amendment Number 1 to Registration Statement Number 33-28605 on Form S-8 dated May 17, 2000;
- (6) Post-Effective Amendment Number 1 to Registration Statement Number 333-63353 on Form S-8 dated May 17, 2000;
- (7) Post-Effective Amendment Number 1 to Registration Statement Number 333-63357 on Form S-8 dated May 17, 2000;
- (8) Post-Effective Amendment Number 1 to Registration Statement Number 333-52141 on Form S-8 dated May 17, 2000;
- (9) Post-Effective Amendment Number 1 to Registration Statement Number 2-90724 on Form S-8 dated May 17, 2000;
- (10) Registration Statement Number 333-63353 on Form S-8 dated September 14, 1998;
- (11) Registration Statement Number 333-63355 on Form S-8 dated September 14, 1998;
- (12) Registration Statement Number 333-63357 on Form S-8 dated September 14, 1998;
- (13) Registration Statement Number 333-52141 on Form S-8 dated May 5, 1998;
- (14) Registration Statement Number 33-28605 on Form S-8 dated May 5, 1989;
- (15) Registration Statement Number 2-90724 on Form S-8 dated April 27, 1984;
- (16) Post-Effective Amendment Number 3 to Registration Statement Number 2-64080 on Form S-8 dated April 22, 1983;
- (17) Registration Statement Number 333-114147 on Form S-3 dated July 1, 2004;
- (18) Registration Statement Number 333-127130 on Form S-8 dated August 3, 2005;
- (19) Registration Statement Number 333-133428 on Form S-8 dated April 20, 2006; and
- (20) Registration Statement Number 333-133429 on Form S-8 dated April 20, 2006.

/s/ Ernst & Young LLP

Cleveland, Ohio March 15, 2007

# **POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS, that each of the undersigned directors and officers of BRUSH ENGINEERED MATERIALS INC., an Ohio corporation (the "Corporation"), hereby constitutes and appoints Richard J. Hipple, John D. Grampa, Michael C. Hasychak and David P. Porter, and each of them, their true and lawful attorney or attorneys-in-fact, with full power of substitution and revocation, for them and in their names, place and stead, to sign on their behalf as a director or officer, or both, as the case may be, of the Corporation, an Annual Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 on Form 10-K for the fiscal year ended December 31, 2006, and to sign any and all amendments to such Annual Report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission granting unto said attorney or attorneys-in-fact, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as they might or could do in person, hereby ratifying and confirming all that said attorney or attorneys-in-fact or any of them or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands as of the 8th day of March, 2007.

/s/ Richard J. Hipple		
Richard J. Hipple, Chairman, President,	William P. Madar, Director	
Chief Executive Officer and Director		
(Principal Executive Officer)		
/s/ John D. Grampa	/s/ William G. Pryor	
John D. Grampa, Senior Vice President	William G. Pryor, Director	
Chief Financial Officer	• •	
(Principal Financial Officer)		
/s/ Albert C. Bersticker	/s/ N. Mohan Reddy	
Albert C. Bersticker, Director	N. Mohan Reddy, Director	
/s/ Joseph P. Keithley	/s/ William R. Robertson	
Joseph P. Keithley, Director	William R. Robertson, Director	
/s/ William B. Lawrence	/s/ John Sherwin, Jr.	
William B. Lawrence, Director	John Sherwin, Jr., Director	

#### **CERTIFICATIONS**

- I, Richard J. Hipple, certify that:
- I have reviewed this annual report on Form 10-K of Brush Engineered Materials Inc.;
- 2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our
    conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by
    this report based on such evaluation; and
  - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 15, 2007

/s/ Richard J. Hipple
Richard J. Hipple
Chairman of the Board, President
and Chief Executive Officer

#### **CERTIFICATIONS**

I, John D. Grampa, certify that:

- 1) I have reviewed this annual report on Form 10-K of Brush Engineered Materials Inc.;
- 2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our
    conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by
    this report based on such evaluation; and
  - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 15, 2007

/s/ John D. Grampa John D. Grampa Senior Vice President Finance and Chief Financial Officer

# Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in connection with the filing of the Annual Report on Form 10-K of Brush Engineered Materials Inc. (the "Company") for the year ended December 31, 2006, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies, that, to such officer's knowledge:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o (d)), and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

Dated: March 15, 2007

/s/ Richard J. Hipple

Richard J. Hipple Chairman of the Board, President and Chief Executive Officer

/s/ John D. Grampa

John D. Grampa Senior Vice President Finance and Chief Financial Officer