
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, 2010

OR

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

For the Transition Period from to

Commission File Number 1-15885

MATERION CORPORATION

(Exact name of Registrant as specified in its charter)

Ohio

*(State or other jurisdiction of
incorporation or organization)*

34-1919973

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

6070 Parkland Blvd., Mayfield Heights, Ohio

(Address of principal executive offices)

44124

(Zip Code)

Registrant's telephone number, including area code

216-486-4200

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

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, no par value	New York Stock Exchange

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

None

Indicate by check mark if 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 Act. Yes ☐
 No ☒

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 ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐
 No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) 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, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐ Smaller reporting company ☐
 (Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

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 July 2, 2010 was \$387,244,077.

As of February 21, 2011, there were 20,357,787 common shares, no par value, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the annual meeting of shareholders to be held on or about May 4, 2011 are incorporated by reference into Part III.

MATERION CORPORATION

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Year Ended December 31, 2010

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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: consumer electronics, defense and science, industrial components and commercial aerospace, energy, automotive electronics, telecommunications infrastructure, medical and appliance;
- Changes in product mix and the financial condition of customers;
- Actual sales, operating rates and margins for 2011;
- 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, including the impact of fluctuating prices on inventory values;
- Our success in integrating newly acquired businesses, including the acquisitions of Materion Precision Optics and Thin Film Coatings Inc. (formerly known as Barr Associates, Inc.) and Materion Advanced Materials Technologies and Services Corp. (formerly known as Academy Corporation);
- The impact of the results of Materion Precision Optics and Thin Film Coatings Inc. and Materion Advanced Materials Technologies and Services Corp. on our ability to achieve fully the strategic and financial objectives related to these acquisitions;
- Our success in implementing our strategic plans and the timely and successful completion and start-up of any capital projects, including the new primary beryllium facility in Elmore, Ohio;
- The availability of adequate lines of credit and the associated interest rates;
- Other financial factors, including the cost and availability of raw materials (both base and precious metals), metal financing fees, tax rates, exchange rates, pension costs and required cash contributions and other employee benefit costs, energy costs, regulatory compliance costs, the cost and availability of insurance, and the impact of our stock price on the cost of incentive compensation plans;
- 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 operations;
- The conclusion of pending litigation matters in accordance with our expectation that there will be no material adverse effects;
- The amount and timing of repurchases of our Common Stock, if any;
- The timing and ability to achieve further efficiencies and synergies resulting from our name change, from Brush Engineered Materials Inc. to Materion Corporation, and product line alignment under the Materion name and Materion brand; and
- The risk factors set forth elsewhere in Part I, Item 1A of this Form 10-K.

Item 1. BUSINESS

Materion Corporation (formerly known as Brush Engineered Materials Inc.), through its wholly owned subsidiaries, is an integrated producer of high performance advanced engineered materials used in a variety of electrical, electronic, thermal and structural applications. Our products are sold into numerous markets, including consumer electronics, defense and science, industrial components and commercial aerospace, energy, automotive electronics, telecommunications infrastructure, medical and appliance. As of December 31, 2010, we had 2,484 employees.

In the first quarter 2011, we announced the change of our name from Brush Engineered Materials Inc. to Materion Corporation. The names of all of our active subsidiaries are changing as well and each subsidiary will have Materion as part of their name. The legal and ownership structure of our subsidiaries will remain unchanged.

This name change did not alter our senior management structure or how the chief decision maker evaluates the performance of our businesses. We continue to have the same four reportable segments as we had previously with no change in their make up, although the names of those segments have changed. Advanced Material Technologies and Services has been renamed as Advanced Material Technologies; Specialty Engineered Alloys is now known as Performance Alloys; Beryllium and Beryllium Composites has been shortened to Beryllium and Composites; and Engineered Material Systems has been changed to Technical Materials.

All Other includes our parent company expenses, other corporate charges and the operating results of Materion Services Inc., a wholly owned subsidiary that provides administrative and financial oversight services to our other businesses on a cost-plus basis. Corporate employees not included in a reportable segment totaled 92 as of December 31, 2010.

We use our web site, www.materion.com, as a channel for routine distribution of important information, including news releases, analyst presentations, and financial information. We post filings as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC, including our annual, quarterly, and current reports on Forms 10-K, 10-Q, and 8-K; our proxy statements; and any amendments to those reports or statements. All such postings and filings are available on our web site free of charge. In addition, this web site allows investors and other interested persons to sign up to automatically receive e-mail alerts when we post news releases and financial information on our web site. The SEC also maintains a web site, www.sec.gov, that contains reports, proxy and information statements, and other information regarding issuers who file electronically with the SEC. The content on any web site referred to in this Annual Report on Form 10-K is not incorporated by reference into this annual report unless expressly noted.

ADVANCED MATERIAL TECHNOLOGIES

Sales for this segment were \$879.0 million, or 67% of total sales, in 2010; \$460.8 million, or 64% of total sales, in 2009; and \$480.3 million, or 53% of total sales, in 2008. As of December 31, 2010, Advanced Material Technologies had 1,089 employees.

Advanced Material Technologies 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, advanced chemicals, optics, performance coatings and microelectronic packages. These products are used in wireless, semiconductor, photonic, hybrid and other microelectronic applications within the consumer electronics and telecommunications infrastructure markets. Other key markets for these products include medical, defense and science, energy and industrial components. Advanced Material Technologies also has metal cleaning operations and in-house refineries that allow for the reclaim of precious metals from internally generated or customers' scrap.

Advanced Material Technologies' products are sold directly from its facilities throughout the U.S., Asia and Europe, 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., Solar Applied Materials Technology Corp. and a number of smaller regional and national suppliers.

Advanced Material Technologies — Sales and Backlog

The backlog of unshipped orders for Advanced Material Technologies as of December 31, 2010, 2009 and 2008 was \$55.4 million, \$51.3 million and \$34.6 million, respectively. Backlog is generally represented by purchase orders that may be terminated under certain conditions. We expect that substantially all of our backlog of orders for this segment at December 31, 2010 will be filled during 2011.

Sales are made to over 7,100 customers. Government sales accounted for less than 1% of the sales volume in 2010, 2009 and 2008. Sales outside the United States, principally to Europe and Asia, accounted for approximately 19% of sales in 2010, 29% of sales in 2009 and 28% of sales in 2008. Other segment reporting and geographic information is contained in Note M of Notes to Consolidated Financial Statements, which can be found in Part II, Item 8 of this Form 10-K and which is incorporated herein by reference.

Advanced Material Technologies — 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 Advanced Material Technologies amounted to \$4.0 million in 2010, \$3.2 million in 2009 and \$2.9 million in 2008. A staff of 22 scientists, engineers and technicians was employed in this effort as of year-end 2010.

PERFORMANCE ALLOYS

Sales for this segment were \$293.8 million, or 23% of total sales, in 2010; \$172.5 million, or 24% of total sales, in 2009; and \$299.9 million, or 33% of total sales, in 2008. As of December 31, 2010, Performance Alloys had 893 employees.

Performance Alloys manufactures and sells three main product families: strip products, bulk products and beryllium hydroxide. Strip products, the larger of the product families, include thin gauge precision strip and thin diameter rod and wire. These copper and nickel 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 consumer electronics, telecommunications infrastructure, automotive electronics, appliance and medical. Performance Alloys' primary direct competitor in strip form beryllium alloys is NGK Insulators, Ltd. of Nagoya, Japan, with subsidiaries in the United States and Europe. Performance Alloys also competes with alloy systems manufactured by Global Brass and Copper, Inc., 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.

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, thermal conductivity or lubricity. While the majority of bulk products contain beryllium, a growing portion of bulk products' sales is from non-beryllium-containing alloys as a result of product diversification efforts. Applications for bulk products include oil and gas drilling components, bearings, bushings, welding rods, plastic mold tooling, and undersea telecommunications housing equipment. In the area of bulk products, in addition to NGK Insulators, Ltd., Performance Alloys competes with several smaller regional producers such as International Beryllium Corp., Ningxia Orient Tantalum in China and LeBronze Industriel in Europe.

Beryllium hydroxide is produced at our milling operations in Utah from our bertrandite mine and purchased beryl ore. The hydroxide is used primarily as a raw material input for strip and bulk products and, to a lesser extent, by the Beryllium and Composites segment. External sales of hydroxide from the Utah operations were less than 4% of Performance Alloys' total sales in each of the three most recent years. We also sell beryllium hydroxide externally to NGK Insulators, Ltd.

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

Performance Alloys — Sales and Backlog

The backlog of unshipped orders for Performance Alloys as of December 31, 2010, 2009 and 2008 was \$98.9 million, \$68.6 million and \$55.5 million, respectively. Backlog is generally represented by purchase orders that may be terminated under certain conditions. We expect that substantially all the backlog of orders for this segment as of December 31, 2010 will be filled during 2011.

Sales are made to over 1,700 customers. Performance Alloys had government sales accounting for less than 1% of segment sales in 2010 and 2009 and none in 2008. Sales outside the United States, principally to Europe and Asia, accounted for approximately 58% of sales in 2010 and 57% of sales in 2009 and 2008. Other segment reporting and geographic information is contained in Note M of Notes to Consolidated Financial Statements, which can be found in Part II, Item 8 of this Form 10-K and which is incorporated herein by reference.

Performance 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 \$1.8 million in 2010, \$2.2 million in 2009 and \$2.3 million in 2008. A staff of seven scientists, engineers and technicians was employed in this effort as of year-end 2010.

BERYLLIUM AND COMPOSITES

Sales for this segment were \$61.9 million, or 5% of total sales, in 2010; \$47.0 million, or 7% of total sales, in 2009; and \$63.6 million, or 7% of total sales, in 2008. As of December 31, 2010, Beryllium and Composites had 226 employees.

Beryllium and Composites manufactures beryllium-based metals and metal matrix composites in rod, sheet, foil and a variety of customized forms at our 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 produced at our Tucson, Arizona facility. Defense and science is the largest market for Beryllium and Composites, while other markets served include industrial components and commercial aerospace, medical, energy and telecommunications infrastructure. Products are also sold for acoustics and optical scanning applications. A majority of defense sales are made to contractors and subcontractors instead of directly to government entities. In June 2008, we announced that Materion Brush Inc. (formerly known as Brush Wellman Inc.), a wholly owned subsidiary, had entered into an agreement with the Department of Defense to construct a \$93.6 million primary beryllium facility. This facility will produce primary beryllium, the feedstock material used to produce beryllium metal products. Construction of this facility was completed in 2011, and the start-up is underway. Beryllium-containing products are sold throughout the world through a direct sales organization and through company-owned and independent distribution centers. While Beryllium and Composites is the only domestic producer of metallic beryllium, it competes primarily with designs utilizing other materials including metals, metal matrix and organic composites. Electronic components utilizing beryllia are used in the telecommunications infrastructure, medical, industrial components and commercial aerospace, and defense and science markets. These products are distributed through direct sales and independent sales agents. Direct competitors include American Beryllia Inc. and CBL Ceramics Limited.

Beryllium and Composites — Sales and Backlog

The backlog of unshipped orders for Beryllium and Composites as of December 31, 2010, 2009 and 2008 was \$26.1 million, \$38.1 million and \$28.7 million, respectively. Backlog is generally represented by purchase orders that may be terminated under certain conditions. We expect that substantially all of our backlog of orders for this segment at December 31, 2010 will be filled during 2011.

Sales are made to over 300 customers. Government sales accounted for less than 2% of Beryllium and Composites' sales in 2010 and 2009, and less than 1% of segment sales in 2008. Sales outside the United States, principally to Europe and Asia, accounted for approximately 22% of sales in each of 2010 and 2009, and 23% of sales in 2008. Other segment reporting and geographic information is contained in Note M of Notes to Consolidated Financial Statements, which can be found in Part II, Item 8 of this Form 10-K and which is incorporated herein by reference.

Beryllium and 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 \$1.3 million in 2010, \$1.4 million in 2009 and \$1.3 million in 2008. A staff of seven scientists, engineers and technicians was employed in this effort as of year-end 2010. Some research and development projects, expenditures for which are not material, were externally sponsored and funded.

TECHNICAL MATERIALS

Sales for this segment were \$67.5 million, or 5% of total sales, in 2010; \$34.7 million, or 5% of total sales, in 2009; and \$65.9 million, or 7% of total sales, in 2008. As of December 31, 2010, Technical Materials had 184 employees.

Technical Materials manufactures 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 while the largest markets are automotive electronics and consumer electronics. The defense and science, energy and medical markets are smaller, but offer further growth opportunities. Technical Materials' products are manufactured at our Lincoln, Rhode Island facility and sold directly and through its sales representatives. Technical Materials' major competitors include Umicore S.A., Heraeus Inc. and Doduco, Inc.

Technical Materials — Sales and Backlog

The backlog of unshipped orders for Technical Materials as of December 31, 2010, 2009 and 2008 was \$16.3 million, \$7.6 million and \$7.6 million, respectively. Backlog is generally represented by purchase orders that may be terminated under certain conditions. We expect that substantially all of our backlog of orders for this segment at December 31, 2010 will be filled during 2011.

Sales are made to over 200 customers. Technical Materials did not have any sales to the government for 2010, 2009 or 2008. Sales outside the United States, principally to Europe and Asia, accounted for approximately 26% of Technical Materials' sales in 2010, 21% of sales in 2009 and 17% of sales in 2008. Other segment reporting and geographic information is contained in Note M of Notes to Consolidated Financial Statements, which can be found in Part II, Item 8 of this Form 10-K and which is incorporated herein by reference.

Technical Materials — 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 Technical Materials were nominal in 2010, 2009 and 2008.

GENERAL

Availability of Raw Materials

The principal raw materials we use are aluminum, beryllium, cobalt, copper, gold, nickel, palladium, platinum, ruthenium, silver and tin. Ore reserve data can be found in Part II, Item 7 of this Form 10-K. 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.

Standards for exposure to beryllium are under review by the U.S. Occupational Safety and Health Administration (OSHA) and by other governmental and private standard-setting organizations. One result of these reviews will likely be more stringent worker safety standards. Some organizations, such as the California Occupational Health and Safety Administration and the American Conference of Governmental Industrial Hygienists, have adopted standards that are more stringent than the current standards of OSHA. The development, proposal or adoption of more stringent standards may affect buying decisions by the users of beryllium-containing products. If the standards are made more stringent and/or our customers or other downstream users decide to reduce their use of beryllium-containing products, our results of operations, liquidity and financial condition could be materially adversely affected. The impact of this potential 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. The magnitude of this potential adverse effect cannot be estimated.

Executive Officers of the Registrant

<u>Name</u>	<u>Age</u>	<u>Positions and Offices</u>
Richard J. Hipple	58	<i>Chairman of the Board, President and Chief Executive Officer.</i> In May 2006, Mr. Hipple was named Chairman of the Board and Chief Executive Officer of Materion Corporation. 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 Performance Alloys 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 2002. Prior to joining Materion, 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. Mr. Hipple has served on the Board of Directors of Ferro Corporation since 2007 and as its Lead Director since April 2010.
John D. Grampa	63	<i>Senior Vice President Finance and Chief Financial Officer.</i> 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 positions at Avery Dennison Corporation (producer of pressure sensitive materials, office products, labels and other converted products) from 1984.
Daniel A. Skoch	61	<i>Senior Vice President Administration.</i> 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 this 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.

The businesses of many of 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 the demand for our products and reduce our sales and profitability.

A substantial number of our customers are in the consumer electronics, telecommunications infrastructure, defense and science, industrial components and commercial aerospace, automotive electronics and appliance industries. Each of these industries is cyclical in nature, influenced by a combination of factors that could have a negative impact on our business, including, among other things, periods of economic growth or recession, strength or weakness of the U.S. 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 recent global economic crisis had, and any additional negative or uncertain worldwide economic conditions may have, a negative impact on our financial performance.

The recent global economic crisis adversely affected the global economy. Some customers experienced difficulty in obtaining adequate financing due to the disruption in the credit markets, which has impacted our sales. Our exposure to bad debt losses may also increase if customers are unable to pay for products previously ordered. The severe recession has also caused higher unemployment rates globally which could have an adverse effect on demand for consumer electronics, which comprised 41% of our sales in 2010. Any additional negative or uncertain financial and macroeconomic conditions may have a significant adverse effect on our sales, profitability and results of operations.

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

We have been active over the last several years in pursuing niche acquisitions. For example, during 2010 we completed the acquisition of Materion Advanced Materials Technologies and Services Corp. (formerly known as Academy Corporation). 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.

In addition, there may be liabilities that we fail, or are unable, to discover in the course of performing due diligence investigations on the assets or companies we have already acquired or may acquire in the future. We cannot assure that rights to indemnification by the sellers of these assets or companies to us, even if obtained, will be enforceable, collectible or sufficient in amount, scope or duration to fully offset the possible liabilities associated with the business or property acquired. Any such liabilities, individually or in the aggregate, could have a materially adverse effect on our business, financial condition and results of operations.

The markets for our 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, copper beryllium has long been used for high reliability contacts in mobile handheld devices. Mobile device designers may justify using lower-performance materials in some of the less-critical components of mobile phones. 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 research and development costs, which could adversely affect our margins and profitability.

A portion of our revenue is derived from the sale of defense-related products through various contracts and subcontracts. These contracts may be suspended or canceled, which could have an adverse impact on our revenue.

In 2010, 12% of our revenue was derived from sales to customers in the defense and science market. A portion of these customers operate under contracts with the U.S. government, which are vulnerable to termination at any time, for convenience or default. Some of the reasons for cancellation include, but are not limited to, budgetary constraints or re-appropriation of government funds, timing of contract awards, violations of legal or regulatory requirements, and changes in political agenda. If these cancellations were to occur, it would result in a reduction on our revenue. For example, various projects, including the F-22 fighter aircraft, have been canceled, which had, and will have, a negative impact on our revenue.

Our 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 our customers, end users or to us. 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.

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

The terms of our credit facilities contain a number of restrictive covenants, including restrictions in our ability to, among other things, borrow and make investments, acquire other businesses and consign additional precious metals. These covenants could adversely affect us by limiting our ability to plan for or react to market conditions or to meet our capital needs, as well as adversely affect our ability to pursue our growth, acquisition strategies and other strategic initiatives.

Our failure to comply with the covenants contained in the terms of our indebtedness could result in an event of default, which could materially and adversely affect our operating results and our financial condition.

The terms of our credit facilities require us to comply with various covenants, including financial covenants. If the recent global economic downturn returns, it could have a material adverse impact on our earnings and cash flow, which could adversely affect our ability to comply with our financial covenants and could limit our borrowing capacity. Our ability to comply with these covenants depends, in part, on factors over which we may have no control. A breach of any of these covenants could result in an event of default under one or more of the agreements governing our indebtedness that, if not cured or waived, could give the holders of the defaulted indebtedness the right to terminate commitments to lend and cause all amounts outstanding with respect to the indebtedness to be due and payable immediately. Acceleration of any of our indebtedness could result in cross defaults under our other debt instruments. Our assets and cash flow may be insufficient to fully repay borrowings under all of our outstanding debt instruments if some or all of these instruments are accelerated upon an event of default, 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 28% of our sales in 2010, 35% in 2009 and 37% in 2008. We anticipate that international shipments will account for a significant portion of our sales for the foreseeable future. Revenue from international operations (principally Europe and Asia) amounted to approximately 17% of our sales in 2010 and 24% in each of 2009 and 2008. 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;
- disadvantages of competing against companies from countries that are not subject to U.S. laws and regulations, including the Foreign Corrupt Practices Act (FCPA);
- potentially adverse tax consequences due to overlapping or differing tax structures; and
- fluctuations in currency exchange rates.

Any of these risks could have an adverse effect on our international operations by reducing the demand for our products or reducing the prices at which we can sell our products, which could result in an adverse effect on our business, financial position, results of operations or cash flows.

In addition, we could be adversely affected by violations of the FCPA and similar worldwide anti-bribery laws. The FCPA and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. Our policies mandate compliance with these anti-bribery laws. We operate in many parts of the world that have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. We cannot assure you that our internal controls and procedures always will protect us from the reckless or criminal acts committed by our employees or agents. If we are found to be liable for FCPA violations, we could suffer from criminal or civil penalties or other sanctions, which could have a material adverse effect on our business.

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 substantially all of our assets (other than non-mining real property and certain other assets). 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. Additional information regarding our market risks is contained in Part II, Item 7A of this Form 10-K.

The availability and prices of some raw materials we use in our manufacturing operations fluctuate, and increases in raw material costs can adversely affect our operating results and our financial condition.

We manufacture advanced engineered materials using various precious and non-precious metals, including aluminum, beryllium, cobalt, copper, gold, nickel, palladium, platinum, ruthenium, silver and tin. 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

U.S. dollar exchange rate, production costs of United States and foreign competitors, anticipated or perceived shortages and other factors. Precious metal prices, including prices for gold and silver, have increased significantly in recent years. These higher prices can cause adjustments to our inventory carrying values, whether a result of quantity discrepancies, normal manufacturing losses, differences in scrap rates, theft or other factors, to have a greater impact on our profitability and cash flows. Also, the price of our products has increased in tandem with the rising metal prices, as a result of pass-through, which could deter customers from purchasing our products and adversely affect our sales.

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 are dependent on the successful scheduled completion of a new primary beryllium facility for our future supply of pure beryllium.

We have partnered with the Department of Defense to share in the cost of a new beryllium plant for primary beryllium feedstock. We may experience quality and/or production issues in start-up of this new facility. Any prolonged delays of pure beryllium production from the new plant could negatively impact our business.

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

We expect seasonal patterns to continue, which causes our quarterly results to fluctuate. For example, the Christmas season generates increased demand from our customers that manufacture consumer products. 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 results of operations.

Natural disasters, equipment failures, work stoppages, bankruptcies 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, bankruptcies, work stoppages due to strikes or lockouts, including those affecting the automotive industry, one of our major markets, and other unexpected events. For example, Delphi Corporation, a customer of three of our business units and the largest United States supplier of automotive parts, filed for bankruptcy protection in 2005. Delphi Corporation emerged from bankruptcy reorganization in 2009. Similar events could also affect other suppliers to our customers. Such 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," of this Form 10-K. 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, such as those increases which may occur from climate change legislation or other environmental mandates, 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 Reading, 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", of this Form 10-K. 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 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. In particular, the substantial volatility in world capital markets due to the recent global economic crisis has had a significant negative impact on the global financial markets.

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;
- a deterioration in the financial condition of the banks with which we do business;
- extreme volatility in our markets that increases margin or credit requirements; and
- the collateral pledge of substantially all of our assets in connection with our existing indebtedness, which limits our flexibility in raising additional capital.

These factors have adversely impacted our access to the financial markets from time to time. Negative or uncertain global economic conditions may make it difficult for us to access the credit market and to obtain financing or refinancing, as the case may be, to the extent necessary, on satisfactory terms or at all.

Low investment performance by our domestic pension plan assets may require us to increase our pension liability and expense, which may require us to fund a portion of 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. As of December 31, 2010, for pension accounting purposes, we assumed an 8.00% 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 pension asset return fall below our expectations, it

is likely that future pension expenses would increase. The actual return on our plan assets for the year ended December 31, 2010 was a gain of approximately 13.4%.

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 \$8.8 million to our pension plan in 2011. If our current assumptions and estimates are not correct, a contribution in years beyond 2011 may be greater than the projected 2011 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 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 maintained the assumed rate at which health care costs will increase for the next year at 8% for both December 31, 2010 and December 31, 2009. In addition, we have assumed that this health care cost increase trend rate will decline to 5% by 2019.

Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. A one percentage point increase in assumed health care cost trend rates would have increased the post-employment benefit obligation by \$0.7 million at December 31, 2010.

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 U.S. dollar. Revenues from customers outside of the United States (principally Europe and Asia) amounted to 28% of sales in 2010, 35% in 2009 and 37% in 2008. 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 U.S. dollar may negatively affect our financial performance. In the past, fluctuations in currency exchange rates, particularly for the euro and the yen, have impacted our sales, margins and profitability. The fair value of our net liability relating to outstanding foreign currency contracts was \$1.5 million at December 31, 2010, indicating that the average hedge rates were unfavorable compared to the actual year end market exchange rates. 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.

Our financial results are likely to be negatively impacted by an impairment of goodwill should our shareholder equity exceed our market capitalization for a number of quarters.

A goodwill impairment charge may be triggered by a reduction in actual and projected cash flows, which could be negatively impacted by the market price of our common shares. Our goodwill balance at December 31, 2010 was \$72.9 million. Any required non-cash impairment charge could significantly reduce this balance and have a material impact on our reported financial position and results of operations.

Changes in laws or regulations or the manner of their interpretation or enforcement could adversely impact our financial performance and restrict our ability to operate our business or execute our strategies.

New laws or regulations, or changes in existing laws or regulations or the manner of their interpretation or enforcement, could increase our cost of doing business and restrict our ability to operate our business or execute our strategies. This includes, among other things, the possible taxation under U.S. law of certain income from foreign operations, compliance costs and enforcement under the Dodd-Frank Wall Street Reform and Consumer Protection Act, and costs associated with complying with the Patient Protection and Affordable Care Act of 2010 and the regulations promulgated thereunder.

We are exposed to lawsuits in the normal course of business, which could harm our business.

During the ordinary conduct of our business, we may become involved in certain legal proceedings, including those involving product liability claims, third-party lawsuits relating to exposure to beryllium and claims against us of infringement of intellectual property rights of third parties. Due to the uncertainties of litigation, we can give no assurance that we will prevail at the conclusion of future claims. Certain of these matters involve types of claims that, if they result in an adverse ruling to us, could give rise to substantial liability which could have a material adverse effect on our business, operating results or financial condition.

We are presently uninsured for beryllium-related claims where the claimants' first exposure to beryllium occurred on or after January 1, 2008, and we have not undertaken to estimate the impact of such claims, which have yet to be asserted. In addition, some jurisdictions preclude insurance coverage for punitive damage awards. Accordingly, our profitability could be adversely affected if any current or future claimants obtain judgments for any uninsured compensatory or punitive damages. Further, an unfavorable outcome or settlement of a pending beryllium case or additional adverse media coverage could encourage the commencement of additional similar litigation.

Health issues, litigation and government regulation relating to our beryllium operations could significantly reduce demand for our products, limit our ability to operate and adversely affect our profitability.

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. This scrutiny includes regulatory decisions relating to the approval or prohibition of the use of beryllium-containing materials for various uses. 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. 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.

Our bertrandite ore mining and beryllium-related manufacturing operations and some of 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.

Our customers and we are subject to laws regulating worker exposure to beryllium. Standards for exposure to beryllium are under review by OSHA, the Department of Energy and by other governmental and private standard-setting organizations. One result of these reviews will likely be more stringent worker safety standards. Some organizations, such as the California Occupational Health and Safety Administration and the American Conference of Governmental Industrial Hygienists, have adopted standards that are more stringent than the current standards of OSHA. The development, proposal or adoption of more stringent standards may affect buying decisions by the users of beryllium-containing products. If the standards are made more stringent and/or our customers or other downstream users decide to reduce their use of beryllium-containing products, our results of operations, liquidity and financial condition could be materially adversely affected. The impact of this potential 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. The magnitude of this potential adverse effect cannot be estimated.

Our bertrandite ore mining and 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 non-compliance. Others, such as the federal Comprehensive Environmental Response, Compensation, and Liability Act, or CERCLA, 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. The Environmental Protection Agency is developing financial responsibility requirements under CERCLA for hardrock mining facilities. These future requirements could impose on us significant additional costs or obligations with respect to our extraction, milling and processing of ore. 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. These environmental laws and regulations could also require us to acquire costly equipment, obtain additional financial assurance, or 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.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

We operate manufacturing plants, service and distribution centers and other facilities throughout the world. During 2010, we made effective use of our productive capacities at our principal facilities. We believe that the quality and production capacity of our facilities is sufficient to maintain our competitive position for the foreseeable future. Information as of December 31, 2010, with respect to our significant facilities that are owned or leased, and the respective segments in which they are included, is set forth below.

<u>Location</u>	<u>Owned or Leased</u>	<u>Approximate Number of Square Feet</u>
<i>Corporate and Administrative Offices</i>		
Mayfield Heights, Ohio ⁽²⁾⁽³⁾⁽⁵⁾	Leased	53,800
<i>Manufacturing Facilities</i>		
Albuquerque, New Mexico ⁽¹⁾	Owned/Leased	13,000/80,200
Bloomfield, Connecticut ⁽¹⁾	Leased	23,400
Brewster, New York ⁽¹⁾	Leased	75,000
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	556,000/316,000
Fremont, California ⁽³⁾	Leased	16,800
Limerick, Ireland ⁽¹⁾	Leased	18,000
Lincoln, Rhode Island ⁽⁴⁾	Owned/Leased	130,000/11,000
Lorain, Ohio ⁽²⁾	Owned	55,000
Louny, Czech Republic ⁽¹⁾	Leased	19,800
Milwaukee, Wisconsin ⁽¹⁾	Owned/Leased	99,000/7,300
Newburyport, Massachusetts ⁽¹⁾	Owned	30,000
Reading, Pennsylvania ⁽²⁾	Owned	123,000
Santa Clara, California ⁽¹⁾	Leased	5,800
Singapore ⁽¹⁾	Leased	24,500
Subic Bay, Philippines ⁽¹⁾	Leased	5,000
Suzhou, China ⁽¹⁾	Leased	22,400
Taipei, Taiwan ⁽¹⁾	Leased	11,500
Tucson, Arizona ⁽³⁾	Owned	53,000
Tyngsboro, Massachusetts ⁽¹⁾	Leased	38,000
Westford, Massachusetts ⁽¹⁾	Leased	75,000
Wheatfield, New York ⁽¹⁾	Owned	35,000
Windsor, Connecticut ⁽¹⁾	Leased	34,700
<i>Service and Distribution Centers</i>		
Elmhurst, Illinois ⁽²⁾	Leased	28,500
Fukaya, Japan ⁽²⁾⁽³⁾⁽⁴⁾	Owned	35,500
Gallup, New Mexico ⁽¹⁾	Leased	5,000
Reading, England ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾	Leased	9,700
Singapore ⁽²⁾⁽³⁾⁽⁴⁾	Leased	2,500
Stuttgart, Germany ⁽²⁾⁽⁴⁾	Leased	24,800
Tokyo, Japan ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾	Leased	6,900
Warren, Michigan ⁽²⁾	Leased	34,500

⁽¹⁾ Advanced Material Technologies

⁽²⁾ Performance Alloys

⁽³⁾ Beryllium and Composites

⁽⁴⁾ Technical Materials

⁽⁵⁾ All Other

In addition to the above, the Company holds certain mineral rights on 7,500 acres in Juab County, Utah from which the beryllium-bearing ore, bertrandite, is mined by the open pit method. A portion of these mineral rights are held under lease. Ore reserve data can be found in Part II, Item 7 of this Form 10-K.

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, 2010, our subsidiary, Materion Brush Inc. (formerly known as Brush Wellman Inc.), was a defendant in two proceedings in state and federal courts brought by plaintiffs alleging that they have contracted, or have been placed at risk of contracting, beryllium sensitization or 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.

As of December 31, 2009, there were four beryllium cases (involving eight plaintiffs) and as of December 31, 2010, there were two beryllium cases (involving six plaintiffs). During 2010:

- one case (involving one plaintiff) was filed;
- the earlier dismissal of one purported class action (involving one named plaintiff) was affirmed by the court of appeals, as discussed more fully below; and
- two cases (involving two plaintiffs) were settled and dismissed.

The two pending beryllium cases as of December 31, 2010 involve four plaintiffs, plus two spouses with consortium claims. The Company has some insurance coverage, subject to an annual deductible.

The purported class action was Gary Anthony v. Small Tube Manufacturing Corporation d/b/a Small Tube Products Corporation, Inc., et al., filed in the Court of Common Pleas of Philadelphia County, Pennsylvania, case number 000525, on September 7, 2006. The case was removed to the U.S. District Court for the Eastern District of Pennsylvania, case number 06-CV-4419, on October 4, 2006. The only named plaintiff was Gary Anthony. The defendants were Small Tube Manufacturing Corporation, d/b/a Small Tube Products Corporation, Inc.; Admiral Metals Inc.; Tube Methods, Inc.; and Cabot Corporation. 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 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 monitoring of the class, attorneys' fees and expenses. Defendant Tube Methods, Inc. filed a third-party complaint against Brush Wellman Inc. in that action on November 15, 2006. Tube Methods alleged that Brush supplied beryllium-containing products to U.S. Gauge, and that Tube Methods worked on those products, but that Brush was liable to Tube Methods for indemnification and contribution. Brush filed its answer to the amended third-party complaint on October 19, 2007. On February 29, 2008, Brush filed a motion for summary judgment based on plaintiff's lack of any substantially increased risk of CBD. On September 30, 2008, the court granted the motion for summary judgment in favor of all of the defendants and dismissed plaintiff's class action complaint. On October 29, 2008, plaintiff filed a notice of appeal. The Court of Appeals granted a motion to stay the appeal due to the bankruptcy of one of the appellees, Millennium Petrochemicals. On July 29, 2009, after relief from a bankruptcy stay, the Company and the other appellees filed their brief in the Court of Appeals. The Court heard oral argument on January 11, 2010. On June 7, 2010, the Court affirmed the trial court's ruling.

Subsequent Events

From January 1, 2011 to March 8, 2011, the following subsequent events took place. On January 26, 2011, a Stipulation for Dismissal without Prejudice was filed in one case (involving one plaintiff), and the case is now dismissed. On February 7, 2011, in the sole remaining case (involving five plaintiffs), two spouses filed a Request for Dismissal of their consortium claims.

Other Claims

One of our subsidiaries, Materion Advanced Materials Technologies and Services Inc. (formerly known as Williams Advanced Materials Inc.) (WAM herein), was a party to patent litigation in the United States involving Target Technology Company, LLC of Irvine, California (Target). The litigation involved patents directed to technology used in the production of DVD-9s, which are high storage capacity DVDs, and other optical recording media. The patents at issue primarily concerned certain silver alloys used to make the semi-reflective layer in DVD-9s, a thin metal film that is applied to a DVD-9 through a process known as sputtering. The raw material used in the sputtering process is called a target. Target alleged that WAM manufactured and sold infringing sputtering targets to DVD manufacturers.

In the first action, filed in April 2003 by WAM against Target in the U.S. District Court, Western District of New York (case no. 03-CV-0276A (SR)) (the NY Action), WAM had asked the Court for a judgment declaring certain Target patents invalid and/or unenforceable and awarding WAM damages. Target counterclaimed alleging infringement of those patents and seeking a judgment for infringement, an injunction against further infringement and damages for past infringement. Following certain proceedings in which WAM was denied an injunction to prevent Target from suing and threatening to sue WAM's customers, Target filed an amended counterclaim and a third-party complaint naming certain of WAM's customers and other entities as parties to the case and adding related other patents to the NY Action. The action temporarily was stayed pending resolution of the ownership issue in the CA Action (defined below), as discussed more fully below. On January 26, 2009, the Court in the CA Action ordered that the case and remaining issues be transferred to the Court in the NY Action. As a result, the stay in the NY Action was lifted, and the Court in the NY Action consolidated the CA Action with the NY Action. With the parties having resumed pre-trial proceedings, Target had moved the Court to further amend its counts for infringement to include only certain claims of six of the patents claimed to be owned by Target. If granted, Target's counts for infringement of other claims in those patents and six other patents claimed to be owned by Target would have been removed from the NY Action. WAM had opposed the motion to the extent Target sought dismissal without prejudice of the counts for infringement of the other claims and other patents. Following a Court hearing on Target's motion to amend its pleadings and upon agreement of the parties, Target further amended its counts for infringement to include a total of nine U.S. patents and withdrawing four other patents. In response to Target's amendment of its pleadings, WAM moved for (a) dismissal of Target's counts for lack of jurisdiction on the basis that Target did not own the patents, (b) terminating sanctions on the basis of litigation misconduct by Target, and (c) a stay of discovery pending a decision by the Court on the first two WAM motions, all of which motions were pending. WAM continued to dispute Target's claims of ownership of all of the patents and denied both validity and infringement of the patent claims. Following a September 11, 2009 oral argument on WAM's motions, the Magistrate Judge reserved decision and pending the Court's action on the motions effectively stayed further discovery. On October 28, 2009, the Magistrate Judge recommended to the District Court Judge that the Court deny WAM's motion for dismissal of Target's counts for lack of jurisdiction on the basis of WAM's claim that Target did not own the patents. The Magistrate Judge reasoned that, in view of the earlier reported November 2008 settlement agreement between the Sony companies and Target, any lack of jurisdiction was cured when in July 2009, Target filed an amended answer. The Magistrate Judge further deferred until trial WAM's motion for terminating sanctions because of Target's litigation misconduct, but reopened discovery. Both WAM and Target objected to the Magistrate Judge's report, and their objections were to be heard by the District Court Judge before ruling on the recommendation. Notwithstanding the Magistrate Judge's recommendation, WAM continued to dispute Target's claims of ownership of the patents remaining in the Action, and to deny both validity and infringement of the patents. The Magistrate Judge by separate order and with the consent of the parties referred the case to a mediator for consideration under the Court's alternate dispute resolution plan.

Target in September 2004 filed in the U.S. District Court, Central District of California (case no. SAC04-1083 DOC (MLGx)), a separate action for infringement of one of the same patents named in the NY Action (the CA Action), naming as defendants WAM and certain of WAM's customers who purchased certain WAM sputtering targets. Target sought a judgment that the patent was valid and infringed by the defendants, a permanent injunction, a judgment on ownership of certain Target patents, damages adequate to compensate Target for the infringement, treble damages and attorneys' fees and costs. In April 2007, Sony DADC U.S., Inc. among other Sony companies (Sony) had intervened in the CA Action claiming ownership of that patent and others of the patents that Target sought to enforce in the NY Action. Sony's claim was based on its prior employment of the patentee and Target's founder, Han H. Nee (Nee), and had included a demand for damages against both Target and Nee. WAM on behalf of itself and its customers has a paid-up license from Sony under any rights that Sony has in those patents. Although trial of the CA Action had been scheduled for March 2009, in December 2008, a confidential settlement agreement was reached between Target and Sony, as well as a partial settlement agreement between Target and WAM releasing WAM and its customers from infringement of the one named patent. As a result, the issues not subject to any settlement were (1) a remaining count in which the Target parties had requested a judgment declaring that Target was the owner of certain of the Target patents and (2) WAM's request for sanctions against Target. Pursuant to various stipulations filed by the parties, the Court on January 6, 2009 ordered a dismissal with prejudice of all of the respective intervention claims and counterclaims between the Target parties and the Sony companies, and a dismissal without prejudice of the counterclaims by WAM and its defendant customers, the exception being the remaining declaratory judgment count on patent ownership. Following motions filed by the parties, the Court on January 26, 2009 ordered that the case and remaining issues be transferred to the Court in the NY Action.

On April 1, 2010, WAM and Target entered into a confidential settlement agreement, terminating the actions as between them, which includes a release of all claims that each may have had against the other. On April 12, 2010, the District Court approved the consent motion to dismiss the actions between WAM and Target, and declared the consolidated cases (the CA Action and the NY Action) closed.

Item 4. (REMOVED AND RESERVED)

PART II

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

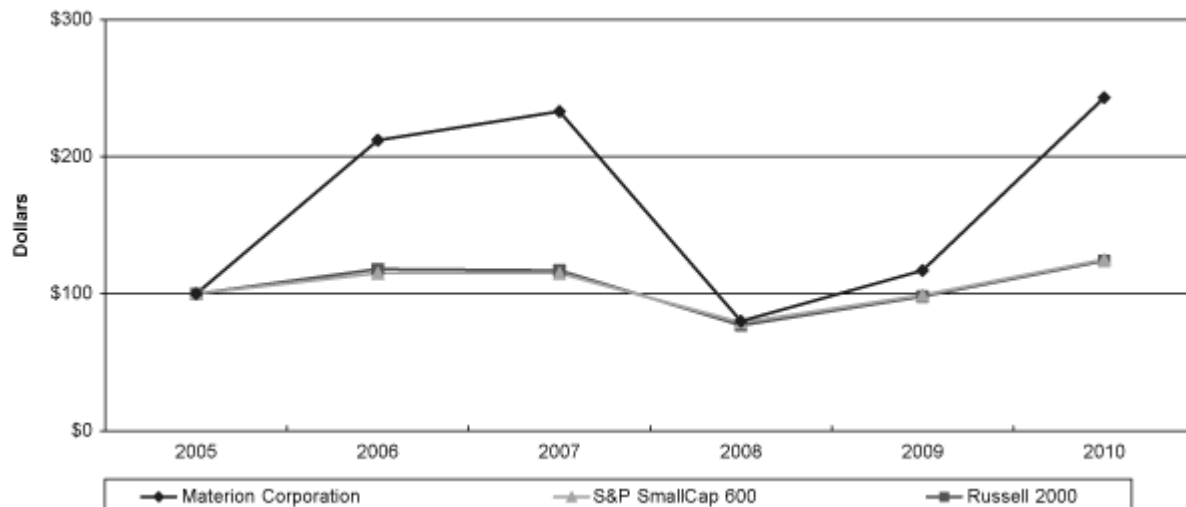
Market Information and Dividends

The Company's common shares are listed on the New York Stock Exchange under the symbol "MTRN" (formerly "BW"). As of February 21, 2011, there were 1,375 shareholders of record. The table below is a summary of the range of market prices with respect to common shares during each quarter of fiscal years 2010 and 2009. We did not pay any dividends in 2010 or 2009. 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.

Fiscal Quarters	Stock Price Range	
	High	Low
2010		
First	\$22.95	\$15.80
Second	30.33	18.75
Third	29.23	18.24
Fourth	40.11	27.62
2009		
First	\$17.27	\$10.50
Second	19.19	12.41
Third	25.38	14.11
Fourth	27.06	17.11

Performance Graph

The following graph sets forth the cumulative shareholder return on our common shares as compared to the cumulative total return of the S&P SmallCap 600 Index and the Russell 2000 Index as Materion Corporation is a component of these indices.



	2005	2006	2007	2008	2009	2010
Materion Corporation	\$100	\$212	\$233	\$80	\$117	\$243
S&P SmallCap 600	\$100	\$115	\$115	\$79	\$ 99	\$125
Russell 2000	\$100	\$118	\$117	\$77	\$ 98	\$124

The above graph assumes that the value of our common shares and each index was \$100 on December 31, 2005 and that all dividends, if paid, were reinvested.

Item 6. SELECTED FINANCIAL DATA

Materion Corporation and Subsidiaries

(Thousands except per share amounts)	2010	2009	2008	2007	2006
For the year					
Net sales	\$1,302,314	\$715,186	\$909,711	\$955,709	\$763,054
Cost of sales	1,079,666	623,764	757,836	759,037	600,882
Gross margin	222,648	91,422	151,875	196,672	162,172
Operating profit (loss)	73,633	(19,485)	28,071	84,465	43,840
Interest expense — net	2,665	1,299	1,995	1,760	4,135
Income (loss) before income taxes	70,968	(20,784)	26,076	82,705	39,705
Income taxes (benefit)	24,541	(8,429)	7,719	29,420	(9,898)
Net income (loss)	46,427	(12,355)	18,357	53,285	49,603
Earnings per share of common stock:					
Basic	2.29	(0.61)	0.90	2.62	2.52
Diluted	2.25	(0.61)	0.89	2.59	2.45
Depreciation and amortization	35,932	32,369	34,204	24,296	25,141
Capital expenditures	42,314	44,173	35,515	26,429	15,522
Mine development expenditures	11,348	808	421	7,121	—
Year-end position					
Working capital	208,365	140,482	189,899	216,253	158,061
Ratio of current assets to current liabilities	2.4 to 1	2.0 to 1	2.8 to 1	2.9 to 1	2.4 to 1
Property and equipment:					
At cost	719,953	665,361	635,266	583,961	557,861
Cost less depreciation and impairment	265,868	227,766	207,254	186,175	175,929
Total assets	735,410	621,953	581,897	550,551	498,606
Long-term liabilities	157,571	131,630	116,524	69,140	70,731
Long-term debt	38,305	8,305	10,605	10,005	20,282
Shareholders' equity	384,356	339,859	347,097	353,714	291,000
Weighted-average number of shares of stock outstanding:					
Basic	20,282	20,191	20,335	20,320	19,665
Diluted	20,590	20,191	20,543	20,612	20,234

Capital expenditures shown above include amounts spent under government contracts for which reimbursements were received from the government in the amounts of \$21.9 million in 2010, \$28.2 million in 2009, \$8.0 million in 2008 and \$3.5 million in 2007.

Changes in deferred tax valuation allowances decreased income tax expense by \$21.8 million in 2006.

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

OVERVIEW

We are an integrated producer of high performance advanced engineered materials used in a variety of electrical, electronic, thermal and structural applications. Our products are sold into numerous markets, including consumer electronics, defense and science, industrial components and commercial aerospace, energy, automotive electronics, telecommunications infrastructure, medical and appliance.

Sales of \$1.3 billion in 2010 were 82% higher than sales in 2009 and established a record high. The demand from various key markets, after a steep fall-off in 2009 largely due to the global economic crisis, improved significantly in 2010. Sales also improved in 2010 as a result of two acquisitions, higher metal prices and product and market development efforts. Sales from each of our four reportable segments grew at double digit rates in 2010 over 2009.

Gross margin of \$222.6 million in 2010 was \$131.2 million higher than the gross margin generated in 2009. The margin also improved to 17% of sales in 2010 from 13% of sales last year. The margin improvement was largely due to a combination of the higher sales volume (from existing operations and the acquisitions), operating efficiencies (partially due to higher production volumes), product mix effects and other factors.

After reducing our manufacturing, selling and administrative costs in 2009 due to the fall-off in sales, portions of these costs increased in 2010 in order to support the higher level of business. The spending level did not increase proportionately with sales, however, which allowed us to leverage the sales growth to generate additional profits. The increase in selling, general and administrative expenses in 2010 was mainly a result of the expenses incurred by the acquisitions and higher incentive compensation due to our improved profitability.

Operating profit was \$73.6 million in 2010, a significant turn around from the \$19.5 million operating loss in 2009. Diluted earnings per share grew to \$2.25 in 2010 from a per share loss of \$0.61 in 2009.

In the first quarter 2010, we acquired all of the outstanding capital stock of Academy Corporation (Academy) for an adjusted purchase price of \$21.0 million in cash. Academy's precious and non-precious metal products and metal refining capabilities augment our existing product offerings as well as expand our reach into various new markets. The Academy acquisition closely followed our purchase of all of the outstanding capital stock of Barr Associates, Inc. (Barr) in October 2009 for \$55.2 million in cash.

Our working capital levels, after declining in 2009, increased in 2010 as a result of and in support of the improved business levels. Cash flow from operations totaled \$31.0 million in 2010. This cash flow plus an increase of \$21.6 million in debt during 2010 was used to finance capital expenditures and the acquisition of Academy. As a result of the higher debt levels, our debt-to-debt-plus-equity ratio increased to 18% as of year-end 2010 from 16% as of year-end 2009.

RESULTS OF OPERATIONS

(Millions except per share amounts)	2010	2009	2008
Net sales	\$1,302.3	\$715.2	\$909.7
Operating profit (loss)	73.6	(19.5)	28.1
Income (loss) before income taxes	71.0	(20.8)	26.1
Net income (loss)	46.4	(12.4)	18.4
Diluted earnings per share	2.25	(0.61)	0.89

Sales of \$1.3 billion were \$587.1 million, or 82%, higher than sales of \$715.2 million in 2009, while sales in 2009 declined \$194.5 million, or 21%, from the 2008 sales level of \$909.7 million.

Demand from the majority of our key markets improved in 2010 over 2009. Demand had fallen significantly in 2009 from the 2008 level largely as a result of the global economic crisis and the related impact on consumer spending. Demand levels hit the near-term low point in the first quarter 2009 and then began improving over the

balance of 2009. The overall demand remained strong throughout 2010 as order entry levels exceeded sales in each quarter of 2010 and also established a record high for the year.

Consumer electronics is our largest market, accounting for 41% of sales in 2010. Sales to this market were affected the most by the global economic crisis in 2009 and showed the most improvement in 2010. Consumer electronics sales grew in 2010 as a result of an increase in consumer spending as well as the development of new applications as our materials are used in the latest generation of smart phones and in a number of other wireless and hand-held devices. Sales of our materials for new and growing LED applications also contributed to the higher sales to the consumer electronics market in 2010.

Sales to the *defense and science market*, which accounted for 12% of total sales in 2010, grew in 2010 over 2009 as a result of improvements in our existing defense business and the inclusion of a full year of Barr's defense business. Defense sales, after being solid in the first half of 2009, softened in the second half of that year due to program delays and push outs and finished 2009 below the 2008 level.

Sales to the *industrial components and commercial aerospace market*, which were 11% of our total sales in 2010, also contributed to the growth in sales in 2010 over 2009. Commercial aerospace sales, which were soft in 2009, improved in 2010 due to an increase in the build rate for aircraft utilizing our materials. Shipments of materials for heavy equipment and other industrial applications grew in 2010 as well.

Automotive electronics sales in 2010 were approximately double the sales level in 2009 as sales improved in both the domestic and European markets in 2010. Automotive electronics sales were approximately 5% of our total sales in 2010. Sales to this market had declined at a double-digit rate in 2009 from 2008. Shipments into Europe, partially spurred by the lower value of the U.S. dollar, helped offset a portion of the weakness in the U.S. market in 2009.

Sales to the *energy market* were over 6% of our total sales in 2010. We sell a variety of products into this expanding market and we have a number of growth platforms. Our traditional oil and gas materials contributed to the growth in energy market sales in 2010 as did sales for architectural glass applications through Academy. We also sell materials for new and developing solar energy, fuel cell and other energy-related applications.

Medical market sales were relatively unchanged in 2010 from 2009 after declining in 2009 from 2008. In 2010, we temporarily lost sales to a key medical application customer as a result of lower manufacturing yields. Process improvements have been implemented and shipments to the customer have resumed in early 2011. Other portions of our medical business improved in 2010, including x-ray window assemblies and related materials. Sales to the medical market were 4% of total sales in 2010.

We believe that the demand level in certain markets fell further in the first half of 2009 than the actual decline in consumer spending levels as a result of excess inventory levels in the downstream supply chain. We also believe that a portion of the sales improvement in the first half of 2010 may have been due to a replenishment of these downstream inventory levels.

The acquisitions of Barr and Academy accounted for 40% of the sales growth in 2010 over 2009. A large portion of Academy's sales is a precious metal pass-through.

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 have been quite volatile over the last three years, with various metals reaching near-term or all-time record highs in 2010. The average copper price for 2010 was higher than 2009 while the average 2009 price was lower than the 2008 average price. Gold and other precious metal prices were higher on average in 2010 and 2009 than the immediate prior year. The change in metal prices resulted in an estimated \$103.0 million net increase in sales in 2010 over 2009 and an estimated \$9.1 million decrease in sales in 2009 from 2008.

Domestic sales in 2010 were slightly more than double the 2009 level. Domestic sales had declined 19% in 2009 from the 2008 level. Domestic sales include the majority of the sales from the two acquisitions as well as the majority of the impact of the higher metal price pass-through between periods. International sales, which are included in each of our reportable segments, improved 48% in 2010 over 2009 after declining 25% in 2009 from 2008.

We implemented various cost-saving initiatives beginning in the fourth quarter 2008 and throughout the first nine months of 2009 in response to the weakening order entry rate at that time. These initiatives included a reduction in work force, reduced wage and compensation levels, elimination of overtime (and a reduction in regular work hours in some cases), reduced discretionary spending and the cancellation or deferral of various projects and initiatives. These efforts helped to offset the negative impact of the lower sales volume in 2009.

With the improved volumes in 2010, wage levels have been restored and various resources, including manpower and services, have been added back as needed to support the current and projected sales volumes. However, total manpower, excluding the two acquisitions, as of year-end 2010 was still 9% lower than the third quarter 2008 manpower level (which was just prior to when the global economic crisis began to significantly impact our business). The cost control programs remain in place as changes have been made to help improve our total cost structure.

We estimate that spending on certain operating costs (excluding materials) and other manufacturing overhead and selling, general and administrative costs in 2010, while higher than 2009, was still 7% lower than the 2008 level, excluding the impact of the acquisitions, despite the increase in sales volume.

Gross margin of \$222.6 million in 2010 was \$131.2 million higher than the gross margin of \$91.4 million in 2009. Gross margin also improved from 13% of sales in 2009 to 17% of sales in 2010. In 2008, the gross margin was \$151.9 million, or 17% of sales.

We estimate that the incremental margin generated by the higher sales volumes, including the sales from the two acquisitions, accounted for approximately 76% of the gross margin improvement in 2010 over 2009. Manufacturing efficiencies, in part due to the increased production levels, and cost control efforts also contributed to the margin growth in 2010. Factory labor, other direct manufacturing costs and manufacturing overhead costs did not increase proportionately with the increase in sales in 2010. The overall change in product mix was favorable between 2010 and 2009 while pricing improvements were made in portions of our business. Yield losses and other inventory valuation adjustments at certain operations had a minor negative impact on overall margins in 2010.

The lower sales volume in 2009 reduced margins by an estimated \$69.5 million from 2008 and was the primary cause for the overall decline in margins in 2009 from 2008. Production levels were reduced in 2009 (due to the lower sales and a reduction in inventory), which resulted in operating inefficiencies at various facilities that negatively affected margins. The change in product mix was unfavorable in 2009 as compared to 2008 partially due to lower sales of higher margin generating beryllium-containing products in 2009. The 2009 gross margin was also reduced by the cost of a manufacturing quality return, unplanned downtime on a key piece of equipment and inventory valuation adjustments.

The cost-reduction efforts offset a portion of the negative impact of the above items on gross margin in 2009 as operating and overhead manufacturing costs were lower in 2009 than in 2008.

The margin comparison between years was also affected by lower of cost or market charges of differing amounts each year as accounting regulations require inventory to be written down to its market value if it is below its cost. As a result of the falling prices for certain items, primarily ruthenium-containing materials, we recorded charges of \$0.4 million in 2010, \$0.7 million in 2009, and \$15.2 million in 2008.

In the first quarter 2009, we determined that the domestic defined benefit pension plan was curtailed due to the significant reduction in the workforce. As a result of the curtailment and the associated plan remeasurement, we recorded a \$1.1 million one-time benefit during the first quarter 2009, \$0.8 million of which was recorded against cost of sales and \$0.3 million recorded against selling, general and administrative expenses on the Consolidated Statement of Income and Loss. The all-in expense on this plan, including the one-time benefit in 2009, was \$5.8 million in 2010, \$3.2 million in 2009 and \$4.8 million in 2008. See "Critical Accounting Policies" below.

Selling, general and administrative (SG&A) expenses were \$126.5 million (10% of sales) in 2010, \$89.8 million (13% of sales) in 2009 and \$104.5 million (11% of sales) in 2008. The majority of the \$36.7 million increase in SG&A expenses in 2010 over 2009 was due to a combination of the expenses incurred by the acquisitions and higher incentive compensation expenses. Sales-related expenses and other

costs had a minor impact on the increase. The lower expense in 2009 as compared to 2008 was mainly due to the cost-reduction efforts in light of the sales decline as manpower levels and costs and discretionary spending were cut in 2009. Sales and distribution-related expenses were lower in 2009 than in 2008 as well. With the significantly improved sales volumes in 2010, a portion, but not all, of the previously reduced resources were added back to support the current and projected growth in the business.

Approximately 35% of the increase in SG&A expenses in 2010 over 2009 was due to the expenses incurred by Barr and Academy subsequent to their acquisition.

The incentive compensation expense on plans designed to pay in cash was \$15.2 million higher in 2010 than in 2009 and \$1.2 million lower in 2009 than in 2008. The changes in the annual expense between years were caused by the performance of the individual businesses relative to their plans' objectives. In 2010, the majority of our operations exceeded their plans' targets. Stock-based compensation expense, including the expense for stock appreciation rights, restricted stock and performance restricted shares, was \$4.1 million in 2010, \$3.5 million in 2009 and \$2.6 million in 2008. The comparison of stock-based compensation expense between years may be affected by changes in plan design, the number of grants in a given year, actual performance relative to the plans' objectives, movement in our stock price and other factors.

International SG&A expenses, excluding incentive compensation (which is included in the above paragraph), were approximately 5% higher in 2010 than in 2009. A portion of this increase is due to translation rate differences. International expenses were 19% lower in 2009 than in 2008 largely due to the cost-reduction efforts and a decline in sales-related expenses.

Severance and related costs associated with headcount reductions totaled \$1.1 million in 2010 and \$2.1 million in 2009.

Acquisition-related expenses for legal, accounting and due diligence services associated with the Barr and Academy transactions totaled \$0.7 million in 2009. Additional fees totaling \$0.1 million were incurred in 2010. As a result of a change in accounting regulations effective January 1, 2009, acquisition-related expenses must be charged against income as incurred. Previously, these expenses would have been capitalized as part of the cost of the acquisitions.

Other corporate administrative expenses were higher in 2010 than in 2009 partially as a result of the cost of various initiatives that were designed to provide long-term benefits. Costs associated with changing our corporate name, along with our subsidiaries' names, totaled approximately \$0.9 million in 2010. Corporate expenses were down \$5.6 million in 2009 from 2008 in part due to the cost-reduction efforts and the related impact on compensation and benefits. Information technology costs were also lower in 2009 than 2008 as were costs for various outside services.

Research and development (R&D) expenses were \$7.1 million in 2010, \$6.8 million in 2009 and \$6.5 million in 2008. R&D expenses were less than 1% of sales in each of the last three years. Despite the corporate-wide cost-reduction efforts in light of the lower sales volume in 2009, we increased our R&D spending slightly in that year. R&D efforts are focused on developing new products and applications as well as continuing improvements in our existing products.

The **litigation settlement gain** of \$1.1 million in 2008 represents the favorable settlement of a lawsuit, net of legal fees, in which we sought recovery of our rights under a previously signed indemnity agreement.

There were no litigation settlement gains in 2010 or 2009.

Derivative ineffectiveness expense was \$0.6 million in 2010, \$4.9 million in 2009 and \$0.2 million in 2008. We secured a copper derivative embedded in a debt obligation in 2009 that served as an economic hedge to changes in the value of our copper inventories. However, the derivative did not qualify as a hedge for accounting purposes and changes in its fair value were recorded against income as ineffectiveness expense. The derivative was in a loss position of \$4.9 million as of year-end 2009 as a result of an increase in the market price of copper since the derivative's inception. Forward contracts were secured in 2010 to hedge against further unfavorable changes in the embedded derivative's fair value. The \$0.6 million of expense in 2010 was the net unfavorable change in the fair value of these instruments in 2010. The embedded derivative and forward contracts matured during 2010.

Derivative ineffectiveness expense of \$0.2 million in 2008 resulted from changes in the fair value of an interest rate swap that did not qualify as a hedge for accounting purposes. This swap was terminated in the fourth quarter 2008.

Other-net expense was \$14.8 million in 2010, \$9.5 million in 2009 and \$13.6 million in 2008. See Note O to the Consolidated Financial Statements for the details of the major components of other-net expense for each of the three years. The major differences in other-net expense between the years include the following:

Amortization expense increased \$2.4 million in 2010 over 2009 and \$0.5 million in 2009 over 2008 primarily due to the amortization of the intangible assets acquired with Barr and Academy. See Note E to the Consolidated Financial Statements.

The metal consignment fee, after declining \$1.2 million in 2009 from 2008, increased \$3.2 million in 2010 over 2009 as a result of higher metal prices, increased quantities of metal on hand and the inclusion of Academy's requirements under the consignment lines in 2010. The expense was lower in 2009 than in 2008 as we reduced the quantity of metal on hand in response to the lower sales and production requirements in that year.

The Barr purchase agreement included an earn-out feature that would require us to make additional payments to the prior owners of Barr based upon Barr's performance against identified benchmarks over the 2010 to 2013 period. The present value of the earn-out was estimated to be \$1.9 million at the time of the acquisition and was recorded in other long-term liabilities on the Consolidated Balance Sheet as of December 31, 2009. No payment was required to be made for 2010 based upon Barr's actual performance relative to the benchmark for the year. We determined that the fair value of this liability, based upon the current facts and circumstances and updated projections, should be reduced to \$1.1 million as of December 31, 2010. The \$0.8 million benefit from the reduction in the liability was recorded as income in the fourth quarter 2010 in accordance with accounting guidelines.

We donated our former headquarters building and the associated land to a non-profit organization, which resulted in a write-off of the carrying value of \$0.5 million to other-net expense in 2010. The majority of this unfavorable impact on income before income taxes was offset by a favorable income tax adjustment.

Foreign currency exchange and translation losses totaled \$0.8 million in 2010, \$0.7 million in 2009 and \$3.7 million in 2008. These losses result from movements in the value of the U.S. dollar versus other currencies, primarily the euro, yen and sterling, and the related impact on certain foreign currency denominated assets, liabilities and transactions and the maturity of foreign currency hedge contracts.

The **operating profit** in 2010 was \$73.6 million, a \$93.1 million improvement over the \$19.5 million operating loss in 2009. This improvement was due to the higher margin generated by the increased sales volumes, the impact of the acquisitions and other factors offset in part by an increase in incentive compensation, metal consignment fees, amortization and other expenses. The operating loss in 2009 was \$47.6 million lower than the operating profit of \$28.1 million generated in 2008. This reduction was primarily a result of the lower gross margin due to the decline in sales and other factors along with the derivative ineffectiveness loss offset in part by the operating and overhead spending savings from the cost-reduction efforts, lower foreign currency exchange and translation losses and other items.

Interest expense totaled \$2.7 million in 2010, \$1.3 million in 2009 and \$2.0 million in 2008. The average outstanding debt levels were higher throughout 2010 than 2009 primarily as a result of the two acquisitions and the increase in working capital. Capital lease balances were higher in 2010 than 2009 as well. The impact of the higher debt and capital lease levels on interest expense was partially offset by a lower effective borrowing rate in 2010 than in 2009. Average debt levels for the full year 2009 were lower than in 2008 and the average borrowing rate was slightly lower as well.

The **income (loss) before income taxes** and the **income tax expense (benefit)** for each of the past three years were as follows:

(Dollars in millions)	2010	2009	2008
Income (loss) before income taxes	\$71.0	\$(20.8)	\$26.1
Income tax expense (benefit)	24.5	(8.4)	7.7
Effective tax (benefit) rate	34.6%	(40.6)%	29.6%

The effects of percentage depletion (a tax benefit resulting from our mining operations), foreign source income and deductions, the production deduction and other items were major causes of the differences between the effective and statutory rates in each of the three years. The effect of executive compensation was also a cause for the difference between the effective and statutory rates in 2010 and 2008.

The tax expense in 2010 included \$1.5 million for the reduction of a deferred tax asset as a result of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act. Beginning in 2013, we will no longer be able to claim an income tax deduction for prescription drug benefits provided to our retirees and reimbursed under the Medicare Part D retiree drug subsidy program. While this tax increase does not take effect until 2013, accounting standards require that the carrying value of a deferred tax asset be adjusted in the period in which legislation changing the applicable tax law is enacted.

The 2010 tax expense included the unfavorable impact of a net \$0.6 million increase in the tax reserves that was recorded in accordance with accounting guidelines. In 2009, the tax benefit was increased by a net \$0.7 million reduction in the tax reserves while in 2008 the tax expense was affected by a net \$1.3 million reduction in tax reserves.

See Note Q to the Consolidated Financial Statements for a reconciliation of the statutory and effective tax rates.

Net income was \$46.4 million, or \$2.25 per share diluted, in 2010 compared to a net loss of \$12.4 million, or \$0.61 per share diluted, in 2009. In 2008, net income was \$18.4 million, or \$0.89 per share diluted.

Segment Disclosures

In the first quarter 2011, we announced the change of our name from Brush Engineered Materials Inc. to Materion Corporation effective March 8, 2011. The names of all of our active subsidiaries are changing as well and each subsidiary will have Materion as part of its name. The legal and ownership structure of our subsidiaries remained unchanged.

This name change did not alter our senior management structure or how the chief operating decision maker evaluates the performance of our businesses. We continue to have the same four reportable segments as we had previously with no change in their make up or reporting structure, although the names of those segments have changed. Advanced Material Technologies and Services has been renamed as Advanced Material Technologies, Specialty Engineered Alloys is now known as Performance Alloys, Beryllium and Beryllium Composites has been shortened to Beryllium and Composites, and Engineered Material Systems has been changed to Technical Materials.

Results by segment are shown in Note M to the Consolidated Financial Statements. The All Other column in Note M includes our parent company expenses, other corporate charges and the operating results of Materion Services Inc. (formerly BEM Services, Inc.), a wholly owned subsidiary that provides administrative and financial oversight services to our other businesses on a cost-plus basis.

The All Other column shows an operating loss of \$8.3 million in 2010, \$9.4 million in 2009 and \$2.9 million in 2008. The loss was lower in 2010 than in 2009 as an increase in corporate spending and higher incentive compensation expense were more than offset by an increase in charges out to the business units and the difference in derivative ineffectiveness between periods.

The increased loss in the All Other column in 2009 as compared to 2008 was due primarily to the \$4.9 million derivative ineffectiveness expense recorded in 2009, the \$1.1 million litigation settlement gain recorded in 2008 and differences in the level of costs charged to the other units offset in part by lower corporate spending and other factors.

Advanced Material Technologies

(Millions)	2010	2009	2008
Net sales	\$879.0	\$460.8	\$480.3
Operating profit	39.5	22.6	10.8

Advanced Material Technologies 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, advanced chemicals, optics, performance coatings and microelectronic packages. These products are used in wireless, semiconductor, photonic, hybrid and other microelectronic applications within the consumer electronics and telecommunications infrastructure markets. Other key markets for these products include medical, defense and science, energy and industrial components. Advanced Material Technologies also has metal cleaning operations and in-house refineries that allow for the reclaim of precious metals from internally generated or customers' scrap. This segment has domestic facilities in New York, Connecticut, Wisconsin, New Mexico, Massachusetts and California and international facilities in Asia and Europe.

Sales from Advanced Material Technologies of \$879.0 million in 2010 grew \$418.2 million, or 91%, over sales of \$460.8 million in 2009. Sales in 2009 were 4% lower than sales of \$480.3 million in 2008. The growth in 2010 was due to a combination of improved market conditions, product development efforts, higher metal prices and the two acquisitions. The decline in sales in 2009 from 2008 was largely due to the impact of the global economic conditions, particularly for consumer electronics applications in the first half of 2009, and lower sales for defense, medical and media applications offset in part by higher metal prices and other factors.

Revenues for fabrication and other related charges from the Buffalo, New York facility, this segment's largest operation, grew 30% in 2010 over 2009. The Buffalo facility manufactures vapor deposition targets, lids, wire and other precious metal products for various semiconductor and other microelectronic applications. The key driver for this growth was improved demand from the consumer electronics market for materials for LED and wireless and other hand-held device applications. Demand from other markets served, including defense and science, grew as well. Refining revenue, after declining in 2009 from 2008, also contributed to the growth in 2010. Refining revenue is partially a function of the volume of precious metal products sold and the available quantity of metal in the market to be reclaimed.

Sales of advanced chemicals, after declining in 2009 from 2008 due to the global economic crisis, improved approximately 34% in 2010 from 2009. A large portion of this growth was due to sales of materials for LED applications within the consumer electronics market as a result of the expanded use of LED technologies and the development of new applications. Advanced chemicals are also used in the growing solar energy market as well as for optics and security applications.

Sales of electronic packages, one of this segment's smaller product lines, grew 42% in 2010 over 2009 due to improved demand for telecommunications infrastructure applications in Asia. Sales of these products grew 8% in 2009 over 2008. Due to a change in technology in the market, we anticipate that sales of electronic packages may soften in 2011. Sales for data storage applications, primarily magnetic head materials, showed modest growth in the first three quarters of 2010 over a sluggish 2009, but softened in the fourth quarter 2010, partially due to an inventory correction in the market place.

The acquisitions of Academy and Barr accounted for approximately 56% of the increase in the segment's sales in 2010 over 2009, while Barr's sales subsequent to its acquisition in the fourth quarter 2009 helped offset a portion of the decline in total segment sales between 2009 and 2008. The addition of Academy provided access to new markets and applications for us, including architectural glass and jewelry, as well as additional precious metal refining capabilities and capacity. Academy's operations in Albuquerque, New Mexico dovetail with our existing Buffalo, New York operations and provide opportunities for enhanced operational efficiencies.

Barr produces precision thin film optical filters used in defense, medical, telecommunications and other markets. The acquisition of Barr, coupled with our existing operations, expands our precision optics product line, allowing us to provide a broad array of optical filters across a wide band of wavelengths. The Barr facility faced various operational challenges that hampered sales in the first half of 2010, including unsatisfactory on-time delivery performance and other inefficiencies. However, process changes were made throughout the year and performance and operating results improved in the second half of the year. The backlog for precision optics was solid entering 2011. New applications within the defense and science market helped to drive improvements in sales and the order backlog.

Offsetting a portion of the growth in the above products and markets was a decline in sales of large area special coatings to the medical market. Sales of these products, mainly precision precious metal coated polymer films, were 17% lower in 2010 than in 2009. Lower manufacturing yields and the inability to hold tolerances resulted in missed sales to a key customer and the loss of a portion of the business to our competitor in 2010. New processes have been developed and qualified with the customer and shipment levels began to ramp back up in the first quarter 2011. Sales of polymer films to the medical market were softer in 2009 than a solid 2008 due to weaker demand and other factors.

Sales of other materials to the medical market, primarily lids, were relatively unchanged throughout the 2008 to 2010 time frame.

We adjust our selling prices daily to reflect the current cost of the precious and various non-precious metals sold. While a change in the cost of the metal is generally a pass-through to the customer, we generate a margin on our fabrication efforts irrespective of the type of metal used in a given application. On average, the applicable metal prices were higher in 2010 and 2009 than the respective prior years. We estimate that the higher metal prices increased sales by \$90.9 million in 2010 as compared to 2009 and \$5.0 million in 2009 as compared to 2008.

Total order entry for the segment exceeded sales by approximately 4% in 2010.

Gross margins generated by Advanced Material Technologies totaled \$113.3 million (13% of sales) in 2010, \$68.1 million (15% of sales) in 2009 and \$59.6 million (12% of sales) in 2008.

The main cause for the \$45.2 million increase in gross margin in 2010 over 2009 was the margin benefit from the higher sales volume from the existing operations as well as from the two acquisitions. This margin benefit was partially offset by the incremental manufacturing overhead costs incurred by the two acquisitions totaling \$11.4 million and the increased manufacturing overhead costs incurred by the existing operations of \$0.6 million.

The 2010 margin was adversely affected by the lower medical market sales, which typically generate higher margins. Approximately 18% of Academy's sales in 2010 were silver investment bars that generate very low margins. These negative mix effects were generally offset by efficiencies and improvements in other areas. Gross margin as a percent of sales declined in 2010 from 2009 largely due to the higher precious metal price pass-through in sales in 2010 and the addition of Academy's sales, which have a very high metal content.

Margins grew in 2009 on the reduced sales volume largely due to lower cost or market charges of \$0.7 million in 2009 compared to \$15.2 million in 2008. This \$14.5 million benefit between years was partially offset by an estimated \$8.0 million margin impact from the lower sales volume. Lower yields on polymer strip products and various inventory valuation adjustments reduced margins by an estimated \$1.1 million in 2009. The change in product mix was slightly unfavorable in 2009 largely due to lower medical and defense sales. Manufacturing overhead costs at the existing facilities were reduced in 2009, but these savings were partially offset by the inclusion of Barr beginning in the fourth quarter.

SG&A, R&D and other-net expenses from Advanced Material Technologies were \$73.8 million (8% of sales) in 2010, \$45.5 million (10% of sales) in 2009 and \$48.7 million (10% of sales) in 2008.

Expenses incurred by Academy and Barr accounted for approximately 56% of the increase in expenses in 2010 over 2009. The decline in expenses in 2009 was net of the \$1.9 million of SG&A expenses incurred by Barr since its acquisition in the fourth quarter 2009.

Incentive compensation expense was \$3.9 million higher in 2010 than 2009, due to the improved performance in 2010, and \$0.1 million higher in 2009 than 2008. Various sales-related expenses increased in 2010 to support the higher volumes. R&D costs increased in each of the last two years in order to support the current business and future growth. Corporate charges increased \$4.7 million in 2010 over 2009 after declining in 2009 from the 2008 level.

Expenses were reduced in 2009 mainly in response to the lower sales volumes. Manpower levels and costs and discretionary spending items were reduced at various facilities during the year.

Amortization of intangible assets increased \$2.3 million in 2010 over 2009 and \$0.5 million in 2009 over 2008 largely due to the acquisitions of Academy and Barr.

Metal financing fees were \$2.1 million higher in 2010 than in 2009 due to the additional quantity of metal on hand (due to the higher production requirements and from the inclusion of Academy's requirements under the consignment lines) and higher metal prices. Financing fees were \$1.2 million lower in 2009 than in 2008 primarily due to a reduction in the average quantity of metal on hand.

Operating profit from Advanced Material Technologies of \$39.5 million in 2010 was a \$16.9 million improvement over the operating profit of \$22.6 million in 2009. This improvement was due to the margin benefit from the higher sales volumes and other factors offset in part by higher expenses. The acquisitions contributed to the improved profit in this segment in 2010. The operating profit in 2009 was more than double the profit of \$10.8 million earned in 2008 as a result of the margin improvement and lower expenses. Operating profit was 4% of sales in 2010, 5% of sales in 2009 and 2% of sales in 2008.

Performance Alloys

(Millions)	2010	2009	2008
Net sales	\$293.8	\$172.5	\$299.9
Operating profit (loss)	27.2	(32.3)	5.8

Performance 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 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 consumer electronics, telecommunications infrastructure, automotive electronics, appliance and medical;

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, thermal conductivity or lubricity. While the majority of bulk products contain beryllium, a growing portion of bulk products' sales is from non-beryllium-containing alloys as a result of product diversification efforts. Applications for bulk products include oil and gas drilling components, bearings, bushings, welding rods, plastic mold tooling, and undersea telecommunications housing equipment; and

Beryllium hydroxide is produced at our milling operations in Utah from our bertrandite mine and purchased beryl ore. The hydroxide is used primarily as a raw material input for strip and bulk products and, to a lesser extent, by the Beryllium and Composites segment. External sales of hydroxide from the Utah operations were less than 4% of Performance 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 internationally through a network of company-owned service centers and outside distributors and agents.

Sales from Performance Alloys were \$293.8 million in 2010, an improvement of \$121.3 million, or 70%, over sales of \$172.5 million in 2009. This growth was due to improved demand from key markets, higher metal pass-through prices and other price increases. Sales in 2009 were \$127.4 million, or 42%, lower than sales of \$299.9 million in 2008 primarily due to the impact of the global economic crisis on shipments of both strip and bulk products. Sales to all major markets declined at double digit rates in 2009 from the 2008 levels.

The order entry rate, after an extremely weak first half of 2009, improved in the second half of 2009 and then was quite strong during the majority of 2010. The improved demand for strip products fueled the growth in the order entry rate in the first half of 2010 while the demand for bulk products was stronger in the second half of 2010. Total order entry exceeded the sales level in 2010 by 11%.

Sales of strip and bulk products grew in 2010 over 2009 after declining in 2009 from 2008. The growth in strip sales in 2010 was largely due to improved demand from the consumer electronics, appliance and automotive electronics markets. The growth in sales to the consumer electronics market, Performance Alloys' largest market, was fueled by the use of our materials in PDAs, the latest generations of smart phones and other hand-held devices. Automotive electronic sales were higher in 2010 as sales in 2009 were quite low, particularly in the first half of that year. Appliance sales grew approximately 50% in 2010 over 2009, primarily in Europe. The demand for strip

products was stronger in the first half of 2010 than the second half of the year due to seasonality issues, model changeovers and the replenishment of downstream inventory positions.

The decline in strip sales in 2009 as compared to 2008 was mainly caused by the global economic crisis and the impact on consumer spending. Demand levels from the consumer electronics and automotive electronics markets declined severely, particularly in the first quarter 2009. Market conditions improved somewhat in the second half of that year due to consumer electronic applications in Asia and automotive and appliance applications in Europe.

The growth in bulk product sales in 2010 over 2009 was across multiple markets. Demand from the oil and gas sector of the energy market improved throughout 2010, partially as an aftermath of the gulf oil disaster in 2010 as customers turned to our products due to their high performance characteristics. Sales for oil and gas applications weakened in 2009 from 2008 due to excess inventory positions and because the price of oil was generally below the level that would spur significant exploration and production increases. Commercial aerospace sales grew in 2010 over 2009 as a result of an increase in the build rate of aircraft that utilize our materials. Aerospace sales in 2009 had declined from the 2008 level due to ongoing deferrals of new aircraft builds and decreased repair and maintenance activities. Sales of materials for heavy equipment and other applications within the industrial components market, including sales of non-beryllium containing alloys, also contributed to the growth in bulk product sales in 2010 over 2009.

Strip product volumes (i.e., pounds shipped) grew 56% in 2010 over 2009 after declining 32% in 2009 from 2008. Bulk product volumes were 70% higher in 2010 than in 2009 while volumes in 2009 were 45% lower than 2008. Total volumes rebounded in 2010 from the softness in 2009 and were essentially on par with the volumes shipped in 2008.

Copper prices were higher on average in 2010 than in 2009 and the increased copper price pass-through accounted for an estimated \$12.1 million of the sales growth in 2010. Lower copper prices reduced sales in 2009 by an estimated \$14.1 million from 2008.

As demand declined beginning in the fourth quarter 2008, Performance Alloys initiated various cost-reduction efforts that continued throughout 2009. By the end of 2009, the employment levels within manufacturing, sales and administration had been reduced by approximately 200 people from the September 2008 level. With the improvement in demand in 2010 and the increased production requirements and other business support needs, the employment level increased during 2010. However, the year-end 2010 employment level was still lower than it was as of the end of the third quarter 2008.

Performance Alloys generated a gross margin of \$74.2 million in 2010, an improvement of \$65.2 million over the gross margin of \$9.0 million in 2009. The gross margin was \$59.3 million in 2008. Gross margin was 25% of sales in 2010 compared to 5% of sales in 2009 and 20% of sales in 2008.

The higher sales volume was the largest cause of the improved gross margin in 2010, accounting for an estimated \$31.2 million of the increase. Production volumes were also higher in 2010 than in 2009, which, combined with other factors, led to improved manufacturing efficiencies and higher machine utilization rates. Factory labor and other direct manufacturing costs, while higher in 2010 than in 2009, did not increase proportionately with the volume increase, allowing us to leverage our production efforts. Higher selling prices for bulk and strip products also contributed to the margin increase in 2010 over 2009 as did a favorable change in the product mix. Manufacturing overhead costs increased \$2.7 million in 2010 over 2009 largely due to increases in maintenance and supply expenses offsetting a decline in utility expenses.

The depletion of a last-in, first-out (LIFO) layer from inventory resulted in a net benefit to gross margin of \$4.4 million in 2010. This benefit may not recur to this extent or at all in 2011.

The \$50.3 million margin decline in 2009 was primarily due to the \$127.4 million reduction in sales. Production volumes were even lower than sales in 2009 as inventories were worked down throughout the year. The lower production volumes negatively affected margins as a result of increased manufacturing inefficiencies and lower machine utilization rates. In addition, unplanned downtime on a key piece of equipment in the fourth quarter 2009 reduced margins by an estimated \$1.3 million. The change in product mix was unfavorable in 2009 as well. Manufacturing overhead spending, including manpower and utilities, was lower in 2009 than 2008 and helped to

mitigate a portion of the negative impact the above items had on margins. Pricing improvements implemented during 2009 also provided a small benefit to margins in the year.

Total SG&A, R&D and other-net expenses were \$47.0 million in 2010, an increase of \$5.7 million over expenses of \$41.3 million in 2009. The 2009 expenses were \$12.2 million lower than expenses of \$53.5 million in 2008. Expenses were 16% of sales in 2010, 24% of sales in 2009 and 18% of sales in 2008.

The increased expense in 2010 on a dollar basis was due to higher incentive compensation (which resulted from the significantly improved operating results), higher commissions (due to the increased sales) and higher corporate costs. These increases were offset in part by a net decline in all of the other expenses incurred by Performance Alloys as many of the cost-reduction efforts implemented during 2009 remained in place throughout 2010. Cost savings were also obtained in 2010 as a result of the closing of the distribution center operation in the United Kingdom in the fourth quarter 2009. Sales to the United Kingdom are now shipped from our German operations or through an independent distributor.

The lower expenses in 2009 as compared to 2008 were largely due to the aforementioned cost-reduction efforts offset in part by severance costs. Sales-related expenses, including commissions and advertising, were also lower in 2009 than in 2008. Lower incentive compensation and foreign currency exchanges losses contributed to the decline in expenses in 2009 as well.

Performance Alloys earned an operating profit of \$27.2 million in 2010, an improvement of \$59.5 million over the operating loss of \$32.3 million in 2009. The increase in profit was due to the margin generated by the higher sales, manufacturing improvements and improved pricing partially offset by changes in expenses. The operating loss in 2009 was down \$38.1 million from the operating profit of \$5.8 million earned in 2008 due to the impact of the lower sales volumes and other factors partially offset by the cost saving efforts and other expense reductions.

Beryllium and Composites

(Millions)	<u>2010</u>	<u>2009</u>	<u>2008</u>
Net sales	\$61.9	\$47.0	\$63.6
Operating profit	10.0	2.1	8.4

Beryllium and Composites manufactures beryllium-based metals and metal matrix composites in rod, 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 produced at the Tucson, Arizona facility. Defense and science is the largest market for Beryllium and Composites, while other markets served include industrial components and commercial aerospace, medical, energy and telecommunications infrastructure. Products are also sold for acoustics and optical scanning applications.

Sales from Beryllium and Composites were \$61.9 million in 2010, an improvement of \$14.9 million, or 32%, over sales of \$47.0 million in 2009. Sales in 2009 were 26% lower than sales of \$63.6 million in 2008.

The majority of the sales improvement in 2010 over 2009 was due to growth in sales to the defense and science market. Sales to this market, which accounted for over half of Beryllium and Composites sales in 2010, had declined in the second half of 2009 as a result of project funding delays and push outs at that time. The primary defense platforms for these products are aerospace and missile system applications. Due to changes in government spending patterns, we anticipate that defense sales will be flat to softer in 2011 than in 2010.

Sales to the industrial components and commercial aerospace market, the segment's second largest market, also grew in 2010 over 2009. A portion of this growth was due to the development of new applications for AlBeMet[®], a metal matrix composite, in semiconductor manufacturing equipment.

Sales to the medical market improved in 2010 over 2009 after declining significantly in 2009 from 2008. Shipments of x-ray window assemblies nearly doubled in 2010 over 2009. A key driver for this growth is the conversion to digital x-ray equipment, particularly in radiology and fluoroscopy systems. Shipments of beryllium foil for x-ray applications also increased in 2010 over 2009. Our x-ray window assemblies and related materials are used in medical, scientific and industrial applications.

Sales of ceramic products increased over 50% in 2010 over 2009 after declining 42% in 2009 from 2008. The growth in 2010 was largely due to increased shipments for applications within the telecommunications infrastructure market. The decline in sales in 2009 was largely due to the global economic crisis and its impact in particular on a key ceramic products customer's business.

Sales of beryllium speaker domes for acoustic diaphragm assemblies grew slightly in 2010 over 2009 but remained relatively minor. This niche application presents potential growth opportunities for our materials.

The gross margin on Beryllium and Composites' sales was \$21.5 million (35% of sales) in 2010, \$11.1 million (24% of sales) in 2009 and \$19.6 million (31% of sales) in 2008.

The gross margin improved by an estimated \$7.9 million in 2010 over 2009 as a result of the higher sales volume. The change in product mix was favorable in 2010 as compared to 2009 while manufacturing overhead costs were also lower in 2010 than in 2009 as we were able to leverage the existing cost base. The difference in input materials, use of vendor scrap and reclamation efforts provided an estimated \$0.3 million net benefit in 2010. These margin benefits were partially offset by lower manufacturing yields on welded products that reduced margins by an estimated \$1.2 million in 2010. Process improvements were implemented and yields on these products improved in the second half of 2010.

The main cause of the decline in the gross margin dollars and rate in 2009 was the significant fall-off in sales in that year. The margin impact of the lower volumes was partially mitigated by a reduction in direct and overhead manufacturing costs, including manpower, supplies and utility costs. Material input costs increased in 2009 over 2008 and had a negative impact on margins. The change in product mix was slightly unfavorable in 2009.

SG&A, R&D and other-net expenses were \$11.5 million (19% of sales) in 2010, \$9.0 million (19% of sales) in 2009 and \$11.2 million (18% of sales) in 2008. The main driver for the increased expense level in 2010 was higher incentive compensation, due to the improved profitability, and higher corporate charges. Various sales and marketing support expenses, including commissions and travel, also increased in 2010 over 2009. The lower expense in 2009 was due to the cost-reduction initiatives and reduced incentive compensation. These benefits were partially offset by an increase in R&D expenses.

Beryllium and Composites generated an operating profit of \$10.0 million in 2010, an improvement of \$7.9 million over the operating profit of \$2.1 million generated in 2009. This improvement was due to the margin benefit from the higher sales and other factors offset in part by an increase in expenses. Operating profit in 2009 declined \$6.3 million from the \$8.4 million earned in 2008, primarily as a result of the lower sales volume. Operating profit was 16% of sales in 2010, 5% of sales in 2009 and 13% of sales in 2008.

Technical Materials

(Millions)	<u>2010</u>	<u>2009</u>	<u>2008</u>
Net sales	\$67.5	\$34.7	\$65.9
Operating profit (loss)	5.3	(2.5)	5.9

Technical Materials manufactures 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 while the largest markets are automotive electronics and consumer electronics. The defense and science, energy and medical markets are smaller but offer further growth opportunities. Technical Materials' products are manufactured at the Lincoln, Rhode Island facility.

Sales from Technical Materials of \$67.5 million in 2010 were nearly double the sales of \$34.7 million in 2009 while sales in 2009 were 47% lower than sales of \$65.9 million in 2008. Sales of all major product lines were higher in 2010 than in 2009 and total volumes shipped increased approximately 74% in 2010 over 2009.

The sales growth in 2010 over 2009 was due to improved demand from each of the key markets served as well as the continued product development efforts. The significant decline in sales in 2009 was due to the impact of the global economic crisis on demand beginning in the fourth quarter 2008 and continuing into 2009. Sales, after reaching their near-term low point in the first quarter 2009, improved sequentially in each quarter of 2009. Sales in the first half of 2010 were higher than sales in the second half of 2010 partially due to the replenishment of downstream inventories in the first half of the year. Total order entry exceeded sales by approximately 10% in 2010.

Automotive electronic sales in 2010 were more than twice the sales level from 2009 as both domestic and foreign shipments improved. Sales to this market declined significantly in 2009, particularly in the U.S.

Sales to the consumer electronics market grew approximately 80% in 2010 over 2009. A portion of the growth in 2010 was attributable to a 64% improvement in sales of disk drive arm materials. After growing into a sizable portion of this segment's sales in 2008, sales of disk drive arm materials declined sharply in the first quarter 2009 and, while shipment levels recovered somewhat over the balance of the year, sales in 2009 were still 46% lower in 2009 than in 2008.

Sales to the medical and energy markets, while relatively minor, also contributed to the sales growth in 2010 over 2009.

Technical Materials generated a gross margin of \$14.5 million in 2010, \$3.5 million in 2009 and \$13.5 million in 2008. Gross margin improved to 22% of sales in 2010 after falling to 10% of sales in 2009 from 21% of sales in 2008.

The \$11.0 million increase in gross margin in 2010 over 2009 was largely due to the \$32.8 million growth in sales while the associated higher production volumes helped generate improved manufacturing efficiencies as well. Factory labor and other direct manufacturing costs were added back in 2010 only as needed to meet the production schedule. Manufacturing overhead costs were \$0.8 million higher in 2010 than in 2009.

The lower margin dollars and rate in 2009 were due to the severe decline in sales during the year. The change in product mix was also unfavorable in 2009. In response to the lower sales, labor and other direct manufacturing costs were reduced approximately 26% in 2009 from the 2008 level. Production schedules were revised to allow for manufacturing to be campaigned on various equipment lines in order to offset a portion of the inefficiencies created by the low production volumes. Manufacturing overhead costs, including manpower, maintenance and utilities, were also reduced by \$1.6 million in 2009 from the 2008 level.

While employment levels increased during 2010, the total employment within Technical Materials was 10% lower at year-end 2010 than it was as of the third quarter 2008.

SG&A, R&D and other-net expenses were \$9.2 million in 2010 compared to \$6.0 million in 2009 and \$7.6 million in 2008. Higher selling and marketing costs, including manpower, commissions and travel expenses, were the main cause of the increase in 2010 over 2009. Incentive compensation costs and corporate charges were \$1.0 million higher in 2010 than in 2009. Other net-expenses, including the metal consignment fee and other miscellaneous items, contributed to the higher expense level in 2010 as well. The lower expense level in 2009 as compared to 2008 was due to the spending reductions, implemented in reaction to the decline in sales, and lower incentive compensation and corporate charges.

Technical Materials generated an operating profit of \$5.3 million (8% of sales) in 2010 versus an operating loss of \$2.5 million in 2009. In 2008, this segment earned an operating profit of \$5.9 million.

International Sales and Operations

We operate in worldwide markets and our international customer base continues to expand geographically 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.

In Asia, we have strategically located our facilities in Japan, Singapore, China, Korea, Taiwan and the Philippines. Our European facilities are in Germany, the United Kingdom, Ireland and the Czech Republic. These

operations provide a combination of light manufacturing, finishing operations, local sales support and distribution services. We also augment our sales and distribution efforts with an established network of independent distributors and agents throughout the world. Approximately 10% of our workforce is based overseas.

The following chart summarizes total international sales by region for the last three years:

(Dollars in millions)	2010	2009	2008
Asia	\$216.3	\$163.9	\$197.5
Europe	127.5	73.5	115.3
Rest of world	25.3	11.8	20.8
Total	<u>\$369.1</u>	<u>\$249.2</u>	<u>\$333.6</u>
Percent of total sales	28%	35%	37%

International sales include sales from international operations and direct exports from our U.S. operations. The international sales in the above chart are included in the individual segment sales previously discussed.

Total international sales grew \$119.9 million in 2010 over 2009 as demand improved from the majority of our key markets and from all regions. Sales to Asia increased 32% while European sales improved 73%.

The lower international sales in 2009 were primarily due to the global economic crisis and the resulting fall-off in demand, particularly from the consumer electronics market. Sales to Asia declined 17% in 2009 from the 2008 levels while sales to Europe fell 36%.

Consumer electronics, automotive electronics, appliance (primarily in Europe) and telecommunications infrastructure are the larger international markets for our products. Our market share is smaller in the overseas markets than it is domestically and, given the macro-economic growth potential for the international economies, including the continued transfer of U.S. business to overseas locations, the international markets, and Asia in particular, may present greater long-term growth opportunities.

Sales from the European and certain Asian operations are denominated in the local currency. Exports from the U.S. and the balance of the sales from the Asian operations are typically denominated in U.S. dollars. Local competition generally limits our ability to adjust selling prices upwards to compensate for short-term unfavorable exchange rate movements.

We have a hedge program with the objective of minimizing the impact of fluctuating currency values on our consolidated operating profit. See "Critical Accounting Policies" below.

Legal Proceedings

One of our subsidiaries, Materion Brush Inc. (formerly 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,		
	2010	2009	2008
Total cases pending	2	4	9
Total plaintiffs (including spouses)	6	8	36
Number of claims (plaintiffs) filed during period ended	1(1)	0(2)	1(6)
Number of claims (plaintiffs) settled during period ended	2(2)	3(16)	0(0)
Aggregate cost of settlements during period ended (dollars in thousands)	\$ 20	\$ 850	\$ —
Number of claims (plaintiffs) otherwise dismissed	1(1)	2(14)	1(1)

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.

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.

Based upon currently known facts and assuming collectibility of insurance, we do not believe that resolution of the current and future beryllium 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.

The balances recorded on the Consolidated Balance Sheets associated with beryllium litigation were as follows:

(Millions)	December 31,	
	2010	2009
Asset (liability)		
Reserve for litigation	\$(0.4)	\$(0.6)
Insurance recoverable	0.1	0.3

The settlement payments of \$20,000 made in 2010 were not reimbursed by insurance since our total applicable costs were less than the annual deductible. The \$0.9 million payment to settle three cases in 2009 was fully insured.

Regulatory Matters. Standards for exposure to beryllium are under review by the United States Occupational Safety and Health Administration (OSHA) and by other governmental and private standard-setting organizations. One result of these reviews will likely be more stringent worker safety standards. Some organizations, such as the California Occupational Health and Safety Administration and the American Conference of Governmental Industrial Hygienists, have adopted standards that are more stringent than the current standards of OSHA. The development, proposal or adoption of more stringent standards may affect the buying decisions by the users of beryllium-containing products. If the standards are made more stringent and/or our customers or other downstream users decide to reduce their use of beryllium-containing products, our results of operations, liquidity and financial condition could be materially adversely affected. The impact of this potential 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. The magnitude of this potential adverse effect cannot be estimated.

FINANCIAL POSITION

Net cash provided from operations was \$31.0 million in 2010 as net income and the effects of depreciation, deferred taxes and other items more than offset increases in working capital, primarily accounts receivable and inventory. The majority of the working capital build in 2010 occurred in the first half of the year as sales levels ramped up from the low levels in 2009 and resulted in cash being used in operations of \$20.7 million. The growth in working capital levels began to level off in the second half of 2010, which, coupled with a further increase in profitability, resulted in net cash provided from operations of \$51.7 million in the second half of the year.

In 2009, we generated cash flow from operations of \$41.6 million as reductions in accounts receivable and inventory, the effects of depreciation and other items more than offset the net loss for the year. Cash provided from operations was a strong \$76.9 million in 2008 due to the net income, effects of depreciation and a reduction in working capital.

As previously noted, changes in the cost of precious and base metals are essentially passed on to customers. Therefore, while sudden movements in the price of metals can cause a temporary imbalance in our cash receipts and payments in either direction, once prices stabilize our cash flow tends to stabilize as well.

Working Capital

Cash totaled \$16.1 million as of year-end 2010 compared to \$12.3 million at year-end 2009 as the cash flow from operations, the increase in debt and proceeds from the exercise of stock options exceeded the cost to acquire Academy and the capital expenditure funding requirements in 2010. The cash balance declined \$6.2 million during 2009 as a portion of the cash on hand, increased debt and the cash flow from operations were used to fund the acquisition of Barr and capital expenditures during 2009.

Accounts receivable totaled \$139.4 million as of December 31, 2010, an increase of \$55.4 million, or 66%, over the accounts receivable balance of \$84.0 million at December 31, 2009. The main driver for the increased receivable balance was the higher level of sales. Sales in the fourth quarter 2010 were \$140.8 million, or 65%, higher than sales in the fourth quarter 2009. The days sales outstanding, a measure of how quickly receivables are collected, slowed by less than one day and had a minor impact on the increase in receivables in 2010.

The expense for accounts written off to bad debts and changes in the allowance for doubtful accounts, while slightly higher in 2010 than 2009, remained minor at \$0.3 million for the year. We have procedures in place to closely monitor our accounts receivable aging and to follow-up on past due accounts. We evaluate the credit position of new customers in advance of the initial sale and we evaluate our existing customers' credit positions on an ongoing basis. We will revise credit terms offered to our customers as conditions warrant in order to minimize our exposures. Credit terms may vary by country based upon local customary practice and competition. Billings for precious metals tend to have tighter payment terms than billings for other products. Advance billings are used from time to time to help reduce credit exposures and speed up the collection of cash.

The accounts receivable balance as of December 31, 2009 was \$3.9 million, or 4%, lower than the receivable balance of \$87.9 million at December 31, 2008. The receivable balance declined despite sales in the fourth quarter 2009 being higher than sales in the fourth quarter 2008 due to an improvement in the collection period.

Other receivables were a balance of \$4.0 million as of December 31, 2010 compared to \$11.1 million as of December 31, 2009. The majority of the amounts due at both year ends were for reimbursement for equipment purchased under a government contract. These billings are typically paid by the government on a current basis. The other receivable balance at year-end 2009 also included a \$0.9 million advance of a legal settlement for which we were reimbursed in full by our insurance provider in the first quarter 2010.

Inventories totaled \$154.5 million as of year-end 2010 compared to \$130.1 million as of year-end 2009. While inventories increased \$24.4 million, or 19%, during 2010, largely due to the significantly higher level of business, inventory turns, a measure of how efficiently inventory is utilized, improved as of year-end 2010 as compared to year-end 2009.

Inventories within Performance Alloys accounted for the majority of the increase in total inventories. Inventory pounds on hand were 33% higher at year-end 2010 than at year-end 2009 while pounds shipped increased 61% year-over-year with feedstocks and work in process growing more than finished goods.

Despite the high level of sales growth in Advanced Material Technologies in 2010 over 2009, inventories only increased approximately 8% as a large portion of this segment's metal requirements are maintained on a consigned basis. The acquisition of Academy added only \$0.8 million to the year-end 2010 inventory balance.

Technical Materials' inventory increased approximately 32% in order to support the increased business levels in 2010. Inventories within Beryllium and Composites also increased to support the higher sales volumes with the majority of this increase occurring in the second half of 2010 due to the timing of purchases of input materials.

Inventories declined \$26.6 million, or 17%, in 2009. Inventory turns improved as of year-end 2009 as compared to year-end 2008. This improvement occurred primarily in the second half of the year as inventory positions were held fairly constant while sales increased. The majority of the inventory reduction in 2009 was within the Performance Alloys segment as inventory was adjusted to the lower business levels. Their total pounds in inventory were down 24% from 2008 year end, with the finished goods inventories being reduced further than raw materials and work-in-process due in part to mild changes in distribution channels. Inventories within Technical

Materials declined over the course of 2009, but started to climb in the fourth quarter in response to the improved order entry at that time and their 2009 year end inventory was down approximately 10% from year-end 2008.

Inventories as of year-end 2009 within Advanced Material Technologies were essentially unchanged from the prior year end as various reductions from the existing facilities were offset by the inventory acquired with Barr. Beryllium and Composites' inventory was also relatively unchanged in 2009.

Raw material prices increased dramatically in 2010. The impact of changing prices on our inventory value is minimized by the use of the last-in, first-out costing method, which results in the current cost being charged to the income statement and the older costs being used to value the inventory on hand. See "Critical Accounting Policies" below. In addition, a portion of our metal requirements are maintained under off-balance sheet consignment arrangements. The metal is not purchased out of consignment until it is being shipped to the customer.

Intangible assets of \$36.8 million as of year-end 2010 were \$2.2 million lower than the \$39.0 million balance as of year-end 2009. Intangible assets increased \$8.0 million during 2009. We acquired intangible assets totaling \$4.7 million during 2010, including \$3.2 million acquired with Academy, and \$12.5 million in 2009, largely due to the purchase of Barr. Amortization expense was \$6.9 million in 2010 and \$4.5 million in 2009. See Note E to the Consolidated Financial Statements.

Accrued salaries and wages were \$34.0 million at the end of 2010 compared to \$16.3 million at the end of 2009. The 2009 balance was \$6.3 million lower than the balance as of year-end 2008. The differences in the balances between years were due to changes in the incentive compensation accruals, manpower levels, including the impact of the two acquisitions, and other related factors.

Other Long-term Liabilities

Other long-term liabilities were \$17.9 million as of year-end 2010 versus \$9.6 million as of year-end 2009. The predominate cause for this increase was the recording of the long-term portion of a 160-month, \$10.2 million capital lease for the building associated with the new beryllium facility being constructed at the Elmore plant site. This increase was partially offset by a \$0.8 million reduction in the estimated fair value of the earn-out liability for the potential payments to be made to the sellers of Barr.

Other long-term liabilities increased \$1.7 million in 2009, largely due to liabilities totaling \$2.8 million assumed with the purchase of Barr, including the earn-out, and other minor changes net of a \$1.3 million decline in the legal reserve that resulted from a settlement and other changes to the outstanding cases.

Retirement and Post-employment Benefits

The long-term retirement and post-employment benefit obligation of \$82.5 million at December 31, 2010 was relatively unchanged from the balance of \$82.4 million at December 31, 2009.

Included within these balances is the recorded liability for the domestic defined benefit pension plan of \$44.1 million as of year-end 2010 and \$44.2 million as of year-end 2009. This plan, which covers the majority of our domestic employees, had a projected benefit obligation of \$171.2 million at year-end 2010 and \$149.9 million as of year-end 2009. The main causes for the increase in the obligation were the current year expense and actuarial losses offset in other comprehensive income (OCI), a component of shareholders' equity. These actuarial losses were primarily due to a reduction in the discount rate as of December 31, 2010. The market value of the plan assets was \$127.1 million at year-end 2010, an increase of \$21.4 million for the year as a result of investment earnings of \$14.9 million and contributions of \$13.5 million less benefit payments and expenses of \$7.0 million.

A portion of our domestic retirees and current employees are eligible to participate in a retiree medical benefit plan. The liability for this unfunded plan was \$32.4 million as of December 31, 2010 and \$30.9 million as of December 31, 2009. The plan expense was \$2.0 million in 2010 and \$2.2 million in 2009.

Our subsidiary in Germany has an unfunded retirement plan for its employees while our subsidiary in England has a funded retirement plan.

See Note I to the Consolidated Financial Statements for additional details on our retirement obligations.

Depreciation and Amortization

Depreciation, amortization and depletion was \$35.4 million in 2010, \$31.9 million in 2009 and \$33.8 million in 2008. The majority of the increase in 2010 over 2009 was due to the acquisitions of Barr and Academy and the additional depreciation and amortization on the assets acquired. The decline in 2009 from 2008 was due to reduced mine amortization at our Utah operations.

Capital Expenditures

A summary of capital expenditures over the 2008 to 2010 timeframe is as follows:

(Millions)	<u>2010</u>	<u>2009</u>	<u>2008</u>
Capital expenditures	\$42.4	\$44.2	\$35.5
Mine development	11.3	0.8	0.4
Subtotal	53.7	45.0	35.9
Reimbursement for spending under government contract	21.9	28.2	8.0
Net spending	\$31.8	\$16.8	\$27.9

We have a contract with the U.S. Department of Defense (DoD) for the design and development of a new facility for the production of primary beryllium. The total cost of the project is estimated to be approximately \$93.6 million; we will contribute land, buildings, research and development, technology and ongoing operations valued at approximately \$23.2 million to the project. The DoD will reimburse us for the balance of the project cost. Reimbursements from the DoD are recorded as unearned income on the Consolidated Balance Sheets. The new facility is being constructed on our Elmore plant site. Construction of the building was completed in 2010 while the equipment was nearing completion by year end. We anticipate that the equipment will be placed in service in the first half of 2011. The \$42.4 million of capital expenditures in 2010 included \$28.0 million of spending on this project. 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.

Advanced Material Technologies' capital spending totaled \$5.2 million in 2010, a slight increase over spending of \$4.5 million in 2009. Spending by this unit totaled \$7.9 million in 2008. Spending in 2010 included a clean room and other equipment upgrades in Buffalo, new equipment at both Barr and Academy and other small projects throughout the organization.

Capital spending by Performance Alloys was \$17.1 million in 2010 versus \$3.8 million in 2009 and \$9.1 million in 2008. These totals include mine development costs of \$11.3 million in 2010, \$0.8 million in 2009 and \$0.4 million in 2008. The new pit was completed in 2010 and we began extracting ore from this pit in the fourth quarter 2010. The majority of the segment's remaining capital spending in 2010 was on discrete pieces of equipment used in the manufacture of strip and bulk products as well as other infra-structure projects at Elmore. Spending in 2009 was reduced from the 2008 level due to the large operating loss in 2009.

In addition to the new beryllium plant, capital spending within the Beryllium and Composites segment included spending for a new milling center and inspection unit in 2010.

Capital projects within Technical Materials in 2010 included a new clad brushing machine, a cleaning line and upgrades to various furnaces and other equipment. Spending within this segment was limited to high-priority items in 2009 due to the decline in profitability.

We also continued work on software upgrades and implementations at various facilities throughout 2010.

Capacity expansion projects, primarily the new beryllium facility, accounted for approximately 55% of the capital spending in 2010. Approximately 22% of the 2010 spending was for maintenance capital projects while mine development costs were 21% of the total spending. New technology projects accounted for the balance of the capital spending in 2010.

Acquisitions

In addition to the above capital expenditures, we acquired the following businesses in the 2008 to 2010 time frame:

(Millions)	Year	Cost	Acquired Goodwill
Academy Corporation	2010	\$21.0	\$ 5.4
Barr Associates, Inc.	2009	55.2	31.7
Techni-Met, Inc.	2008	86.5	13.9

The Academy acquisition cost is shown net of \$1.7 million we received back from the sellers in 2010 subsequent to the purchase as a result of the resolution of valuation adjustments in accordance with the purchase agreement. The Techni-Met acquisition cost is shown net of \$1.4 million we received back from escrow in the first quarter 2009 as the final purchase price adjustment under the terms of that agreement. Each of these three acquisitions was financed with a combination of cash on hand and borrowings under the revolving credit agreement. The value of the assigned goodwill from each transaction was determined with the assistance of independent valuation experts. See Note B to the Consolidated Financial Statements.

Debt

Total outstanding debt of \$86.1 million at December 31, 2010 was an increase of \$21.6 million over the \$64.5 million outstanding as of December 31, 2009. The majority of this increase occurred in the first quarter 2010 as a result of funding a portion of the acquisition of Academy and an increase in working capital. Short-term debt, which included U.S. dollar, metal and foreign currency denominated borrowings, totaled \$47.8 million while long-term debt totaled \$38.3 million as of year-end 2010.

Total debt increased \$22.7 million during 2009. After declining \$2.8 million over the first three quarters of 2009 as a result of the cash flow from operations, debt increased \$25.5 million in the fourth quarter 2009 in order to partially fund the acquisition of Barr.

We have a \$240.0 million revolving credit agreement that matures in the fourth quarter 2012. It is a committed facility and is comprised of sub-facilities for revolving loans, swing line loans, letters of credit and foreign currency denominated borrowings. The agreement is subject to a maximum availability calculation. We were in compliance with all of our debt covenants as of December 31, 2010.

Shareholders' Equity

Shareholders' equity of \$384.4 million as of year-end 2010 was \$44.5 million higher than the balance of \$339.9 million as of year-end 2009. Equity declined \$7.2 million in 2009. Comprehensive income, which includes net income (loss), changes in derivative fair values and the adjustment to the pension and other post-employment benefit liability that are charged directly to equity and the change in the cumulative translation adjustment, was \$41.5 million in 2010. In 2009, we recorded a comprehensive loss of \$11.2 million.

We received \$2.6 million from the exercise of approximately 154,000 options in 2010 and \$0.5 million from the exercise of approximately 32,000 options in 2009.

We repurchased approximately 150,000 shares at a cost of \$3.5 million in 2010 under a share buyback program initially authorized by our Board of Directors in 2008. We did not repurchase any shares under this plan in 2009.

Equity was also affected by stock-based compensation expense, the tax benefits on stock compensation realization and other factors in both 2010 and 2009.

Off-balance Sheet Obligations

We maintain the majority of the precious metals we use in production on a consignment basis in order to reduce our exposure to metal price movements and to reduce our working capital investment. In 2010, we began consigning a portion of our copper requirements as well. See "Quantitative and Qualitative Disclosures about Market Risk". The notional value of the off-balance sheet inventory was \$211.8 million as of year-end 2010 compared to \$98.7 million as of year-end 2009. This increase was caused by a combination of significantly higher metal prices and higher quantities of metal on hand. The increased quantity was due to improved business conditions, the

acquisition of Academy and inclusion of their requirements under the consignment lines and the addition of copper under the lines in 2010.

We were in compliance with all of the covenants contained in the consignment agreements as of December 31, 2010.

Contractual Obligations

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

(Millions)	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Thereafter</u>	<u>Total</u>
Long-term debt	\$ —	\$ 30.0	\$ —	\$ —	\$ —	\$ 8.3	\$ 38.3
Non-cancelable lease payments	8.6	5.7	5.1	3.6	3.4	18.2	44.6
Capital lease payments	1.3	1.2	1.1	1.1	1.1	7.9	13.7
Pension plan contribution	8.8	—	—	—	—	—	8.8
Purchase commitments	2.5	—	—	—	—	—	2.5
Total	<u>\$ 21.2</u>	<u>\$ 36.9</u>	<u>\$ 6.2</u>	<u>\$ 4.7</u>	<u>\$ 4.5</u>	<u>\$ 34.4</u>	<u>\$107.9</u>

The long-term debt repayment in 2012 represents the amounts borrowed under the revolving credit agreement as of year-end 2010. This agreement matures in 2012. We anticipate that we will renegotiate a new agreement prior to the maturation date as we have done with previous agreements; however, we cannot guarantee that we will be able to enter into a replacement facility with similar terms as the existing facility. Outstanding borrowings under the revolving credit agreement classified as short-term debt totaled \$11.1 million as of December 31, 2010. See Note F to the Consolidated Financial Statements for additional debt information.

The non-cancelable lease payments represent payments under operating leases with initial lease terms in excess of one year as of December 31, 2010. The capital lease payments include the building for the new beryllium facility at the Elmore site and other material capital leases. See Note G to the Consolidated Financial Statements for further leasing details.

The pension plan contribution of \$8.8 million in the above table represents our best estimate of the required 2011 contribution to the domestic defined benefit plan as of early in 2011. Contributions to the plan are designed to comply with ERISA guidelines, which change from time to time, and are based upon the plan's funded ratio, which is affected by actuarial assumptions, investment performance, benefit payouts, plan expenses, amendments and other factors. Therefore, it is not practical to estimate contributions to the plan beyond one year.

The purchase commitments of \$2.5 million are for capital equipment to be acquired in 2011 based on orders placed as of December 31, 2010.

Liquidity

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 strategic acquisitions.

The cumulative cash flow provided from operations totaled \$149.5 million in 2008 through 2010, while capital expenditures, net of amounts reimbursed by the government, totaled \$76.5 million.

A summary of key data relative to our liquidity, including the outstanding debt, cash balances and available borrowing capacity, as of the end of each of the last three years is as follows:

(Millions)	<u>December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
Total outstanding debt	\$ 86.1	\$64.5	\$ 41.8
Cash	16.1	12.3	18.5
Debt net of cash	70.0	52.2	23.3
Available borrowing capacity	173.0	46.3	218.2

Debt net of cash is a non-GAAP measure. We are providing this information because we believe it is more indicative of our overall financial position. It is also a measure our management uses to assess financing and other decisions.

As the chart indicates, debt net of cash increased \$46.7 million from the end of 2008 to the end of 2010. During these two years, we acquired Barr for \$55.2 million and Academy for \$21.0 million. We also made contributions to the domestic defined benefit pension plan totaling \$31.8 million in these two years. The increase in debt was less than these net outlays as a result of the cash flow from operations being in excess of capital spending.

The available borrowing capacity in the chart represents the amounts that could be borrowed under the revolving credit agreement and other secured lines existing as of December 31 of each year depicted. The applicable debt covenants have been taken into account when determining the available borrowing capacity. One of these covenants restricts the borrowing capacity to a multiple of the twelve-month trailing earnings before interest, income taxes, depreciation and amortization and other adjustments. The improvement in our earnings in 2010 over 2009 has allowed for the available borrowing capacity to increase, despite the additional debt outstanding. Conversely, the operating loss in 2009 reduced the available borrowing capacity as of year-end 2009 from the year-end 2008 level.

As of early in the first quarter 2011, we do not know of any future or pending changes that will cause us to be in non-compliance with any of our debt covenants in the near term.

The debt-to-total-debt-plus-equity ratio, a measure of balance sheet leverage, was 18% as of December 31, 2010, 16% as of December 31, 2009 and 11% as of December 31, 2008. The increases in 2010 and 2009 were largely due to the additional borrowings to finance portions of the Academy and Barr acquisitions. Management believes that this level of leverage is within the long-term average for the Company.

There are no mandatory long-term debt repayments due in 2011.

The unused and available capacity under the consignment lines totaled approximately \$24.8 million as of year-end 2010.

The working capital ratio, which compares current assets excluding cash to current liabilities excluding debt, was 3.4 to 1.0 as of year-end 2010 versus 3.2 to 1.0 as of year-end 2009.

Cash on hand does not affect the covenants or the borrowing capacity under our debt agreements. Portions of the cash balances may be invested in high quality, highly liquid investments with maturities of three months or less.

In July 2010, our Board of Directors re-authorized the Company to purchase up to 700,000 shares of our common stock, which represents approximately 3% of our outstanding shares. The primary purpose of this program is to offset the dilution created through shares issued under stock-based compensation plans. Any stock repurchases will be made from time to time for cash in the open market or otherwise, including without limitation, in privately negotiated transactions and round lot or block transactions on the New York Stock Exchange, and may be made pursuant to accelerated share repurchases or Rule 10b5-1 plans. The repurchase program may be suspended or discontinued at any time.

ENVIRONMENTAL

We have an active environmental compliance program. We estimate the probable cost of identified environmental remediation projects and establish reserves accordingly. The environmental remediation reserve balance was \$5.2 million at December 31, 2010 and \$5.6 million at December 31, 2009. Payments against the reserve totaled \$0.7 million in 2010 and \$1.0 million in 2009. Spending in both years included clean-up costs for the Company's former headquarters building that previously was also used to house light manufacturing operations and R&D laboratories as well as other small remediation projects. See Note J to the Consolidated Financial Statements.

ORE RESERVES

We have proven and probable reserves of beryllium-bearing bertrandite ore in Juab County, Utah. 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 but have been computed from inspection sites that are farther apart than those used to measure proven reserves. Although the inspection sites are fewer, assurance levels are sufficient to assume ore continuity. Ore dilution of approximately seven percent occurs during the mining

process. The ore is processed at our extraction facility in Utah. Approximately 87% of the beryllium in ore is recovered in the extraction process. We own approximately 95% of the proven reserves, with the remaining reserves leased. 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 the Utah facility.

We use computer models to estimate ore reserves, which are subject to economic and physical evaluation. 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. Based upon average production levels in recent years, proven reserves would last over one hundred years. Ore reserves classified as possible are excluded from the following table.

	2010	2009	2008	2007	2006
Proven bertrandite ore reserves at year end (thousands of dry tons)	6,404	6,425	6,454	6,531	6,550
Grade % beryllium	0.266%	0.266%	0.266%	0.266%	0.267%
Probable bertrandite ore reserves at year end (thousands of dry tons)	3,519	3,519	3,519	3,519	3,519
Grade % beryllium	0.232%	0.232%	0.232%	0.232%	0.232%
Bertrandite ore processed (thousands of dry tons, diluted)	56	39	64	52	48
Grade % beryllium, diluted	0.336%	0.330%	0.321%	0.321%	0.352%

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 accounting guidelines. Litigation and environmental accruals are established only 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 in the period when the change was made. See Note J to the Consolidated Financial Statements.

Legal claims may be 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 an 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.

Non-employee claims for beryllium disease made prior to 2022 where any of the alleged exposure period is prior to year-end 2007 are covered by insurance. The insurance covers defense costs and indemnity payments (resulting from settlements or court verdicts), subject to a \$1.0 million annual deductible. In 2010, defense and indemnity costs were less than the deductible.

Pensions. We have a defined benefit pension plan that covers a large portion of our current and former domestic employees. Carrying values of the associated pension assets and liabilities are determined on an actuarial basis using numerous actuarial and financial assumptions. Differences between the assumptions and current period

actual results are typically 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 plan liability for accounting purposes was \$44.1 million as of December 31, 2010.

Management annually reviews key pension plan assumptions, including the expected return on plan assets, the discount rate and the average wage rate increase, against actual results, trends, Company strategies, the current and projected investment environment and industry standards and makes adjustments accordingly. The actuaries adjust certain assumptions to reflect changes in demographics and other factors, including mortality rates and employee turnover, annually as warranted. These adjustments may then lead to a higher or lower expense in future periods.

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 5.50% as of December 31, 2010 and 5.875% as of December 31, 2009.

Our pension plan investment strategies are governed by a policy adopted by the Board of Directors. Management uses a group of outside investment analysts and brokerage firms to implement these strategies. 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, we reduced the expected rate of return on plan assets assumption to 8.00% as of December 31, 2010 from an assumption of 8.25% as of December 31, 2009. The plan investments generated a return in excess of the 8.25% in both 2010 and 2009 after incurring a significant loss in 2008. However, the expected rate of return assumption relates to the long term and given changes in risk assumptions, projections of future returns by type of investment and other factors, we believe that an 8.00% return over the long term is a reasonable assumption. Should the assets earn an average return less than 8.00% over time, in all likelihood the future pension expense would increase. Investment earnings in excess of 8.00% would tend to reduce the future expense.

The impact on the pension expense of a change in discount rate or expected rate of return assumption can vary from year to year depending upon the undiscounted liability level, the current discount rate, the asset balance, other changes to the plan and other factors. If the December 31, 2010 discount rate were reduced by 25 basis points (0.25%) and all other pension assumptions remained constant, then the 2011 projected pension expense would increase by approximately \$0.6 million. If the expected rate of return assumption was reduced by 25 basis points and all other pension assumptions remained constant, the 2011 projected pension expense would increase by approximately \$0.3 million.

Based upon current assumptions, guidelines and estimates, we project the required cash contribution to be made to the plan will be \$8.8 million in 2011. Additional contributions may be made during 2011 based upon a number of factors, including the performance of the plan investments, the discount rate environment, the Company's operating performance, the availability of excess cash and borrowing rates under available credit lines.

The pension liability is recalculated at the measurement date (December 31 of each year) and any adjustments to this account and OCI will be recorded at that time accordingly. See Note I to the Consolidated Financial Statements for additional details on our pension and other retirement plans.

LIFO Inventory. The prices of certain major raw materials that we use, including copper, nickel, gold, silver and other precious metals, fluctuate during a given year. Overall prices on average were higher in 2010 than in 2009.

Where possible, such changes in material costs are generally reflected in selling price adjustments, particularly with precious metals and copper. The prices of labor and other factors of production, including supplies and utilities, generally increase with inflation. Portions of these cost increases may be offset by manufacturing improvements and other efficiencies. From time to time, we will revise our billing practices to include an energy surcharge in attempts to recover a portion of our higher energy costs from our customers. However, market factors, alternative materials and competitive pricing may limit our ability to offset all cost increases with higher prices.

We use the 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, but not always, lower than it would be under most alternative costing methods. The LIFO cost may also be 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 inventory 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, 2010 level, a 100 basis point change in the annual inflation rate would cause a \$0.6 million change in the LIFO inventory value.

Deferred Tax Assets. We record deferred tax assets and liabilities 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 do not have an expiration date. We will also evaluate deferred tax assets for impairment due to cumulative operating losses and record a valuation allowance as warranted. A valuation allowance may increase tax expense and reduce net income in the period it is recorded. If a valuation allowance is no longer required, it will reduce tax expense and increase net income in the period that it is reversed.

We had valuation allowances of \$2.5 million associated with state and foreign deferred tax assets as of year-end 2010 primarily for net operating loss carryforwards.

See Note Q to the Consolidated Financial Statements for additional deferred tax details.

Unearned revenue. Billings to customers in advance of the shipment of the goods are initially recorded as unearned revenue, which is a liability on the balance sheet. This liability is subsequently reversed when the revenue is recognized. 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 satisfied. The related inventory also remains on our balance sheet until these revenue recognition criteria are met. Advanced billings are typically made in association with products with long manufacturing times and/or products paid with funds from a customer's contract with the government. 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. The unearned revenue balance was \$2.4 million as of year-end 2010.

Long-term unearned income. Expenditures for capital equipment to be reimbursed under government contracts are recorded in construction in process. Reimbursements for those expenditures are recorded in unearned income, a liability on the balance sheet. The total cost of the assets to be constructed includes costs reimbursed by the government as well as costs borne by us. When the assets are placed in service and capitalized, this total cost will be depreciated over the useful life of the assets. The unearned income liability will be reduced and credited to income ratably with the annual depreciation expense. This benefit in effect will reduce the net expense charged to the income statement to an amount equal to the depreciation on the portion of the cost of the assets borne by us.

Capital expenditures subject to reimbursement from the government under the life of the current DoD project and the related unearned income balance totaled \$57.2 million as of December 31, 2010. The project was close to completion as of year-end 2010 and we anticipate that the equipment will be placed in service in the first half of 2011.

Derivatives. We may use derivative financial instruments to hedge our foreign currency, commodity and precious metal price and interest rate exposures. We apply hedge accounting when an effective hedge relationship can be documented and maintained. If a cash flow 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. If a derivative is deemed to be a hedge of the fair value of a balance sheet item, the change in the derivative's value will be recorded in income and will offset the change in the fair value of the hedged item to the extent that the hedge is effective.

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, quarterly forecasts and other analyses serve as the basis for determining forecasted transactions. The use of derivatives is governed by

policies established by the Board of Directors. These policies provide guidance on the allowable types of hedge contracts, the allowable duration of the contracts and other related matters. Hedge contracts are secured and approved by senior financial managers at our corporate office. The level of derivatives outstanding may be limited by the availability of credit from financial institutions.

Our practice has been to secure hedge contracts denominated in the same manner as the underlying exposure; for example, a yen exposure will only be hedged with a yen contract and not with a surrogate currency. We also secure contracts through financial institutions that are already part of our bank group.

See Note H to the Consolidated Financial Statements and “Quantitative and Qualitative Disclosures About Market Risk”.

OUTLOOK

After a record sales year in 2010, we entered 2011 with a very healthy backlog and a positive outlook for a number of our markets. The performance characteristics of our materials make us the supplier of choice for a wide range of applications within the consumer electronics market. Our materials are used in an increasing number of LED applications and we anticipate solid growth for these materials in 2011. Within the medical market, we anticipate that sales will increase to our existing customer base in 2011 while we continue to develop products and relationships with other potential customers for long-term growth. We are positioned for growth in the industrial components and commercial aerospace market. We believe that we can leverage the investments in Barr and Academy to improve our sales to the key markets they serve. The solar energy market also remains a long-term growth opportunity for a number of our materials.

On the downside, portions of our traditional defense business may be softer in 2011 as compared to 2010 due to changes in government spending patterns. A portion of our sales growth in 2010 was due to a downstream inventory replenishment, particularly in the consumer electronics market, that may not repeat in 2011. The market price for our key raw materials, including gold, silver and copper, was quite high entering 2011 and this higher cost may force some customers to turn to alternative lower cost (and lower performing) materials from other suppliers or defer their purchases from us for a period of time. We also remain cautious about the economy in general and the impact that the current high unemployment rate and government deficits may have on consumer spending levels and the ability for companies to expand.

As of early in the first quarter 2011, taking into account the above and assuming no change in metal prices, we are expecting that our sales will be higher in 2011 than in 2010.

The profitability from the projected sales growth, however, will be offset to a certain extent by higher costs in 2011. These costs include:

- Our employee fringe benefit costs will be higher due to medical cost inflation and an increased expense for the domestic defined benefit pension plan as a result of a lower discount rate and other factors;
- The start-up of the new beryllium facility will probably result in various one-time inefficiencies as the equipment is tested and brought on stream. Once fully operational, the facility will provide a stable source of high-quality metallic beryllium as the current sources are not sufficient to satisfy our needs in the long term. However, the ongoing unit cost of the material produced by the facility will be higher than our purchase price of beryllium in 2010; and
- We are undertaking various initiatives, including the corporate rebranding program, designed to improve our efficiencies and profitability in the long term, but the related up-front costs may have a negative impact on our earnings in 2011. We will have additional legal, administrative and marketing costs associated with changing the name of the Company and all of our subsidiaries and to effectively communicate the impact of the rebranding effort to our customers, vendors and shareholders in 2011.

We will continue our cost control efforts and implement strategies to improve operating efficiencies. The high raw material costs will keep us focused on improving inventory turns and utilization in order to minimize the inventory on hand, whether owned or consigned. Capital investments will continue to be closely managed and we do not anticipate a significant change in the spending level in 2011 from the 2010 level excluding spending on the new beryllium plant.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

While economic conditions have improved in 2010 after the global economic crisis in late 2008 and 2009, we remain exposed to changes in economic conditions and the potential impact those changes may have on various facets of our business. We have a program in place to closely monitor the credit worthiness and financial condition of our key providers of financial services, including our bank group and insurance carriers, as well as the credit worthiness of customers and vendors and have various contingency plans in place.

Our credit lines are with banks that remained solvent throughout the crisis. Our total borrowing capacity under secured lines that cannot be terminated prior to maturity as long as we continue to meet our debt covenants was in excess of current needs as of year-end 2010. We also have metal consignment lines with several institutions. The capacity under these lines has been expanded over the last two years due to our increased needs and the impact of higher metal prices. Our credit lines for foreign currency hedging purposes have remained in excess of our needs as well.

The financial statement impact from the risk of one or more of the banks in our bank group becoming insolvent cannot be estimated at the present time.

We are exposed to precious metal and commodity price, interest rate, foreign exchange rate and utility cost differences. While the degree of exposure varies from year to year, our methods and policies designed to manage these exposures have remained fairly consistent. Generally, 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 cost efficient. The use of derivatives is subject to policies approved by the Board of Directors with oversight provided by a group of senior financial managers at our corporate office.

We use gold and other precious metals in manufacturing various products. To reduce the exposure to market price changes, the majority of our precious metal requirements 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. The use of precious metal consignment arrangements is governed by a policy approved by the Board of Directors.

We are charged a consignment fee by the financial institutions that own the precious metals. This fee is partially a function of the market price of the metal. Because of market forces and competition, the fee can only 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. Customers may also elect to provide their own material for us to process as opposed to purchasing our material. Should the market price of precious metals that we have on consignment increase by 20% from the prices on December 31, 2010, the additional pre-tax cost to us as a result of an increase in the consignment fee would be approximately \$1.3 million on an annual basis. This calculation assumes no changes in the quantity of inventory or the underlying fee and that none of the additional fees are charged to customers.

The available capacity of our existing credit lines to consign precious metals is a function of the quantity and price of the metals on hand. As prices increase, as they did in 2010, a given quantity of metal will use a larger proportion of the credit line. A significant prolonged increase in metal prices could result in our credit lines being fully utilized, and, absent securing additional credit line capacity from a financial institution, could require us to purchase precious metals rather than consign them, require customers to supply their own metal and/or force us to turn down additional business opportunities. If we were in a significant precious metal ownership position, we might elect to use derivative financial instruments to hedge the potential price exposure. The cost to finance the purchased inventory may also be higher than the consignment fee. The financial statement impact of the risk from rising metal prices impacting our credit availability cannot be estimated at the present time.

We also use 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. While over time our price exposure to copper is generally in balance, there can be a lag between the change in our cost and the pass-through to our customers, resulting in higher or lower margins in a given period.

Beginning in 2010, we consigned a portion of our copper inventory requirements. As with precious metals, the available capacity under the existing lines is a function of the quantity and price of metal on hand. Should the market price of copper increase by 20% from the price as of December 31, 2010, the additional pre-tax cost to us as a result of an increase in the consignment fee would be approximately \$0.2 million on an annual basis. This calculation assumes no changes in the quantity of inventory or the underlying fee and that none of the additional fees are charged to customers.

In our manufacturing processes, we use ruthenium and other base and precious metals that are not widely used by others or actively traded and, therefore, there is no established efficient market for derivative financial instruments that could be used to effectively hedge the related price exposures. For certain applications, our pricing practice with respect to these metals is to establish the selling price 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 long manufacturing lead time items and with sludges and scrap materials, which generally have longer processing times to be refined into a usable form for further manufacturing and are typically not covered by specific sales orders from customers. As a result of market price fluctuations, we recorded lower of cost or market charges totaling \$0.4 million in 2010, \$0.7 million in 2009 and \$15.2 million in 2008 on portions of our inventory. The charges were lower in 2010 and 2009 than in 2008 due to the market prices and a reduction in the level of ruthenium-containing inventories.

We are exposed to changes in interest rates on portions of 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. There were no interest rate derivatives outstanding as of December 31, 2010. 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. Assuming no change in the amount or make-up of the outstanding debt as of December 31, 2010, a 200 basis point movement upwards in the interest rates would increase our annual interest expense by \$1.1 million.

Portions of our international operations sell products priced in foreign currencies, mainly the euro and yen, 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 Board approved policies. If the dollar strengthened, the decline in the translated value of our margins would be at least partially 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 \$45.9 million as of December 31, 2010. If the dollar weakened 10% against the currencies we have hedged from the December 31, 2010 exchange rates, the reduced gain and/or increased loss on the outstanding contracts as of December 31, 2010 would reduce pre-tax profits by approximately \$4.5 million in 2011. 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 value of the outstanding foreign currency contracts was a net liability of \$1.5 million at December 31, 2010, indicating that the average hedge rates were unfavorable compared to the actual year end market exchange rates.

The cost of natural gas and electricity can vary from year to year and from season to season. We attempt to minimize these fluctuations and the exposure to higher costs by utilizing fixed price agreements of set durations, when deemed appropriate, obtaining competitive bidding between regional energy suppliers and other methods.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Management's Report on Internal Control over Financial Reporting

The management of Materion Corporation and subsidiaries are responsible for establishing and maintaining adequate internal controls over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. Materion Corporation 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.

Materion Corporation and subsidiaries' management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2010. 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, 2010, the Company's internal control over financial reporting is effective.

The effectiveness of our internal control over financial reporting as of December 31, 2010 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report.

/s/ RICHARD J. HIPPLE

Richard J. Hipple
Chairman, President and Chief Executive Officer

/s/ JOHN D. GRAMPA

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

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Materion Corporation

We have audited Materion Corporation (formerly known as Brush Engineered Materials Inc.) and subsidiaries' internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Materion Corporation (formerly known as 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 included in the Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on 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, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, 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, Materion Corporation (formerly known as Brush Engineered Materials Inc.) and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, 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 as of December 31, 2010 and 2009, and the related consolidated statements of income and loss, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2010 of Materion Corporation (formerly known as Brush Engineered Materials Inc.) and subsidiaries and our report dated March 9, 2011 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Cleveland, Ohio
March 9, 2011

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Materion Corporation

We have audited the accompanying consolidated balance sheets of Materion Corporation (formerly known as Brush Engineered Materials Inc.) and subsidiaries as of December 31, 2010 and 2009, and the related consolidated statements of income and loss, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2010. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule 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 Materion Corporation (formerly known as Brush Engineered Materials Inc.) and subsidiaries at December 31, 2010 and 2009, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2010, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Materion Corporation (formerly known as Brush Engineered Materials Inc.) and subsidiaries' internal control over financial reporting as of December 31, 2010, 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 9, 2011 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Cleveland, Ohio
March 9, 2011

Materion Corporation and Subsidiaries
Years Ended December 31, 2010, 2009 and 2008

Consolidated Statements of Income and Loss

(Thousands except per share amounts)	2010	2009	2008
Net sales	\$1,302,314	\$715,186	\$909,711
Cost of sales	1,079,666	623,764	757,836
Gross margin	222,648	91,422	151,875
Selling, general and administrative expense	126,477	89,762	104,523
Research and development expense	7,113	6,771	6,522
Litigation settlement gain	—	—	(1,059)
Derivative ineffectiveness	598	4,892	171
Other — net	14,827	9,482	13,647
Operating profit (loss)	73,633	(19,485)	28,071
Interest expense — net	2,665	1,299	1,995
Income (loss) before income taxes	70,968	(20,784)	26,076
Income tax expense (benefit)	24,541	(8,429)	7,719
Net income (loss)	\$ 46,427	\$ (12,355)	\$ 18,357
Basic earnings per share:			
Net income (loss) per share of common stock	\$ 2.29	\$ (0.61)	\$ 0.90
Diluted earnings per share:			
Net income (loss) per share of common stock	\$ 2.25	\$ (0.61)	\$ 0.89
Weighted-average number of shares of common stock outstanding			
Basic	20,282	20,191	20,335
Diluted	20,590	20,191	20,543

See Notes to Consolidated Financial Statements.

Materion Corporation and Subsidiaries
Years Ended December 31, 2010, 2009 and 2008

Consolidated Statements of Cash Flows

(Thousands)	2010	2009	2008
Cash flows from operating activities:			
Net income (loss)	\$ 46,427	\$(12,355)	\$ 18,357
Adjustments to reconcile net income (loss) to net cash provided from operating activities:			
Depreciation, depletion and amortization	35,394	31,939	33,826
Amortization of deferred financing costs in interest expense	538	430	378
Stock-based compensation expense	4,100	3,484	2,552
Derivative financial instruments ineffectiveness	598	4,892	171
Deferred tax expense (benefit)	13,623	(10,065)	6,156
Changes in assets and liabilities net of acquired assets and liabilities:			
Decrease (increase) in accounts receivable	(50,386)	10,045	16,513
Decrease (increase) in other receivables	7,084	(7,678)	7,885
Decrease (increase) in inventory	(23,112)	34,162	12,897
Decrease (increase) in prepaid and other current assets	(3,566)	(4,606)	4,713
Increase (decrease) in accounts payable and accrued expenses	7,002	(754)	(11,825)
Increase (decrease) in unearned revenue	1,938	319	(2,456)
Increase (decrease) in interest and taxes payable	2,048	5,456	(14,074)
Increase (decrease) in long-term liabilities	(8,736)	(16,422)	1,960
Other — net	(1,911)	2,796	(176)
Net cash provided from operating activities	31,041	41,643	76,877
Cash flows from investing activities:			
Payments for purchase of property, plant and equipment	(42,314)	(44,173)	(35,515)
Payments for mine development	(11,348)	(808)	(421)
Reimbursement for capital spending under government contract	21,944	28,200	8,017
Payments for purchase of business less cash received	(20,605)	(54,107)	(86,052)
Proceeds from transfer of acquired inventory to consignment line	5,667	—	22,915
Proceeds from sale of property, plant and equipment	77	3	—
Other investments — net	60	75	66
Net cash used in investing activities	(46,519)	(70,810)	(90,990)
Cash flows from financing activities:			
Proceeds from issuance (repayment) of short-term debt	(8,406)	25,778	4,870
Proceeds from issuance of long-term debt	80,000	25,700	46,200
Repayment of long-term debt	(50,000)	(28,600)	(45,600)
Principal payments under capital lease obligations	(779)	(185)	(65)
Deferred financing costs	(220)	(126)	(352)
Repurchase of common stock	(3,527)	—	(4,999)
Issuance of common stock under stock option plans	2,631	497	243
Tax benefit from stock compensation realization	121	53	455
Net cash provided from financing activities	19,820	23,117	752
Effects of exchange rate changes on cash and cash equivalents	(491)	(243)	177
Net change in cash and cash equivalents	3,851	(6,293)	(13,184)
Cash and cash equivalents at beginning of year	12,253	18,546	31,730
Cash and cash equivalents at end of year	\$ 16,104	\$ 12,253	\$ 18,546

See Notes to Consolidated Financial Statements.

Materion Corporation and Subsidiaries
December 31, 2010 and 2009

Consolidated Balance Sheets

(Thousands)	2010	2009
Assets		
Current assets		
Cash and cash equivalents	\$ 16,104	\$ 12,253
Accounts receivable (net of allowance of \$1,452 for 2010 and \$1,397 for 2009)	139,374	83,997
Other receivables	3,972	11,056
Inventories	154,467	130,098
Prepaid expenses	31,743	28,020
Deferred income taxes	10,065	14,752
Total current assets	355,725	280,176
Related-party notes receivable	90	90
Long-term deferred income taxes	2,042	4,873
Property, plant and equipment	719,953	665,361
Less allowances for depreciation, amortization and depletion	(454,085)	(437,595)
Property, plant and equipment – net	265,868	227,766
Intangible assets	36,849	39,007
Other assets	1,900	3,007
Goodwill	72,936	67,034
Total Assets	\$ 735,410	\$ 621,953
Liabilities and Shareholders' Equity		
Current liabilities		
Short-term debt	\$ 47,835	\$ 56,148
Accounts payable	33,375	36,573
Salaries and wages	34,035	16,292
Taxes other than income taxes	905	763
Other liabilities and accrued items	24,911	27,027
Unearned revenue	2,378	432
Income taxes	3,921	2,459
Total current liabilities	147,360	139,694
Other long-term liabilities	17,915	9,579
Retirement and post-employment benefits	82,502	82,354
Unearned income	57,154	39,697
Long-term income taxes	2,906	2,329
Deferred income taxes	4,912	136
Long-term debt	38,305	8,305
Shareholders' equity		
Serial preferred stock, no par value; 5,000 authorized shares; none issued	—	—
Common stock, no par value; 60,000 authorized shares; issued shares of 26,968 in 2010 and 26,800 in 2009	180,161	173,776
Retained earnings	368,401	321,974
Common stock in treasury; 6,648 shares in 2010 and 6,566 shares in 2009	(115,090)	(111,370)
Other comprehensive income (loss)	(51,616)	(46,684)
Other equity transactions	2,500	2,163
Total shareholders' equity	384,356	339,859
Total Liabilities and Shareholders' Equity	\$ 735,410	\$ 621,953

See Notes to Consolidated Financial Statements.

Materion Corporation and Subsidiaries
Years Ended December 31, 2010, 2009 and 2008

Consolidated Statements of Shareholders' Equity

(Thousands)	Common Stock	Retained Earnings	Common Stock In Treasury	Other Comprehensive Income (Loss)	Other Equity Transactions	Total
Balances at January 1, 2008	\$167,347	\$315,972	\$(105,578)	\$ (24,576)	\$ 549	\$353,714
Net income	—	18,357	—	—	—	18,357
Foreign currency translation adjustment	—	—	—	2,305	—	2,305
Derivative and hedging activity, net of taxes of \$51	—	—	—	97	—	97
Pension and post-employment benefit adjustment, net of tax benefit of \$13,126	—	—	—	(25,627)	—	(25,627)
Comprehensive loss						(4,868)
Proceeds from exercise of 12 shares under option plans	243	—	—	—	—	243
Income tax benefit from stock compensation realization	455	—	—	—	—	455
Repurchase of 300 shares	—	—	(4,999)	—	—	(4,999)
Stock-based compensation expense	2,552	—	—	—	—	2,552
Directors' deferred compensation	—	—	(288)	—	288	—
Balances at December 31, 2008	170,597	334,329	(110,865)	(47,801)	837	347,097
Net loss	—	(12,355)	—	—	—	(12,355)
Foreign currency translation adjustment	—	—	—	(22)	—	(22)
Derivative and hedging activity, net of taxes of \$446	—	—	—	825	—	825
Pension and post-employment benefit adjustment, net of tax benefit of \$92	—	—	—	314	—	314
Comprehensive loss						(11,238)
Proceeds from exercise of 32 shares under option plans	497	—	—	—	—	497
Income tax benefit from stock compensation realization	53	—	—	—	—	53
Stock-based compensation expense	3,484	—	—	—	—	3,484
Shares withheld for employee taxes on equity awards	(482)	—	—	—	—	(482)
Directors' deferred compensation	(13)	—	(505)	—	1,326	808
Other equity transactions	(360)	—	—	—	—	(360)
Balances at December 31, 2009	173,776	321,974	(111,370)	(46,684)	2,163	339,859
Net income	—	46,427	—	—	—	46,427
Foreign currency translation adjustment	—	—	—	1,665	—	1,665
Derivative and hedging activity, net of tax benefit of \$581	—	—	—	(1,078)	—	(1,078)
Pension and post-employment benefit adjustment, net of tax benefit of \$3,120	—	—	—	(5,519)	—	(5,519)
Comprehensive income						41,495
Proceeds from exercise of 154 shares under option plans	2,631	—	—	—	—	2,631
Income tax benefit from stock compensation realization	120	—	—	—	—	120
Repurchase of 150 shares	—	—	(3,527)	—	—	(3,527)
Stock-based compensation expense	4,100	—	—	—	—	4,100
Shares withheld for employee taxes on equity awards	(481)	—	—	—	—	(481)
Directors' deferred compensation	—	—	(192)	—	337	145
Other equity transactions	15	—	(1)	—	—	14
Balances at December 31, 2010	\$180,161	\$368,401	\$(115,090)	\$ (51,616)	\$ 2,500	\$384,356

See Notes to Consolidated Financial Statements.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements

Note A —Significant Accounting Policies

Organization: The Company amended its articles of incorporation to change its name from Brush Engineered Materials Inc. to Materion Corporation effective March 8, 2011. Concurrent with the name change, the Company's New York Stock Exchange ticker symbol was changed from BW to MTRN.

The Company is a holding company with subsidiaries that have operations in the United States, Europe and Asia. These operations manufacture advanced engineered materials used in a variety of markets, including consumer electronics, defense and science, industrial components and commercial aerospace, energy, automotive electronics, telecommunications infrastructure, medical and appliance. The Company has four reportable segments, the names of which were changed effective in the fourth quarter 2010:

Advanced Material Technologies manufactures precious and non-precious vapor deposition targets, frame lid assemblies, advanced chemicals, performance coatings, optics, microelectronic packages, other precious and non-precious metal products and specialty inorganic materials;

Performance Alloys manufactures high precision strip and bulk products from copper and nickel-based alloys;

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

Technical Materials manufactures clad inlay and overlay metals, precious and base metal electroplated systems and other related products.

See Note M to the Consolidated Financial Statements for additional segment details. 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 Materion Corporation and its subsidiaries. All of the Company's subsidiaries are wholly owned as of December 31, 2010. Intercompany 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 assets for which depreciation is computed by the

units-of-production or the sum-of-the-years-digit method. The depreciable lives that are used in computing the annual provision for depreciation by class of asset are as follows:

	<u>Years</u>
Land improvements	5 to 25
Buildings	10 to 40
Leasehold improvements	Life 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

An asset acquired under a capital lease will be recorded at the lesser of the present value of the projected lease payments or the fair value of the asset and will be depreciated in accordance with the above schedule. Leasehold improvements will be depreciated over the life of the improvement if it is shorter than the life 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.

Goodwill and Other Intangible Assets: Goodwill is not amortized, but instead reviewed annually as of December 31 of each year, or more frequently under certain circumstances, for impairment. Goodwill is assigned to the reporting unit, which is the operating segment level or one level below the operating segment. 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 by comparing the carrying value of the assets to the associated estimated future undiscounted cash flow. If the carrying value exceeds that cash flow, then the assets are written down to their fair values.

Derivatives: The Company recognizes all derivatives on the balance sheet at their fair values. If the derivative is designated and effective as 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), a component of shareholders' equity, 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.

Unearned Income: Expenditures for capital equipment to be reimbursed under government contracts are recorded in construction in process while the reimbursements for those expenditures are recorded in unearned income, a liability on the balance sheet. When the assets are placed in service, their total cost will be depreciated over their useful lives and the unearned income liability will be reduced and credited to income ratably with the annual depreciation expense.

Revenue Recognition: The Company generally 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 in advance of the shipment of the goods are recorded as unearned revenue, which is a liability on the balance sheet. Revenue is 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 and Loss.

Advertising Costs: The Company expenses all advertising costs as incurred. Advertising costs were \$0.8 million in 2010, \$0.4 million in 2009 and \$1.0 million in 2008.

Stock-based Compensation: All stock-based compensation instruments, including options, stock appreciation rights, restricted stock and performance restricted stock, are viewed collectively when determining the accounting treatment of the tax considerations upon the realization of the benefit by the recipient.

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 will record a valuation allowance to reduce the deferred tax assets to the amount that is more likely than not to be realized, as warranted by the facts and circumstances. The Company applies a more-likely-than-not recognition threshold for all tax uncertainties and will record a liability for those tax benefits that have a less than 50% likelihood of being sustained upon examination by the taxing authorities.

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 2010 consolidated financial statement presentation. These reclassifications include depicting intangible assets as a separate line item from other assets and unearned income as a separate line item from other long-term liabilities on the Consolidated Balance Sheets.

New Pronouncements: The FASB issued Statement No. 160, “Non-controlling Interests in Consolidated Financial Statements, an amendment of ARB No. 51”, in December 2007, codified within ASC 810 — Consolidation. The statement establishes accounting and reporting standards for a non-controlling interest in a subsidiary and for the deconsolidation of a subsidiary. It clarifies that a non-controlling interest should be classified as a separate component of equity. Among other items, it also changes how income attributable to the parent and the non-controlling interest are presented on the consolidated statement of income. The statement was effective for fiscal years beginning on or after December 15, 2008. The Company adopted this statement as required in 2009 and its adoption did not impact the Consolidated Financial Statements.

The FASB issued Statement No. 141 (Revised 2007), “Business Combinations” in December 2007, codified within ASC 805 — Business Combinations. The statement requires that purchase accounting be used for all business combinations and that an acquirer be identified for every combination. It requires the acquirer to recognize acquired assets, liabilities and non-controlling interests at their fair values. It also requires that costs incurred to affect the transaction as well as any expected, but not obligated, restructuring costs be expensed and not accounted for as a component of goodwill or part of the business combination. The statement revises the accounting for deferred taxes, research and development costs and other items associated with business combinations. The statement was effective for fiscal years beginning on or after December 15, 2008. The Company adopted this statement as required in 2009 and used the provisions of this statement to account for the assets and liabilities of the acquisitions completed in 2009 and 2010 and the transaction-related costs.

The FASB issued Statement No. 161, “Disclosures about Derivative Instruments and Hedging Activities — an amendment of FASB Statement No. 133”, in March 2008, codified within ASC 815 — Derivatives and Hedging. The statement expands the disclosures of Statement No. 133 in order to enhance the users’ understanding of how

and why an entity uses derivatives, how derivative instruments and the related hedged items are accounted for and how derivative instruments and related hedged items affect the entity's financial position, financial performance and cash flows. The statement requires qualitative disclosures about hedging objectives and strategies, quantitative disclosures of the fair value of and the gains and losses from derivatives and disclosures about credit-risk related features in derivatives. The statement was effective for fiscal years beginning after November 15, 2008. The Company adopted this statement as required in 2009. The adoption did not impact the Consolidated Financial Statements other than the required additional disclosures.

The FASB issued ASU No. 2009-13, "Multiple-Deliverable Revenue Arrangements — a consensus of the FASB Emerging Issues Task Force", in October 2009 that provides amendments to the criteria for separating consideration in multiple-deliverable arrangements. This update will allow companies to allocate consideration received for qualified separate deliverables using estimated selling price for both delivered and undelivered items when vendor-specific objective evidence or third-party evidence is unavailable. Additional disclosures discussing the nature of multiple element arrangements, the types of deliverables under the arrangements, the general timing of their delivery, and significant factors and estimates used to determine estimated selling prices are required. The Company adopted this update effective January 1, 2011 for new revenue arrangements entered into or materially modified on or after January 1, 2011. The adoption of the provisions of this update is not expected to have a material impact on the Consolidated Financial Statements.

The FASB issued ASU No. 2010-6, "Improving Disclosures About Fair Value Measurements", in January 2010 that amends existing disclosure requirements under ASC 820 by adding required disclosures about items transferring into and out of levels 1 and 2 in the fair value hierarchy; adding separate disclosures about purchases, sales, issuances, and settlements relative to level 3 measurements; and clarifying, among other things, the existing fair value disclosures about the level of disaggregation. The statement was effective for the first quarter of 2010, except for the requirement to provide level 3 activity of purchases, sales, issuances, and settlements on a gross basis, which is effective beginning the first quarter of 2011. Since this standard impacts disclosure requirements only, its adoption did not have a material impact on the Consolidated Financial Statements.

The FASB issued ASU No. 2010-29, "Business Combinations (Topic 805) — Disclosure of Supplementary Pro Forma Information for Business Combinations", in December 2010 which requires public entities that present comparative financial statements to disclose revenue and earnings of the combined entity as though the business combinations that occurred during the current year had occurred at the beginning of the comparable prior annual reporting period only. The amendments also expand the supplemental pro forma disclosures to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination included in the reported pro forma revenue and earnings. These amendments are effective for business combinations for which the acquisition date is on or after January 1, 2011. The adoption of this statement is not expected to have a significant impact on the Consolidated Financial Statements.

Note B — Acquisitions

In January 2010, the Company acquired the outstanding stock of Academy Corporation of Albuquerque, New Mexico for \$21.0 million in cash. Academy provides precious and non-precious metals and refining services for a variety of applications, including architectural glass, solar energy, medical and electronics. Major product forms include sputtering targets, sheet, fine wire, rod and powder. Academy employs approximately 150 people at its four leased facilities.

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A condensed balance sheet depicting the amounts assigned to the acquired assets and liabilities as of the acquisition date is as follows:

(Thousands)	Asset (Liability)
Cash	\$ 380
Other current assets	4,564
Precious metal inventory	5,667
Finite-lived intangible assets	3,253
Property, plant and equipment	8,533
Other assets	10
Goodwill	5,431
Current liabilities	(4,575)
Deferred income taxes	(2,278)
Total purchase	<u>\$ 20,985</u>

The Company financed the acquisition with a combination of cash on hand and borrowings under the \$240.0 million revolving credit agreement. The \$21.0 million purchase price is net of \$1.7 million the Company received back from the sellers in the second quarter 2010 as a result of the resolution of working capital valuation adjustments in accordance with the purchase agreement. Additional funds remain in escrow pending finalization of various other matters as detailed in the purchase agreement. Immediately after the purchase, the Company transferred Academy's precious metal inventory to a financial institution for its fair value of \$5.7 million and consigned it back under the existing consignment lines.

Academy had sales of \$195.3 million and generated income before income taxes of \$3.5 million in 2010. Assuming the Academy acquisition occurred on January 1, 2009, the pro forma effect on selected line items from the Company's Consolidated Statement of Income and Loss would be as follows:

(Thousands except per share amounts)	Pro Forma Results (Unaudited)	
	2010	2009
Sales	\$1,302,314	\$884,502
Income (loss) before income taxes	70,968	(20,385)
Net income (loss)	46,427	(12,096)
Diluted earnings per share	2.25	(0.60)

In October 2009, the Company acquired all of the capital stock of Barr Associates, Inc. for \$55.2 million in cash. Barr, based in Westford, Massachusetts, manufactures thin film optical filters used in a variety of applications, including defense, aerospace, medical, telecommunications, lighting and astronomy.

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A condensed balance sheet depicting the amounts assigned to the acquired assets and liabilities as of the acquisition date is as follows:

(Thousands)	Asset (Liability)
Cash	\$ 1,058
Other current assets	13,206
Finite-lived intangible assets	12,200
Property, plant and equipment	7,269
Other assets	54
Goodwill	31,727
Current liabilities	(3,360)
Other long-term liabilities	(2,974)
Deferred income taxes	(4,015)
Total purchase	<u>\$ 55,165</u>

The purchase price was financed with a combination of cash on hand and borrowings under the revolving credit agreement. The purchase price included amounts to be held in escrow pending the resolution of various matters as detailed in the purchase agreement. In addition to the initial cash considerations, the purchase agreement allows for a potential earn-out to be paid to the sellers based upon the future performance of the operation. The earn-out was initially recorded in other long-term liabilities at its fair value of \$1.9 million as of December 31, 2009. Based upon actual and revised projected performance and the use of a discounted cash flow analysis, the fair value of the earn out liability was reduced to \$1.1 million as of December 31, 2010.

In February 2008, the Company acquired the operating assets of Techni-Met, Inc. of Windsor, Connecticut for \$86.5 million in cash, including acquisition fees. Techni-Met produces precision precious metal coated flexible polymeric films used in a variety of high end applications, including diabetes diagnostic test strips. Techni-Met sources the majority of its precious metal requirements from other operations within the Company's Advanced Material Technologies segment. The \$86.5 million purchase price was net of \$1.4 million received back from escrow in February 2009 based upon the final agreed-upon balances under the terms of the purchase agreement.

A condensed balance sheet depicting the final amounts assigned to the acquired assets and liabilities as of the acquisition date is as follows:

(Thousands)	Asset (Liability)
Precious metal inventory	\$ 22,915
Other current assets	8,739
Finite-lived intangible assets	26,200
Property, plant and equipment	15,000
Goodwill	13,879
Current liabilities	(222)
Total purchase	<u>\$ 86,511</u>

The Company financed the acquisition with a combination of cash on hand and borrowings under the revolving credit agreement. Immediately subsequent to the purchase, the Company transferred Techni-Met's precious metal inventory to the existing consignment lines and received its market value of approximately \$22.9 million back from the financial institution.

The results of the above acquired businesses were included in the Company's financial statements since their respective acquisition dates. The acquisitions are included in the Advanced Material Technologies segment. 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:

(Thousands)	December 31,	
	2010	2009
Principally average cost:		
Raw materials and supplies	\$ 43,295	\$ 38,740
Work in process	159,081	119,698
Finished goods	32,991	38,950
Gross inventories	235,367	197,388
Excess of average cost over LIFO inventory value	80,900	67,290
Net inventories	<u>\$154,467</u>	<u>\$130,098</u>

Average cost approximates current cost. Gross inventories accounted for using the LIFO method totaled \$153.6 million at December 31, 2010 and \$123.4 million at December 31, 2009. The liquidation of LIFO inventory layers reduced cost of sales by \$4.4 million in 2010 and \$1.9 million in 2009.

Lower of cost or market charges reduced net inventories by \$0.4 million in 2010 and \$0.7 million in 2009.

Note D —Property, Plant and Equipment

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

(Thousands)	December 31,	
	2010	2009
Land	\$ 8,991	\$ 8,690
Buildings	110,344	114,114
Machinery and equipment	469,307	458,946
Software	28,261	25,884
Construction in progress	75,282	50,918
Allowances for depreciation	(450,853)	(434,962)
Subtotal	241,332	223,590
Capital leases	10,732	1,122
Allowances for amortization	(260)	(454)
Subtotal	10,472	668
Mineral resources	5,029	5,029
Mine development	12,007	658
Allowances for amortization and depletion	(2,972)	(2,179)
Subtotal	14,064	3,508
Property, plant and equipment — net	<u>\$ 265,868</u>	<u>\$ 227,766</u>

Depreciation expense, including amortization for assets recorded under capital lease, was \$29.0 million in 2010, \$27.9 million in 2009, and \$30.3 million in 2008.

Note E — Intangible Assets**Assets Acquired**

The Company acquired the following intangible assets in 2010:

(Dollars in thousands)	<u>Amount</u>	<u>Weighted-average Amortization Period</u>
Customer relationships	\$2,880	6.8 Years
Trade name	373	2.0 Years
License	1,300	4.0 Years
Deferred financing costs	220	3.0 Years
Total assets subject to amortization	<u>\$4,773</u>	5.5 Years
Goodwill	<u>\$5,902</u>	Not Applicable

The customer relationships and trade name intangible assets and \$5.4 million of the goodwill were acquired as part of the first quarter 2010 purchase of the capital stock of Academy Corporation. The remainder of the goodwill resulted from adjustments to the preliminary goodwill from revisions to the assigned values to various assets and liabilities from the purchase of the capital stock of Barr Associates, Inc.

The license was acquired by Advanced Material Technologies to make products using technology under patent.

Assets Subject to Amortization

The cost, accumulated amortization and net book value of intangible assets subject to amortization as of December 31, 2010 and 2009 and the amortization expense for each year then ended is as follows:

(Thousands)	2010	2009
Deferred financing costs		
Cost	\$ 3,789	\$ 3,569
Accumulated amortization	(2,840)	(2,302)
Net book value	949	1,267
Customer relationships		
Cost	37,430	34,550
Accumulated amortization	(10,691)	(6,721)
Net book value	26,739	27,829
Technology		
Cost	11,120	11,120
Accumulated amortization	(3,454)	(2,025)
Net book value	7,666	9,095
License		
Cost	1,720	420
Accumulated amortization	(467)	(167)
Net book value	1,253	253
Non-compete contracts		
Cost	500	500
Accumulated amortization	(500)	(479)
Net book value	—	21
Trade name		
Cost	973	600
Accumulated amortization	(731)	(58)
Net book value	242	542
Total		
Cost	\$ 55,532	\$ 50,759
Accumulated amortization	(18,683)	(11,752)
Net book value	\$ 36,849	\$ 39,007
Aggregate amortization expense	\$ 6,931	\$ 4,466

The aggregate amortization expense is estimated to be \$6.5 million in 2011, \$5.9 million in 2012, \$5.0 million in 2013, \$4.7 million in 2014 and \$4.6 million in 2015.

Assets Not Subject to Amortization

The Company's only intangible asset not subject to amortization is goodwill. A reconciliation of the goodwill activity for 2010 and 2009 is as follows:

(Thousands)	2010	2009
Balance at the beginning of the year	\$67,034	\$35,778
Current year additions	5,705	31,256
Adjustment to deferred taxes on prior year acquisition	197	—
Balance at the end of the year	<u>\$72,936</u>	<u>\$67,034</u>

All of the goodwill has been assigned to the Advanced Material Technologies segment.

The goodwill acquired in 2010 and 2009 was not deductible for tax purposes.

Note F —Debt

Long-term debt on the Consolidated Balance Sheets is summarized as follows:

(Thousands)	December 31,	
	2010	2009
Revolving credit agreement	\$30,000	\$ —
Variable rate industrial development revenue bonds payable in 2016	8,305	8,305
Total outstanding	38,305	8,305
Current portion of long-term debt	—	—
Total	<u>\$38,305</u>	<u>\$8,305</u>

Maturities on long-term debt instruments as of December 31, 2010 are as follows:

2011	\$ —
2012	30,000
2013	—
2014	—
2015	—
Thereafter	8,305
Total	<u>\$38,305</u>

The Company has a \$240.0 million revolving credit facility with six financial institutions that is comprised of sub-facilities for short and long-term loans, letters of credit and foreign borrowings. The agreement, which expires in November 2012, is subject to a calculation of maximum availability. The credit agreement also provides for an uncommitted incremental facility whereby under certain circumstances, the Company may be able to borrow additional term loans in an amount not to exceed \$50.0 million. At December 31, 2010, the maximum available and unused credit under this facility was \$162.0 million. The credit agreement is secured by substantially all of the assets of the Company and its direct subsidiaries, with the exception of non-mining real property and certain other assets. 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, 2010, there was \$36.9 million outstanding against the letters of credit sub-facility. The Company pays a variable commitment fee that may reset quarterly (0.125% as of December 31, 2010) on the available and unborrowed amounts under the revolving credit line.

The credit agreement is subject to restrictive covenants including incurring additional indebtedness, acquisition limits, dividend declarations and stock repurchases. In addition, the agreement requires the Company to maintain a maximum leverage ratio and a minimum fixed charge coverage ratio. The Company was in compliance with all of its debt covenants as of December 31, 2010.

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.

(Thousands)	December 31, 2010			December 31, 2009		
	Total	Outstanding	Available	Total	Outstanding	Available
Domestic	\$173,068	\$ 11,080	\$161,988	\$ 51,101	\$ 11,418	\$39,683
Foreign	14,327	3,313	11,014	11,303	435	10,868
Precious metal	33,442	33,442	—	50,862	44,295	6,567
Total	<u>\$220,837</u>	<u>\$ 47,835</u>	<u>\$173,002</u>	<u>\$113,266</u>	<u>\$ 56,148</u>	<u>\$57,118</u>

The domestic line is committed and includes all sub-facilities in the \$240.0 million maximum borrowing under the revolving credit agreement. The Company has various foreign lines of credit, one of which for 3.5 million euros is committed and secured. The remaining foreign lines are uncommitted, unsecured and renewed annually. In 2009, the precious metal facility, which is secured and renewed annually, was amended to include copper. The average interest rate on short-term debt was 3.06% and 2.48% as of December 31, 2010 and 2009, 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 0.33% to 0.50% in 2010 and from 0.36% to 1.05% in 2009.

Note G —Leasing Arrangements

The Company leases warehouse and manufacturing space, and manufacturing, computer and other office equipment under operating leases with terms ranging up to 25 years. Operating lease expense amounted to \$9.9 million, \$8.4 million, and \$7.6 million, during 2010, 2009, and 2008, respectively. The Company also leases manufacturing space and computer equipment under capital lease agreements of varying terms.

The future estimated minimum payments under capital leases and non-cancelable operating leases with initial lease terms in excess of one year at December 31, 2010, are as follows:

(Thousands)	<u>Capital Leases</u>	<u>Operating Leases</u>
2011	\$ 1,317	\$ 8,563
2012	1,228	5,670
2013	1,095	5,064
2014	1,066	3,643
2015	1,064	3,430
2016 and thereafter	<u>7,895</u>	<u>18,223</u>
Total minimum lease payments	13,665	<u>\$ 44,593</u>
Amounts representing interest	<u>3,614</u>	
Present value of net minimum lease payments	<u>\$10,051</u>	

Certain lease agreements may be subject to restrictive covenants, including leverage, fixed charges and annual capital expenditures.

Note H —Fair Value Information and Derivative Financial Instruments

The Company measures and records financial instruments at their fair value. A hierarchy is used for those instruments measured at fair value that distinguishes between assumptions based upon market data (observable inputs) and the Company's assumptions (unobservable inputs). The hierarchy consists of three levels:

Level 1 — Quoted market prices in active markets for identical assets and liabilities;

Level 2 — Inputs other than Level 1 inputs that are either directly or indirectly observable; and

Level 3 — Other significant unobservable inputs developed using estimates and assumptions developed by the Company, which reflect those that a market participant would use.

The following table summarizes the financial instruments measured at fair value in the Consolidated Balance Sheet as of December 31, 2010:

		Fair Value Measurements		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Other Significant Unobservable Inputs (Level 3)
(Thousands)	Total			
Financial Assets				
Directors' deferred compensation investments	\$ 660	\$ 660	\$ —	\$ —
Total	<u>\$ 660</u>	<u>\$ 660</u>	<u>\$ —</u>	<u>\$ —</u>
Financial Liabilities				
Directors' deferred compensation liability	\$ 660	\$ 660	\$ —	\$ —
Foreign currency forward contracts	<u>1,543</u>	<u>—</u>	<u>1,543</u>	<u>—</u>
Total	<u>\$2,203</u>	<u>\$ 660</u>	<u>\$ 1,543</u>	<u>\$ —</u>

The Company uses a market approach to value the assets and liabilities for outstanding derivative contracts in the table above. Foreign currency forward contracts are valued through models that utilize market observable inputs including both spot and forward prices for the same underlying currencies. The carrying values of the other working capital items and debt on the Consolidated Balance Sheet approximate their fair values as of December 31, 2010.

The Company uses derivative contracts to hedge portions of its foreign currency exposures and may also use derivatives to hedge a portion of its precious metal exposures. The objectives and strategies for using derivatives in these areas are as follows:

Foreign Currency. The Company sells products to overseas customers in their local currencies, primarily the euro and yen. The Company secures foreign currency derivatives, mainly forward contracts and options, to hedge these anticipated sales transactions. The purpose of the hedge program is to protect against the reduction in the dollar value of foreign currency sales from adverse exchange rate movements. Should the dollar strengthen significantly, the decrease in the translated value of the foreign currency sales should be partially offset by gains on the hedge contracts. Depending upon the methods used, the hedge contract may limit the benefits from a weakening U.S. dollar.

The use of forward contracts locks in a firm rate and eliminates any downside from an adverse rate movement as well as any benefit from a favorable rate movement. The Company may, from time to time, choose to hedge with options or a tandem of options known as a collar. These hedging techniques can limit or eliminate the downside risk but can allow for some or all of the benefit from a favorable rate movement to be realized. Unlike a forward contract, a premium is paid for an option; collars, which are a combination of a put and call option, may have a net premium but they can be structured to be cash neutral. The Company will primarily hedge with forward contracts due to the relationship between the cash outlay and the level of risk.

A team consisting of senior financial managers reviews the estimated exposure levels, as defined by budgets, forecasts and other internal data, and determines the timing, amounts and instruments to use to hedge that exposure. Management analyzes the effective hedged rates and the actual and projected gains and losses on the hedging transactions against the program objectives, targeted rates and levels of risk assumed. Hedge contracts are typically layered in at different times for a specified exposure period in order to minimize the impact of market rate movements.

Precious Metals. The Company maintains the majority of its precious metal inventory on consignment in order to reduce its working capital investment and the exposure to metal price movements. When a precious metal product is fabricated and ready for shipment to the customer, the metal is purchased out of consignment at the current market price. The price paid by the Company forms the basis for the price charged to the customer. This methodology allows for changes in either

direction in the market prices of the precious metals used by the Company to be passed through to the customer and reduces the impact changes in prices could have on the Company's margins and operating profit. The consigned metal is owned by financial institutions who charge the Company a financing fee based upon the current value of the metal on hand.

In certain instances, a customer may want to establish the price for the precious metal at the time the sales order is placed rather than at the time of shipment. Setting the sales price at a different date than when the material would be purchased potentially creates an exposure to movements in the market price of the metal. Therefore, in these limited situations, the Company may elect to enter into a forward contract to purchase precious metal. The forward contract allows the Company to purchase metal at a fixed price on a specific future date. The price in the forward contract serves as the basis for the price to be charged to the customer. By so doing, the selling price and purchase price are matched and the Company's price exposure is reduced.

The use of derivatives is governed by policies adopted by the Board of Directors. The Company will only enter into a derivative contract if there is an underlying identified exposure. Contracts are typically held to maturity. The Company does not engage in derivative trading activities and does not use derivatives for speculative purposes. The Company only uses hedge contracts that are denominated in the same currency or metal as the underlying exposure.

All derivatives are recorded on the balance sheet at their fair values. If the derivative is designated and effective as a hedge, depending upon the nature of the hedge, changes in the fair value of the derivative are either offset against the change in the fair value of the hedged asset, liability or firm commitment through earnings or recognized in other comprehensive income (OCI), a component of shareholders' equity, 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 the fair value are adjusted through income immediately.

The following table summarizes the notional amount and the fair value of the Company's outstanding derivatives as of December 31, 2010 and 2009:

(Thousands)	December 31, 2010		December 31, 2009	
	Notional Amount	Fair Value	Notional Amount	Fair Value
Asset (liability)				
Foreign currency forward contracts				
Yen	\$19,319	\$ (880)	\$ 6,562	\$ 220
Euro	26,578	(663)	6,209	(93)
Sterling	—	—	375	(12)
Total	<u>\$45,897</u>	<u>\$(1,543)</u>	<u>\$13,146</u>	<u>\$ 115</u>
Embedded copper derivative	\$ —	\$ —	\$18,433	\$(4,892)

The fair values of the outstanding derivatives are recorded as assets (if the derivatives are in a gain position) or liabilities (if the derivatives are in a loss position). The fair values will also be classified as short-term or long-term depending upon their maturity dates. The balance sheet classification of the outstanding derivatives at December 31, 2010 and 2009 was as follows:

(Thousands)	December 31,	
	2010	2009
Asset (liability)		
Prepaid expenses	\$ —	\$ 220
Other liabilities and accrued items	(1,536)	(4,997)
Other long-term liabilities	(7)	—
Total	<u>\$(1,543)</u>	<u>\$(4,777)</u>

All of the foreign currency derivatives secured in 2010 and 2009 were designated as cash flow hedges. Changes in the fair values of these derivatives are recorded in OCI and charged or credited to income when the contracts

mature and the underlying hedged transactions occur. There were no precious metal hedge contracts outstanding as of December 31, 2010 or 2009.

A summary of the hedging relationships of the outstanding derivative financial instruments designated as cash flow hedges as of December 31, 2010 and 2009 and the pre-tax amounts transferred into income for the twelve months then ended follows.

(Thousands)	Effective Portion of Hedge		Ineffective Portion of Hedge	
	Recognized In OCI at End of Period	Reclassified From OCI Into Income During Period Location Amount	Recognized in Income on Derivative During Period Location Amount	
Gain (loss)				
2010				
Foreign currency contracts				
Forward contracts	\$ (1,543)	Other-net	\$ 502	Other-net \$ —
Total	<u>\$ (1,543)</u>		<u>\$ 502</u>	<u>\$ —</u>
2009				
Foreign currency contracts				
Forward contracts	\$ 115	Other-net	\$ (810)	Other-net \$ —
Options (collars)	—	Other-net	212	Other-net —
Total	115		(598)	—
Precious metal forward contracts	—	Cost of sales	478	Cost of sales —
Total	<u>\$ 115</u>		<u>\$ (120)</u>	<u>\$ —</u>

The Company secured a debt obligation with an embedded copper derivative in 2009. This derivative provided an economic hedge for the Company's copper inventory against movements in the market price of copper. However, the derivative did not qualify as a hedge for accounting purposes and changes in its fair value were charged against income in the current period. In 2010, the Company secured copper forward contracts that were designed to offset changes in the fair value of the embedded derivative and therefore limit the potential charges against income. The Company recorded losses of \$0.6 million in 2010 and \$4.9 million in 2009 due to changes in the fair values of these derivative financial instruments as derivative ineffectiveness on the Consolidated Statements of Income and Loss. The debt obligation and the embedded derivative as well as the copper forward contracts matured in 2010.

The Company had an interest rate swap that was initially designated as a cash flow hedge. However, in 2003, the underlying hedged item was terminated early and the swap no longer qualified as a hedge. Ineffectiveness of \$0.2 million was recorded in 2008 due to changes in the swap's fair value as a result of movements in interest rates. The swap was terminated in the fourth quarter 2008.

Total derivative ineffectiveness expense was \$0.6 million in 2010, \$4.9 million in 2009 and \$0.2 million in 2008.

During the third quarter 2010, the Company secured a forward contract to sell a specified quantity of gold. The contract served as an economic hedge of gold purchased and held in inventory for use in manufacturing products for sale in the normal course of business. No hedge designation was assigned to the contract. The contract matured in the third quarter 2010 and resulted in an immaterial realized gain of less than \$0.1 million that was recorded in cost of sales on the Consolidated Statement of Income and Loss.

The Company expects to relieve \$1.5 million from OCI and charge other-net on the Consolidated Statement of Income and Loss in 2011.

Note I —Pensions and Other Post-retirement Benefits

The obligation and funded status of the Company's pension and other post-retirement benefit plans are shown below. The Pension Benefits column aggregates defined benefit pension plans in the U.S., Germany and England and the U.S. supplemental retirement plan. The Other Benefits column includes the U.S. retiree medical and life insurance plan.

(Thousands)	Pension Benefits		Other Benefits	
	2010	2009	2010	2009
Change in benefit obligation				
Benefit obligation at beginning of year	\$160,029	\$145,524	\$ 30,886	\$ 32,786
Service cost	5,135	4,463	273	289
Interest cost	9,156	8,994	1,738	1,929
Plan amendments	738	—	—	—
Actuarial (gain) loss	13,317	8,171	1,774	(1,765)
Benefit payments from fund	(6,478)	(6,393)	—	—
Benefit payments directly by Company	(96)	(104)	(2,661)	(2,710)
Expenses paid from assets	(497)	(392)	—	—
Curtailment gain	—	(547)	—	—
Medicare Part D subsidy	—	—	364	357
Foreign currency exchange rate changes	(631)	313	—	—
Benefit obligation at end of year	180,673	160,029	32,374	30,886
Change in plan assets				
Fair value of plan assets at beginning of year	109,729	81,810	—	—
Actual return on plan assets	15,367	15,944	—	—
Employer contributions	13,774	18,494	—	—
Benefit payments from fund	(6,478)	(6,393)	—	—
Expenses paid from assets	(497)	(392)	—	—
Foreign currency exchange rate changes	(134)	266	—	—
Fair value of plan assets at end of year	131,761	109,729	—	—
Funded status at end of year	<u>\$ (48,912)</u>	<u>\$ (50,300)</u>	<u>\$ (32,374)</u>	<u>\$ (30,886)</u>
Amounts recognized in the Consolidated Balance Sheets consist of:				
Other liabilities and accrued items	\$ —	\$ —	\$ (2,863)	\$ (2,609)
Retirement and post-employment benefits	<u>(48,912)</u>	<u>(50,300)</u>	<u>(29,511)</u>	<u>(28,277)</u>
	<u>\$ (48,912)</u>	<u>\$ (50,300)</u>	<u>\$ (32,374)</u>	<u>\$ (30,886)</u>
Amounts recognized in other comprehensive income (before tax) consist of:				
Net actuarial (gain) loss	\$ 73,008	\$ 67,446	\$ (441)	\$ (2,214)
Net prior service (credit) cost	<u>(3,292)</u>	<u>(4,560)</u>	<u>166</u>	<u>129</u>
	<u>\$ 69,716</u>	<u>\$ 62,886</u>	<u>\$ (275)</u>	<u>\$ (2,085)</u>
Amortizations expected to be recognized during next fiscal year (before tax):				
Amortization of net loss	\$ 3,919	\$ 2,834	\$ —	\$ —
Amortization of prior service credit	<u>(472)</u>	<u>(530)</u>	<u>(36)</u>	<u>(36)</u>
	<u>\$ 3,447</u>	<u>\$ 2,304</u>	<u>\$ (36)</u>	<u>\$ (36)</u>
Additional information				
Accumulated benefit obligation for all defined benefit pension plans	\$175,927	\$156,942	N/A	N/A
For defined benefit pension plans with benefit obligations in excess of plan assets:				
Aggregate benefit obligation	176,654	160,029	N/A	N/A
Aggregate fair value of plan assets	127,133	109,729	N/A	N/A
For defined benefit pension plans with accumulated benefit obligations in excess of plan assets:				
Aggregate accumulated benefit obligation	171,908	156,942	N/A	N/A
Aggregate fair value of plan assets	127,133	109,729	N/A	N/A

Components of net periodic benefit cost and other amounts recognized in other comprehensive income

(Thousands)	Pension Benefits			Other Benefits		
	2010	2009	2008	2010	2009	2008
Net periodic benefit cost						
Service cost	\$ 5,135	\$ 4,463	\$ 5,297	\$ 273	\$ 289	\$ 303
Interest cost	9,156	8,994	8,490	1,738	1,929	2,127
Expected return on plan assets	(10,441)	(9,746)	(9,061)	—	—	—
Amortization of prior service (benefit)	(530)	(549)	(644)	(36)	(36)	(36)
Recognized net actuarial loss	2,834	1,557	1,186	—	—	—
Curtailment gain	—	(1,069)	—	—	—	—
Net periodic benefit cost	<u>\$ 6,154</u>	<u>\$ 3,650</u>	<u>\$ 5,268</u>	<u>\$1,975</u>	<u>\$2,182</u>	<u>\$2,394</u>

(Thousands)	Pension Benefits			Other Benefits		
	2010	2009	2008	2010	2009	2008
Change in other comprehensive income						
OCI at beginning of year	\$62,886	\$61,379	\$21,337	\$(2,085)	\$ (356)	\$ 933
Increase (decrease) in OCI:						
Recognized during year — prior service cost (credit)	530	549	644	36	36	36
Recognized during year — net actuarial (losses) gains	(2,834)	(1,557)	(1,225)	—	—	—
Occurring during year — prior service cost	739	—	39	—	—	—
Occurring during year — net actuarial losses (gains)	8,390	1,974	40,677	1,774	(1,765)	(1,325)
Other adjustments	—	522	—	—	—	—
Foreign currency exchange rate changes	5	19	(93)	—	—	—
OCI at end of year	<u>\$69,716</u>	<u>\$62,886</u>	<u>\$61,379</u>	<u>\$ (275)</u>	<u>\$(2,085)</u>	<u>\$ (356)</u>

Summary of key valuation assumptions

	Pension Benefits			Other Benefits		
	2010	2009	2008	2010	2009	2008
Weighted-average assumptions used to determine benefit obligations at fiscal year end						
Discount rate	5.49%	5.86%	N/A	5.13%	5.88%	N/A
Rate of compensation increase	3.97%	3.00%	N/A	4.00%	3.00%	N/A
Weighted-average assumptions used to determine net cost for the fiscal year						
Discount rate	5.86%	6.65%	6.41%	5.88%	6.15%	6.50%
Expected long-term return on plan assets	8.18%	8.22%	8.21%	N/A	N/A	N/A
Rate of compensation increase	2.99%	2.09%	4.34%	3.00%	2.00%	4.50%

The Company uses a December 31 measurement date for the above plans.

Effective January 1, 2011, the Company revised the expected long-term rate of return assumption used in calculating the annual expense for its domestic pension plan. This assumed expected long-term rate of return was decreased to 8.0% from 8.25%, with the impact being accounted for as a change in estimate.

Effective January 1, 2008, the Company revised the expected long-term rate of return assumption used in calculating the annual expense for its domestic pension plan. This assumed expected long-term rate of return was decreased to 8.25% from 8.5%, with the impact being accounted for as a change in estimate.

Management establishes the domestic 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. Consideration is given to both recent plan asset performance as well as plan asset performance over various long-term periods of time, with an emphasis on the assumption being a prospective, long-term rate of return. Management consults with and considers the opinions of its outside investment advisors and actuaries when establishing the rate and reviews its assumptions with the Board of Directors. Management believes that the 8.0% domestic 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 domestic rate of compensation increase assumption was changed from a flat 4.5% to a graded assumption as of January 1, 2009. The graded assumption for the domestic rate of compensation increase is 2.0% for the 2009 fiscal year, 3.0% for the 2010 fiscal year, 4.0% for the 2011 fiscal year and 4.5% for the 2012 fiscal year and later.

Assumptions for the defined benefit pension plans in Germany and England are determined separately from the U.S. plan assumptions, based on historical trends and current and projected market conditions in Germany and England. The plan in Germany is unfunded and the plan in England has assets that are approximately 4% of the Company's aggregated total fair value of plan assets as of year-end 2010.

Assumed health care trend rates at fiscal year end	2010	2009
Health care trend rate assumed for next year	8.00%	8.00%
Rate that the trend rate gradually declines to (ultimate trend rate)	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2019	2016

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:

	1-Percentage-Point Increase		1-Percentage-Point Decrease	
	2010	2009	2010	2009
(Thousands)				
Effect on total of service and interest cost components	\$ 35	\$ 46	\$ (32)	\$ (41)
Effect on post-retirement benefit obligation	682	629	(619)	(573)

Plan Assets

The following tables present the fair values of the Company's defined benefit pension plan assets as of December 31, 2010 and 2009 by asset category. See Note H to the Consolidated Financial Statements for definitions of fair value hierarchy.

(Thousands)	December 31, 2010			
	Total	Level 1	Level 2	Level 3
Cash	\$ 5,617	\$ 5,617	\$ —	\$ —
Equity securities:				
U.S. (a)	44,745	35,917	8,828	—
International (b)	20,565	8,943	11,622	—
Emerging markets (c)	12,300	12,084	216	—
Fixed income securities:				
Intermediate-term bonds (d)	16,387	16,387	—	—
Short-term bonds (e)	10,642	10,642	—	—
Global bonds (f)	10,602	9,976	626	—
Other types of investments:				
Real estate fund (g)	6,506	6,506	—	—
Multi-strategy hedge funds (h)	3,851	—	—	\$ 3,851
Private equity funds	546	—	—	546
Total	\$ 131,761	\$ 106,072	\$ 21,292	\$ 4,397

(Thousands)	December 31, 2009			
	Total	Level 1	Level 2	Level 3
Cash	\$ 16,331	\$ 16,331	\$ —	\$ —
Equity securities:				
U.S. (a)	26,590	19,179	7,411	—
International (b)	11,773	4,741	7,032	—
Emerging markets (c)	9,156	8,951	205	—
Fixed income securities:				
Intermediate-term bonds (d)	17,962	17,962	—	—
Global bonds (f)	18,101	17,583	518	—
Other types of investments:				
Real estate fund (g)	5,523	5,523	—	—
Multi-strategy hedge funds (h)	3,507	—	—	\$ 3,507
Private equity funds	786	—	—	786
Total	\$ 109,729	\$ 90,270	\$ 15,166	\$ 4,293

- (a) Mutual funds that invest in various sectors of the U.S. market.
- (b) Mutual funds that invest in non-U.S. companies primarily in developed countries that are generally considered to be value stocks.
- (c) Mutual funds that invest in non-U.S. companies in emerging market countries.
- (d) Includes a mutual fund that employs a value-oriented approach to fixed income investment management.
- (e) Includes a mutual fund that seeks a market rate of return for a fixed-income portfolio with low relative volatility of returns, investing generally in U.S. and foreign debt securities maturing in five years or less.
- (f) Mutual funds that invest in domestic and foreign sovereign securities, fixed income securities, mortgage-backed and asset-backed bonds, convertible bonds, high yield bonds and emerging market bonds.

- (g) Includes a mutual fund that typically invests at least 80% of its assets in equity and debt securities of companies in the real estate industry or related industries or in companies which own significant real estate assets at the time of investment.
- (h) Includes hedge funds that employ multiple strategies to multiple asset classes with low correlations.

The following table summarizes changes in the fair value of the Company's defined benefit pension plan Level 3 assets measured using significant unobservable inputs during 2010 and 2009.

(Thousands)	<u>Multi- strategy Hedge Funds</u>	<u>Private Equity Funds</u>	<u>Total</u>
Balance as of January 1, 2009	\$ 5,965	\$ 781	\$ 6,746
Actual return:			
On assets still held at reporting date	787	(24)	763
On assets sold during the period	(16)	—	(16)
Purchases, sales and settlements	(3,229)	29	(3,200)
Balance as of December 31, 2009	\$ 3,507	\$ 786	\$ 4,293
Actual return:			
On assets still held at reporting date	686	66	752
On assets sold during the period	11	—	11
Purchases, sales and settlements	(353)	(306)	(659)
Balance as of December 31, 2010	<u>\$ 3,851</u>	<u>\$ 546</u>	<u>\$ 4,397</u>

Plan withdrawals from the multi-strategy hedge fund partnerships may be made up to 25% of the value of the capital account as of June 30 and December 31 of each calendar year upon written notice of at least thirty days. Any withdrawals in excess of 25% must have at least three months written notice. The plan may withdraw up to 100% of the capital account of all other partnerships upon at least thirty day written notice.

The Company's domestic defined benefit pension plan investment strategy, as approved by the Governance and Organization Committee of the Board of Directors, is to employ an allocation of investments that will generate returns equal to or better than the projected long-term growth of pension liabilities so that the plan will be self-funding. The return objective is to maximize investment return to achieve and maintain a 100% funded status over time, taking into consideration required cash contributions. The allocation of investments is designed to maximize the advantages of diversification while mitigating the risk and overall portfolio volatility 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, cash equivalents 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. Current asset allocation guidelines are to invest 30% to 70% in equity securities, 20% to 50% in fixed income securities and cash and up to 20% in alternative securities. Management reviews the asset allocation on a quarterly 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 expects to contribute \$8.8 million to its domestic defined benefit pension plan and \$2.5 million to its other benefit plans in 2011.

Estimated Future Benefit Payments

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

(Thousands)	Pension Benefits	Other Benefits	
		Gross Benefit Payment	Net of Medicare Part D Subsidy
2011	\$ 6,766	\$ 2,863	\$ 2,471
2012	7,335	2,970	2,553
2013	7,869	3,059	2,618
2014	8,312	3,047	2,580
2015	8,900	3,039	2,540
2016 through 2020	56,624	15,215	12,289

Other Benefit Plans

In addition to the plans shown above, the Company also has certain foreign subsidiaries with accrued unfunded pension and other post-employment arrangements. The liability for these arrangements was \$3.2 million at December 31, 2010 and \$2.9 million at December 31, 2009 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 \$1.3 million in 2010, \$0.6 million in 2009 and \$3.0 million in 2008. The Company reduced its matching percentage in half effective at the beginning of 2009, reduced its matching percentage to zero for the majority of its U.S. employees in the second quarter of 2009 and restored its matching percentage to half of its historical level in the second quarter of 2010.

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.

Management believes the Company 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 have generally been covered by varying levels of insurance.

Claims filed by third-party plaintiffs alleging chronic beryllium disease filed prior to the end of 2022 are covered by insurance if any portion of the alleged exposure period occurred prior to year end 2007. Both defense and indemnity costs are covered subject to an annual \$1.0 million deductible and other terms and provisions.

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 \$0.4 million as of December 31, 2010 and \$0.6 million at December 31, 2009. The reserve is included in other long-term liabilities on the Consolidated Balance Sheets.

The Company also recorded an asset of \$0.1 million as of December 31, 2010 and \$0.3 million as of December 31, 2009 for recoveries from insurance carriers on the outstanding insured claims. The asset is included in other assets on the Consolidated Balance Sheets. The Company made settlement payments for beryllium litigation of less than \$0.1 million in 2010. In 2009, beryllium litigation settlement payments totaled \$0.9 million and were fully insured.

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 the current or future beryllium 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.

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 wastewater 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 may also be 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 balance at the beginning of the year, the amounts expensed and paid and the balance at the end of the year for 2010 and 2009 are as follows:

(Thousands)	<u>2010</u>	<u>2009</u>
Reserve balance at beginning of year	\$(5,592)	\$(6,272)
Expensed	(262)	(353)
Paid	653	1,033
Reserve balance at end of year	<u>\$(5,201)</u>	<u>\$(5,592)</u>
Ending balance recorded in:		
Other liabilities and accrued items	\$ (707)	\$ (953)
Other long-term liabilities	(4,494)	(4,639)

The majority of the spending in both 2010 and 2009 was for clean-up costs associated with the Company's former headquarters building; this facility had previously been used for light manufacturing and research and development work. Upon completion of the project, the facility was donated to a non-profit organization in the fourth quarter 2010. Funds were also spent on remediation efforts and related analysis work on smaller projects in 2010 and 2009.

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

Long-term Obligation

The Company has a long-term supply agreement with Ulba/Kazatomprom of the Republic of Kazakhstan and its marketing representative, Nukem, Inc. of Connecticut, for the purchase of approximately 1.6 million pounds of beryllium copper master alloy that expires on December 31, 2011. The pricing for the beryllium content of the material is fixed while the price for the copper content fluctuates based upon the monthly average LME market price. Purchase commitments in 2011 total approximately \$9.3 million. Purchases under this contract totaled \$2.7 million in 2010. The material purchased from Nukem is used in the manufacture of beryllium-containing alloy products by the Performance Alloys segment.

The Company had a long-term supply arrangement with Nukem that terminated on December 31, 2008. Purchases of beryllium-containing materials from Nukem under this arrangement were \$8.9 million in 2008. Beginning in 2009, purchases from Nukem were made from time to time through the Company's normal purchasing practices.

Other

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 \$26.0 million related to workers' compensation, consigned precious metal guarantees, environmental remediation issues and other matters that expire in 2011.

Note K —Common Stock and Stock-based Compensation

The Company has five million shares of Serial Preferred Stock authorized (no par value), none of which have 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, 2008	26,687
Exercise of stock options	12
Vesting of restricted shares	8
Issued as of December 31, 2008	26,707
Exercise of stock options	32
Vesting of performance-restricted shares	61
Issued as of December 31, 2009	26,800
Exercise of stock options and SARs	162
Vesting of performance-restricted shares	6
Issued as of December 31, 2010	26,968

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 and 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 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. The exercise of options is generally satisfied by the issuance of new shares.

Compensation cost for options 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. There was no compensation cost in 2010, 2009 or 2008, as all options were fully vested prior to 2008.

The following table summarizes the Company's stock option activity during 2010:

(Shares in thousands)	Number of Options	Weighted- average Exercise Price Per Share	Aggregate Intrinsic Value	Weighted- average Remaining Term
Outstanding at December 31, 2009	320	\$ 15.83		
Exercised	(154)	17.05		
Outstanding at December 31, 2010	<u>166</u>	14.69	\$3,969,000	2.90 years
Vested and expected to vest as of December 31, 2010	166	14.69	3,969,000	2.90 years
Exercisable at December 31, 2010	166	14.69	3,969,000	2.90 years

Summarized information on options outstanding as of December 31, 2010 is as follows:

	Number Outstanding and Exercisable (Thousands)	Weighted- average Remaining Life (Years)	Weighted- average Exercise Price
Range of Option Prices			
\$5.55-\$8.10	30	2.27	\$ 6.20
\$12.15-\$14.80	27	2.10	12.97
\$15.97-\$17.68	103	3.46	17.22
\$20.64-\$22.43	<u>6</u>	0.18	21.83
	<u>166</u>	2.90	\$ 14.69

Cash received from the exercise of stock options totaled \$2.6 million in 2010, \$0.5 million in 2009 and \$0.2 million in 2008. The tax benefit realized from tax deductions from exercises was \$0.8 million in 2010, \$0.1 million in 2009 and \$0.5 million in 2008. The total intrinsic value of options exercised during the years ended December 31, 2010, 2009 and 2008 was \$2.3 million, \$0.2 million and \$0.1 million, respectively.

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 of 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, which is typically three years.

The fair value of the restricted stock is based on the stock price on the date of grant. The weighted-average grant date fair value for 2010, 2009 and 2008 was \$22.65, \$15.67 and \$28.67, respectively.

Compensation cost was \$2.3 million in 2010, \$2.4 million in 2009 and \$1.7 million in 2008. The unamortized compensation cost on the outstanding restricted stock was \$2.2 million as of December 31, 2010 and is expected to be amortized over a weighted-average period of 18 months.

The following table summarizes the restricted stock activity during 2010:

(Shares in thousands)	Number of Shares	Weighted- average Grant Date Fair Value
Outstanding at December 31, 2009	283	\$ 23.11
Granted	88	22.65
Vested	(62)	21.43
Forfeited	(17)	19.47
Outstanding at December 31, 2010	292	\$ 19.50

Long-term Incentive Plans

Under long-term incentive 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.

Compensation expense is based upon the performance projections for the three-year plan 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 for the portion of the award to be settled in shares is recorded within shareholders' equity and was less than \$0.1 million for 2010, (\$0.3) million for 2009 and \$0.1 million for 2008. The related balance in shareholders' equity was less than \$0.1 million as of December 31, 2010.

In the first quarter 2010, approximately 8,000 shares of common stock were issued to participants for their achievement under the 2007-2009 long-term incentive plan.

In the first quarter 2011, approximately 1,300 shares of common stock will be issued to participants for their achievement under the just completed 2008-2010 long-term incentive plan. With the completion of this plan, there are no other outstanding long-term incentive plans.

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 could also transfer their deferred amounts among 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 were reflected as a change in the liability and an increase or decrease to expense. Effective April 1, 2009, an amendment was adopted for this plan that no longer allows the participants to exchange into or out of the Company's common stock, resulting in the elimination of the market value adjustment and the reclassification of the liability to equity.

The following table summarizes the stock activity for the directors' deferred compensation plan during 2010:

(Shares in thousands)	<u>Number of Shares</u>	<u>Weighted- average Grant Date Fair Value</u>
Outstanding at December 31, 2009	107	\$ 27.29
Granted	13	25.13
Outstanding at December 31, 2010	<u>120</u>	\$ 27.05

The Company recorded an expense for the directors' deferred compensation plan of \$0.1 million in 2009 and income of \$1.2 million in 2008. There was no income or expense associated with this plan recorded in 2010 as a result of the 2009 amendment. During the years ended December 31, 2010, 2009 and 2008, the weighted-average grant date fair value of shares granted was \$25.13, \$14.74 and \$24.18, 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 stock 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. The SARs typically vest three years from the date of grant and expire in ten years.

The following table summarizes the Company's SARs activity during 2010:

(Shares in thousands)	<u>Number of SARs</u>	<u>Weighted- average Exercise Price per Share</u>	<u>Aggregate Intrinsic Value</u>	<u>Weighted- average Remaining Term</u>
Outstanding at December 31, 2009	530	\$ 19.80		
Granted	212	21.24		
Exercised	<u>(45)</u>	24.03		
Outstanding at December 31, 2010	<u>697</u>	19.96	\$13,244,000	8.01 years
Vested and expected to vest as of December 31, 2010	697	19.96	13,244,000	8.01 years
Exercisable at December 31, 2010	105	31.65	967,000	5.63 years

The fair value of the SARs granted in 2010 was \$11.51. The fair value will be amortized to compensation cost on a straight-line basis over the three-year vesting period. Compensation cost was \$1.8 million, \$1.4 million and \$0.8 million in 2010, 2009 and 2008, respectively and was included in selling, general and administrative expense. The unamortized compensation cost balance was \$2.8 million as of December 31, 2010.

Summarized information on SARs outstanding as of December 31, 2010 follows:

<u>SARs Prices</u>	<u>Number Outstanding (Thousands)</u>	<u>Weighted- average Remaining Life (Years)</u>	<u>Weighted- average Exercise Price</u>
\$15.01	350	8.12	\$ 15.01
\$21.24	212	9.15	21.24
\$24.03	66	5.34	24.03
\$27.78	30	7.13	27.78
\$44.72	39	6.13	44.72
	<u>697</u>	8.01	\$ 19.96

The SARs granted at \$24.03 and \$44.72 are exercisable.

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

	<u>2010</u>	<u>2009</u>	<u>2008</u>
Risk-free interest rate	0.11%	0.31%	2.14%
Dividend yield	0%	0%	0%
Volatility	58.0%	55.0%	49.2%
Expected lives (in years)	6.5	6.5	6.5

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. Prior analyses indicated that the Company's employee stock options have an average life of approximately six years. Prior to 2006, the Company had not granted SARs in a significant number of years. Management believes that the SARs have similar features and should function in a manner similar to employee stock options.

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, 2010, 2009 and 2008:

<u>(Thousands)</u>	<u>December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
Foreign currency translation adjustment	\$ 3,989	\$ 2,324	\$ 2,346
Derivative financial instruments (net of taxes of (\$1,943) in 2010, (\$1,362) in 2009 and (\$1,808) in 2008)	399	1,477	652
Pension and other retirement plan adjustment (net of taxes of (\$13,436) in 2010, (\$10,316) in 2009 and (\$10,224) in 2008)	(56,004)	(50,485)	(50,799)
Total	<u>\$(51,616)</u>	<u>\$(46,684)</u>	<u>\$(47,801)</u>

Note M —Segment Reporting and Geographic Information

In the fourth quarter 2010, the names of the Company's four reportable segments were changed. Advanced Material Technologies and Services has become Advanced Material Technologies, Specialty Engineered Alloys was revised to Performance Alloys, Beryllium and Beryllium Composites was shortened to Beryllium and Composites and Engineered Material Systems was changed to Technical Materials. These changes only affected the segment names as the segments' make up, reporting structures and how they are evaluated remained unchanged from previous periods.

Beginning in 2009, the operating results for Zentrix Technologies Inc., a small, wholly owned subsidiary, are included in the Advanced Material Technologies segment. Previously, this operation was included in the All Other column. This change was made because the management of Advanced Material Technologies assumed responsibility for the operation and this structure is consistent with the internal reporting used by the Chairman of the Board in evaluating operations. Prior year results have been recast to reflect this change.

(Thousands)	Advanced Material Technologies	Performance Alloys	Beryllium and Composites	Technical Materials	Subtotal	All Other	Total
2010							
Sales to external customers	\$ 878,994	\$ 293,757	\$ 61,894	\$67,450	\$1,302,095	\$ 219	\$1,302,314
Intersegment sales	1,718	6,086	397	2,597	10,798	—	10,798
Operating profit (loss)	39,454	27,150	10,046	5,331	81,981	(8,348)	73,633
Depreciation, depletion and amortization	16,443	14,186	1,070	2,449	34,148	1,246	35,394
Expenditures for long-lived assets	5,170	17,060	29,123	950	52,303	1,359	53,662
Assets	339,490	219,094	119,117	22,751	700,452	34,958	735,410
2009							
Sales to external customers	\$ 460,837	\$ 172,507	\$ 47,030	\$34,749	\$ 715,123	\$ 63	\$ 715,186
Intersegment sales	639	2,555	176	1,493	4,863	—	4,863
Operating profit (loss)	22,622	(32,273)	2,121	(2,526)	(10,056)	(9,429)	(19,485)
Depreciation, depletion and amortization	11,642	15,937	850	2,361	30,790	1,149	31,939
Expenditures for long-lived assets	4,496	3,802	34,542	430	43,270	1,711	44,981
Assets	274,949	191,806	81,073	21,252	569,080	52,873	621,953
2008							
Sales to external customers	\$ 480,327	\$ 299,867	\$ 63,604	\$65,913	\$ 909,711	\$ —	\$ 909,711
Intersegment sales	2,332	776	452	1,405	4,965	—	4,965
Operating profit (loss)	10,847	5,846	8,372	5,931	30,996	(2,925)	28,071
Depreciation, depletion and amortization	10,152	18,246	740	2,273	31,411	2,415	33,826
Expenditures for long-lived assets	7,901	9,145	13,165	1,145	31,356	4,580	35,936
Assets	215,700	239,810	54,224	23,087	532,821	49,076	581,897

Intersegment sales are eliminated in consolidation. The sales to external customers are presented net of intersegment sales. Segments are evaluated at the operating profit level.

The All Other column includes the parent company expenses, the operating results for Materion Services Inc. (formerly BEM Services, Inc.), a wholly owned subsidiary, and other corporate charges. Materion Services Inc. provides administrative and financial services to the other businesses in the Company on a cost-plus basis.

The assets shown in the All Other column include the assets used by Materion Services Inc. and the parent company as well as cash and long-term deferred income taxes.

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Sales from U.S. operations to external domestic and foreign customers were \$1,079.7 million in 2010, \$540.4 million in 2009 and \$692.6 million in 2008. Sales 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:

(Thousands)	2010	2009	2008
Sales			
United States	\$ 933,264	\$466,031	\$576,141
All other	369,050	249,155	333,570
Total	<u>\$1,302,314</u>	<u>\$715,186</u>	<u>\$909,711</u>
Long-lived assets			
United States	\$ 363,738	\$321,141	\$260,353
All other	11,914	12,553	13,626
Total	<u>\$ 375,652</u>	<u>\$333,694</u>	<u>\$273,979</u>

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

Note N —Litigation Settlement Gain

In the fourth quarter 2008, the Company reached an agreement to settle a lawsuit in which the Company sought to recover its rights under a previously signed indemnity agreement with a customer. The settlement of \$1.1 million, net of legal fees, was recorded as a litigation settlement gain on the Consolidated Statement of Income and Loss in 2008. The cash was received in 2008.

There were no material litigation settlement gains in either 2010 or 2009.

Note O —Other-net

Other-net expense is summarized for 2010, 2009 and 2008 as follows:

(Thousands)	Income (Expense)		
	2010	2009	2008
Foreign currency exchange/translation gain (loss)	\$ (759)	\$ (657)	\$ (3,731)
Amortization of intangible assets	(6,393)	(4,036)	(3,522)
Metal consignment fees	(6,539)	(3,324)	(4,530)
Changes to earn out valuation	848	—	—
Other items	(1,984)	(1,465)	(1,864)
Total	<u>\$(14,827)</u>	<u>\$(9,482)</u>	<u>\$(13,647)</u>

Other items include bad debt expense, cash discounts, gains and losses from the sale of fixed assets and other non-operating items.

Note P —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 2010, 2009 and 2008.

(Thousands)	2010	2009	2008
Interest incurred	\$2,696	\$1,411	\$2,365
Less capitalized interest	31	112	370
Total net expense	<u>\$2,665</u>	<u>\$1,299</u>	<u>\$1,995</u>
Interest paid	<u>\$2,225</u>	<u>\$ 898</u>	<u>\$2,193</u>
Amortization of capitalized interest included in cost of sales	<u>\$ 499</u>	<u>\$ 517</u>	<u>\$ 595</u>

The difference in expense among 2010, 2009 and 2008 was primarily due to changes in the level of outstanding debt, capital leases and the average borrowing rate. Amortization of deferred financing costs within interest expense was \$0.5 million in 2010 and \$0.4 million in each of 2009 and 2008.

Note Q —Income Taxes

Income (loss) before income taxes and income taxes (benefit) are comprised of the following:

(Thousands)	2010	2009	2008
Income (loss) before income taxes:			
Domestic	\$65,489	\$(21,288)	\$24,646
Foreign	5,479	504	1,430
Total income (loss) before income taxes	<u>\$70,968</u>	<u>\$(20,784)</u>	<u>\$26,076</u>
Income taxes (benefit):			
Current income taxes:			
Domestic	\$10,130	\$ 1,018	\$ 659
Foreign	788	618	904
Total current	10,918	1,636	1,563
Deferred income taxes:			
Domestic	\$14,075	\$(10,241)	\$ 6,267
Foreign	719	(107)	(268)
Valuation allowance	(1,171)	283	157
Total deferred	13,623	(10,065)	6,156
Total income taxes (benefit)	<u>\$24,541</u>	<u>\$ (8,429)</u>	<u>\$ 7,719</u>

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

	2010	2009	2008
Federal statutory rate	35.0%	(35.0)%	35.0%
State and local income taxes, net of federal tax effect	0.9	(1.9)	2.1
Effect of excess of percentage depletion over cost depletion	(2.5)	(2.3)	(5.4)
Medicare Part D	2.2	—	—
Manufacturing production deduction	(1.9)	(1.3)	(1.5)
Officers' compensation	1.5	0.1	0.7
Adjustment to unrecognized tax benefits	0.8	(3.4)	(5.0)
Taxes on foreign source income	(1.0)	0.9	0.6
Other items	(0.4)	2.3	3.1
Effective tax rate (benefit)	<u>34.6%</u>	<u>(40.6)%</u>	<u>29.6%</u>

Included in domestic income taxes, as shown in the Consolidated Statements of Income and Loss, are \$1.0 million, \$(0.6) million, and \$0.8 million of state and local income taxes in 2010, 2009 and 2008, respectively.

The Company had domestic and foreign income tax payments (refunds) of \$8.8 million, \$(4.1) million and \$8.6 million in 2010, 2009 and 2008, 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 taxes recorded in the Consolidated Balance Sheets consist of the following:

(Thousands)	December 31,	
	2010	2009
Asset (liability)		
Post-retirement benefits other than pensions	\$ 10,995	\$ 12,141
Alternative minimum tax credit	—	4,211
Other reserves	9,848	8,088
Environmental reserves	1,886	1,975
Inventory	3,242	7,771
Pensions	15,741	15,527
Derivative instruments and hedging activities	789	1,920
Net operating loss and credit carryforwards	3,044	5,095
Miscellaneous	381	380
Subtotal	45,926	57,108
Valuation allowance	(2,525)	(3,696)
Total deferred tax assets	43,401	53,412
Depreciation	(23,970)	(24,674)
Amortization	(8,601)	(8,248)
Capitalized interest expense	(277)	(348)
Mine development	(3,358)	(653)
Total deferred tax liabilities	(36,206)	(33,923)
Net deferred tax asset	\$ 7,195	\$ 19,489

The Company had deferred income tax assets offset with a valuation allowance for state and foreign net operating losses and state investment tax credit carryforwards. The Company intends to maintain a valuation allowance on these deferred tax assets until a realization event occurs to support reversal of all or a portion of the allowance.

At December 31, 2010, for income tax purposes, the Company had foreign net operating loss carryforwards of \$1.8 million that do not expire and \$7.8 million that expire in calendar years 2011 through 2019. The Company had state net operating loss carryforwards of \$0.5 million that expire in calendar years 2011 through 2029. The Company had state tax credits of \$2.1 million that expire in calendar years 2011 through 2025.

The Company files income tax returns in the U.S. federal jurisdiction and in various state, local and foreign jurisdictions. With limited exceptions, the Company is no longer subject to U.S. federal examinations for years before 2002, state and local examinations for years before 2007 and foreign examinations for tax years before 2004. The Company is presently under examination for the income tax filings in a state jurisdiction.

A reconciliation of the Company's unrecognized tax benefits for the years ending December 31, 2010 and 2009 is as follows:

(Thousands)	2010	2009
Balance as of January 1	\$2,444	\$3,476
Additions to tax positions related to prior years	651	—
Reduction to tax positions related to prior years	(151)	(1,029)
Lapses on statutes of limitations	—	(3)
Balance as of December 31	<u>\$2,944</u>	<u>\$2,444</u>

At December 31, 2010, the Company had \$3.3 million of unrecognized tax benefits, of which \$2.9 million would affect the Company's effective tax rate if recognized.

The Company classifies all interest and penalties as income tax expense. The amount of interest and penalties, net of related federal tax benefit, recognized in earnings was immaterial during 2010 and 2009. As of December 31, 2010, accrued interest and penalties, net of related federal tax benefit, was \$0.2 million, unchanged from December 31, 2009.

A provision has not been made with respect to \$26.4 million of unremitted earnings at December 31, 2010 because such earnings may be considered to be reinvested indefinitely. It is not practical to estimate the amount of unrecognized deferred tax liability for undistributed foreign earnings.

Note R —Earnings Per Share

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

(Thousands except per share amounts)	2010	2009	2008
Numerator for basic and diluted EPS:			
Net income (loss)	\$46,427	\$(12,355)	\$18,357
Denominator:			
Denominator for basic EPS:			
Weighted-average shares outstanding	20,282	20,191	20,335
Effect of dilutive securities:			
Stock options and stock appreciation rights	156	—	85
Restricted stock	151	—	29
Performance restricted shares	1	—	94
Diluted potential common shares	<u>308</u>	<u>—</u>	<u>208</u>
Denominator for diluted EPS:			
Adjusted weighted-average shares outstanding	<u>20,590</u>	<u>20,191</u>	<u>20,543</u>
Basic EPS	<u>\$ 2.29</u>	<u>\$ (0.61)</u>	<u>\$ 0.90</u>
Diluted EPS	<u>\$ 2.25</u>	<u>\$ (0.61)</u>	<u>\$ 0.89</u>

In accordance with accounting guidelines, no potential common shares shall be included in the computation of any diluted per share amount when a loss from continuing operations exists. Accordingly, dilutive securities totaling 163,000 have been excluded from the diluted EPS calculation for 2009.

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The following are the stock options to purchase common stock with exercise prices in excess of the average annual share price and the stock appreciation rights with grants in excess of the average annual share price that were excluded from the diluted EPS calculations as their effect would have been anti-dilutive:

(Thousands)	2010	2009	2008
Stock options	—	50	—
Stock appreciation rights	69	180	69
Total	<u>69</u>	<u>230</u>	<u>69</u>

Note S —Related Party Transactions

The Company had outstanding loans of \$0.1 million with four employees, including one executive officer, at December 31, 2010 and at December 31, 2009. 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.

Note T —Quarterly Data (Unaudited)

The following tables summarize selected quarterly financial data for the years ended December 31, 2010 and 2009:

(Dollars in thousands except per share amounts)	2010				Total
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
Net sales	\$295,082	\$325,946	\$325,309	\$355,977	\$1,302,314
Gross margin	49,314	55,853	58,214	59,267	222,648
Percent of sales	16.7%	17.1%	17.9%	16.6%	17.1%
Net income	\$ 6,721	\$ 13,719	\$ 13,358	\$ 12,629	\$ 46,427
Net income per share of common stock:					
Basic	0.33	0.68	0.66	0.62	2.29
Diluted	0.33	0.67	0.65	0.61	2.25
Stock price range:					
High	22.95	30.33	29.23	40.11	
Low	15.80	18.75	18.24	27.62	

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	2009				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Net sales	\$135,359	\$174,134	\$190,538	\$215,155	\$715,186
Gross margin	14,602	22,134	25,191	29,495	91,422
Percent of sales	10.8%	12.7%	13.2%	13.7%	12.8%
Net income (loss)	\$ (8,144)	\$ (785)	\$ 126	\$ (3,552)	\$ (12,355)
Net income (loss) per share of common stock:					
Basic	(0.40)	(0.04)	0.01	(0.18)	(0.61)
Diluted	(0.40)	(0.04)	0.01	(0.18)	(0.61)
Stock price range:					
High	17.27	19.19	25.38	27.06	
Low	10.50	12.41	14.11	17.11	

The results for the fourth quarter 2009 include derivative ineffectiveness expense of \$4.9 million.

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, 2010 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 that occurred during the quarter ended December 31, 2010 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

The Report of Management on Internal Control over Financial Reporting and the Report of Independent Registered Public Accounting Firm thereon are set forth in Part II, Item 8 of this Annual Report on Form 10-K and are incorporated herein by reference.

Item 9B. OTHER INFORMATION

Amendment to Senior Secured Credit Facility

Effective March 4, 2011, the Company and certain of its subsidiaries entered into an amendment (Amendment) of the Credit Agreement, dated as of November 7, 2007, among the Company, the Company's subsidiary, Williams Advanced Materials (Netherlands) B.V., JPMorgan Chase Bank, National Association, as administrative agent for itself and the other lenders party thereto (Agent), and the several banks and other financial institutions or entities from time to time party thereto (Credit Agreement). The Amendment allows the Company and its subsidiaries to enter into agreements for the procurement of gold, silver, platinum, palladium, ruthenium and other precious metals and copper (whether styled as borrowed, leased, consigned or otherwise) and incur outstanding obligations under those agreements of up to \$370 million in the aggregate. This is an increase from \$270 million.

The foregoing description of the Amendment is qualified in its entirety by reference to the full text of the Amendment, a copy of which has been filed as Exhibit 4h to this Form 10-K and is incorporated herein by reference.

Mine Safety and Health Administration Data

Materion Natural Resources Inc. (formerly known as Brush Resources Inc.), a wholly owned subsidiary, operates a beryllium mining complex in the State of Utah which is regulated by both the U.S. Mine Safety and Health Administration (MSHA) and state regulatory agencies. We endeavor to conduct our mining and other operations in compliance with all applicable federal, state and local laws and regulations. We present information below regarding certain mining safety and health citations which MSHA has levied with respect to our mining operations.

Materion Natural Resources Inc. did not receive any written notice of a pattern of violations under Section 104 (e) of the Mine Act, nor the potential to have such a pattern, and they experienced no mining-related fatalities during the current quarter or year ended December 31, 2010.

For reporting purposes of The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, we include the following table that sets forth the total number of specific citations and orders and the total dollar value

of the proposed civil penalty assessments that were issued by MSHA during the current quarter ended December 31, 2010, as well as the year ended December 31, 2010, pursuant to the Mine Act, for Materion Natural Resources Inc.:

Quarter ended December 31, 2010:

<u>Mine ID#</u>	<u>Mine Act Section 104(a) Significant & Substantial Citations</u>	<u>Mine Act Section 104(b) Orders</u>	<u>Mine Act Section 104(d) Citations & Orders</u>	<u>Mine Act Section 110(b)(2) Violations</u>	<u>Mine Act Section 107(a) Orders</u>	<u>Dollar Value (In thousands) Proposed MSHA Assessments</u>
4200706	—	—	—	—	—	\$ 0.10

Year ended December 31, 2010:

<u>Mine ID#</u>	<u>Mine Act Section 104(a) Significant & Substantial Citations</u>	<u>Mine Act Section 104(b) Orders</u>	<u>Mine Act Section 104(d) Citations & Orders</u>	<u>Mine Act Section 110(b)(2) Violations</u>	<u>Mine Act Section 107(a) Orders</u>	<u>Dollar Value (In thousands) Proposed MSHA Assessments</u>
4200706	—	—	—	—	—	\$ 0.60

Additional information follows about MSHA references used in the table.

- *Section 104(a) Citations:* The total number of violations received from MSHA under section 104(a) that are significant and substantial citations which are for alleged violations of a mining safety standard or regulation where there exists a reasonable likelihood that the hazard could result in an injury or illness of a reasonably serious nature.
- *Section 104(b) Orders:* The total number of orders issued by MSHA under section 104(b) of the Mine Act, which represents a failure to abate a citation under section 104(a) within the period of time prescribed by MSHA. This results in an order of immediate withdrawal from the area of the mine affected by the condition until MSHA determines that the violation has been abated.
- *Section 104(d) Citations and Orders:* The total number of citations and orders issued by MSHA under section 104(d) of the Mine Act for unwarrantable failure to comply with mandatory health or safety standards.
- *Section 110(b)(2) Violations:* The total number of flagrant violations issued by MSHA under section 110(b)(2) of the Mine Act.
- *Section 107(a) Orders:* The total number of orders issued by MSHA under section 107(a) of the Mine Act for situations in which MSHA determined an imminent danger existed.

Pending Legal Actions. The Federal Mine Safety and Health Review Commission is an independent adjudicative agency that provides administrative trial and appellate review of legal disputes arising under the Mine Act. These cases may involve, among other questions, challenges by operators to citations, orders and penalties they have received from MSHA, or complaints of discrimination by miners under Section 105 of the Mine Act. For the quarter and year ended December 31, 2010, no legal actions are pending.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information under “Election of Directors” in the proxy statement for our 2011 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 Item 10 relating to our executive officers is included under the caption “Executive Officers of the Registrant” in Part I of this Form 10-K 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 2011 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 Exchange Act is incorporated by reference from the section entitled “Section 16(a) Beneficial Ownership Reporting Compliance” in the proxy statement for our 2011 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 and Compensation Committees of our Board of Directors, which also comply with applicable requirements, are available on our web site at www.materion.com, and copies are also available upon request by any shareholder to Secretary, Materion Corporation, 6070 Parkland Blvd., Mayfield Heights, Ohio 44124. We make our reports on Forms 10-K, 10-Q and 8-K available on our web site, free of charge, as soon as reasonably practicable after these reports are filed with the Securities and Exchange Commission, and any amendments and/or waivers to our Code of Conduct Policy, Statement on Significant Corporate Governance Issues and Committee Charters will also be made available on our web site. The information on our web site is not incorporated by reference into this Annual Report on Form 10-K.

Item 11. EXECUTIVE COMPENSATION

The information required under Item 11 is incorporated by reference from the sections entitled “Executive Compensation” and “2010 Director Compensation” in the proxy statement for our 2011 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 Item 12 regarding security ownership is incorporated by reference from the section entitled “Security Ownership of Certain Beneficial Owners and Management” in the proxy statement for our 2011 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A. The information required by Item 12 regarding securities authorized for issuance under equity compensation plans is incorporated by reference from the section entitled “Equity Compensation Plan Information” in the proxy statement for our 2011 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A.

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

The information required under Item 13 is incorporated by reference from the sections entitled “Related Party Transactions” and “Corporate Governance; Committees of the Board of Directors — Director Independence” of the proxy statement for our 2011 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 2011 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) 1. Financial Statements and Supplemental Information

The financial statements listed in the accompanying index to financial statements are included in Part II, Item 8 of this Annual Report on Form 10-K.

(a) 2. Financial Statement Schedules

The following consolidated financial information for the years ended December 31, 2010, 2009 and 2008 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 Exchange Act by Materion Corporation, 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) Amendment to Amended and Restated Articles of Incorporation of Brush Engineered Materials Inc. (filed as Exhibit 3a to the Current Report on Form 8-K (File No. 1-15885) filed by the Company on March 8, 2011), incorporated herein by reference.
- (3c) Amended and Restated Code of Regulations of Brush Engineered Materials Inc. (filed as Exhibit 3.1 to the Current Report on Form 8-K (File No. 1-15885) filed by the Company on February 4, 2011), incorporated herein by reference.
- (4a) Indenture Modification between Toledo-Lucas County Port Authority, dated as of May 30, 2003 (filed as Exhibit 4 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ending June 27, 2003), incorporated herein by reference.
- (4b) Pursuant to Regulation S-K, Item 601(b)(4), the Company agrees to furnish to the Securities and Exchange 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.
- (4c) Credit Agreement dated November 7, 2007 among Brush Engineered Materials Inc. and other borrowers and JPMorgan Chase, 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 (File No. 1-15885) filed by the Company on November 7, 2007), incorporated herein by reference.
- (4d) First Amendment to Credit Agreement dated December 20, 2007 among Brush Engineered Materials Inc. and other borrowers and JPMorgan Chase, 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 (File No. 1-15885) filed by the Company on December 26, 2007), incorporated herein by reference.
- (4e) Second Amendment to Credit Agreement dated June 11, 2008 among Brush Engineered Materials Inc. and other borrowers and JPMorgan Chase, 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 (File No. 1-15885) filed by the Company on June 16, 2008), incorporated herein by reference.
- (4f) Third Amendment to the Credit Agreement dated May 7, 2010, among Brush Engineered Materials Inc. and other borrowers and JPMorgan 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 (File No. 1-15885) filed on May 12, 2010), incorporated herein by reference.

- (4g) Fourth Amendment to the Credit Agreement dated September 28, 2010, among Brush Engineered Materials Inc. and other borrowers and JPMorgan Chase Bank N.A., acting for itself and as agent for certain other banking institutions as lenders (filed as Exhibit 4.1 to the Company's Form 8-K (File No. 1-15885) on October 4, 2010), incorporated herein by reference.
- (4h)# Fifth Amendment to the Credit Agreement dated March 4, 2011, among Brush Engineered Materials Inc. and other borrowers and JPMorgan Chase Bank N.A., acting for itself and as agent for certain other banking institutions as lenders.
- (4i) Second Amended and Restated Precious Metals Agreement dated December 28, 2007 between Brush Engineered Materials Inc. and The Bank of Nova Scotia (filed as Exhibit 99.1 to the Current Report on Form 8-K (File No. 1-15885) filed by the Company on December 28, 2007), incorporated herein by reference.
- (4j) First Amendment to the Second Amended and Restated Precious Metals Agreement dated March 3, 2008 between Brush Engineered Materials Inc. and the Bank of Nova Scotia (filed as Exhibit 99.1 to the Current Report on Form 8-K (File No. 1-15885) filed by the Company on March 3, 2008), incorporated herein by reference.
- (4k) Second Amendment to the Second Amended and Restated Precious Metals Agreement dated June 25, 2008 between Brush Engineered Materials Inc. and the Bank of Nova Scotia (filed as Exhibit 4k to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2009), incorporated herein by reference.
- (4l) Third Amendment to the Second Amended and Restated Precious Metals Agreement dated October 2, 2009 between Brush Engineered Materials Inc. and The Bank of Nova Scotia (filed as Exhibit 4.1 to the Company's Form 8-K (File No. 1-15885) on October 8, 2009), incorporated herein by reference.
- (4m) Fourth Amendment to the Second Amended and Restated Precious Metals Agreement dated February 11, 2010 between Brush Engineered Materials Inc. and The Bank of Nova Scotia (filed as Exhibit 4m to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2009), incorporated herein by reference.
- (4n) Fifth Amendment to the Second Amended and Restated Precious Metals Agreement dated April 30, 2010, among Brush Engineered Materials Inc. and other borrowers and The Bank of Nova Scotia (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ending July 2, 2010), incorporated herein by reference.
- (4o) Sixth Amendment to the Second Amended and Restated Precious Metals Agreement dated June 9, 2010, among Brush Engineered Materials Inc. and other borrowers and The Bank of Nova Scotia (filed as Exhibit 99.1 to the Company's Form 8-K (File No. 1-15885) filed on June 9, 2010), incorporated herein by reference.
- (4p) Third Amended and Restated Precious Meals Agreement dated October 1, 2010, between Brush Engineered Materials Inc. and other borrowers and The Bank of Nova Scotia (filed as Exhibit 4.2 to the Company's Form 8-K (File No. 1-15885) on October 4, 2010), incorporated herein by reference.
- (10a) Form of Indemnification Agreement entered into by the Company and its executive officers (filed as Exhibit 10a to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2008), incorporated herein by reference.
- (10b) Form of Indemnification Agreement entered into by the Company and its directors (filed as Exhibit 10b to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2008), incorporated herein by reference.
- (10c)* Amended and Restated Form of Severance Agreement for Executive Officers (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ending June 27, 2008), incorporated herein by reference.
- (10d)* Amended and Restated Form of Severance Agreement for Key Employees (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ending June 27, 2008), incorporated herein by reference.
- (10e)* 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 Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 1994), incorporated herein by reference.

- (10f)* 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 Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 1994), incorporated herein by reference.
- (10g)* 2010 Management Performance Compensation Plan (filed as Exhibit 10h to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2009), incorporated herein by reference.
- (10h)*# 2011 Management Performance Compensation Plan.
- (10i)* Long-term Incentive Plan for the performance period January 1, 2008 through December 31, 2010 (filed as Exhibit 10o to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2007), incorporated herein by reference.
- (10j)* 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 (File No. 1-15885) No. 2-64080), incorporated herein by reference.
- (10k)* 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 Registration No. 2-64080), incorporated herein by reference.
- (10l)* 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 Registration No. 33-28605), incorporated herein by reference.
- (10m)* 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 Registration No. 2-90724), incorporated herein by reference.
- (10n)* 1989 Stock Option Plan (filed as Exhibit 4.5 to Registration Statement on Form S-8 Registration No. 33-28605), incorporated herein by reference.
- (10o)* 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 Registration No. 33-28605), incorporated herein by reference.
- (10p)* 1995 Stock Incentive Plan (as Amended March 3, 1998) (filed as Appendix A to the Company's Proxy Statement (File No. 1-15885) dated March 16, 1998), incorporated herein by reference.
- (10q)* Amendment, effective May 16, 2000, to the 1995 Stock Incentive Plan (filed as Exhibit 4b to Post-Effective Amendment No. 1 to Registration Statement Registration No. 333-63357), incorporated herein by reference.
- (10r)* 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 (File No. 1-15885) filed by the Company on February 7, 2005), incorporated herein by reference.
- (10s)* Amended and Restated 2006 Stock Incentive Plan (filed as Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ended June 27, 2008), incorporated herein by reference.
- (10t)* Form of Nonqualified Stock Option Agreement (filed as Exhibit 10t to the Company's Form 10-K (File No. 1-15885) Annual Report for the year ended December 31, 2004), incorporated herein by reference.
- (10u)* Form of Nonqualified Stock Option Agreement (filed as Exhibit 10.7 to the Current Report on (File No. 1-15885) filed by the Company on February 7, 2005), incorporated herein by reference.
- (10v)* Form of 2009 Restricted Stock Agreement (filed as Exhibit 10z to the Company's Annual Report on Form 10-K (File No. 1-15885) the year ended December 31, 2008), incorporated herein by reference.
- (10w)* Form of 2010 Restricted Stock Agreement (filed as Exhibit 10z to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2009), incorporated herein by reference.
- (10x)* Form of 2010 Restricted Stock Units Agreement (filed as Exhibit 10aa to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2009), incorporated herein by reference.
- (10y)* Form of 2011 Restricted Stock Unit Agreement (Stock-Settled) (filed as Exhibit 10.1 to the Company's Current Form 8-K (File No. 1-15885) filed by the Company on March 3, 2011), incorporated herein by reference.

- (10z)* Form of 2011 Restricted Stock Unit Agreement (Cash-Settled) (filed as Exhibit 10.2 to the Company's Current Form 8-K (File No. 1-15885) filed by the Company on March 3, 2011), incorporated herein by reference.
- (10aa)* Form of 2008 Performance Restricted Share and Performance Share Agreement (filed as Exhibit 10ak to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2007), incorporated herein by reference.
- (10ab)* Form of 2006 Stock Appreciation Rights Agreement (filed as Exhibit 10.3 to the Current Report on Form 8-K (File No. 1-15885) filed by the Company on May 8, 2006), incorporated herein by reference.
- (10ac)* Form of 2007 Stock Appreciation Rights Agreement (filed as Exhibit 10.5 to Amendment No. 1 to the Current Report on Form 8-K (File No. 1-15885) filed by the Company on February 16, 2007), incorporated herein by reference.
- (10ad)* Form of 2008 Stock Appreciation Rights Agreement (filed as Exhibit 10an to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2007), incorporated herein by reference.
- (10ae)* Form of 2009 Stock Appreciation Rights Agreement (filed as Exhibit 10ag to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2008), incorporated herein by reference.
- (10af)* Form of 2010 Stock Appreciation Rights Agreement (filed as Exhibit 10ah to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2009), incorporated herein by reference.
- (10ag)* Form of 2011 Stock Appreciation Rights Agreement (filed as Exhibit 10.3 to the Current Report on Form 8-K (File No. 1-15885) filed by the Company on March 3, 2011), incorporated herein by reference.
- (10ah)* Supplemental Retirement Plan as amended and restated December 1, 1992 (filed as Exhibit 10n to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 1992), incorporated herein by reference.
- (10ai)* 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 Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 1995), incorporated herein by reference.
- (10aj)* 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 Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 1998), incorporated herein by reference.
- (10ak)* 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 (File No. 1-15885) Annual Report for the year ended December 31, 1998), incorporated herein by reference.
- (10al)* 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 (File No. 1-15885) Annual Report for the year ended December 31, 1998), incorporated herein by reference.
- (10am)* 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 (File No. 1-15885) Annual Report for the year ended December 31, 2000), incorporated herein by reference.
- (10an)* 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 Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2000), incorporated herein by reference.
- (10ao)* 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 (File No. 1-15885) Annual Report for the year ended December 31, 2000), incorporated herein by reference.
- (10ap)* 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 (File No. 1-15885) Annual Report for the year ended December 31, 2000), incorporated herein by reference.
- (10aq)* Key Employee Share Option Plan (filed as Exhibit 4.1 to the Registration Statement on Form S-8 Registration No. 333-52141, filed by Brush Wellman Inc. on May 5, 1998), incorporated herein by reference.

- (10ar)* 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 Registration No. 333-52141), incorporated herein by reference.
- (10as)* Amendment No. 2 to the Key Employee Share Option Plan dated June 10, 2005 (filed as Exhibit 10aw to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2006), incorporated herein by reference.
- (10at)* 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 (File No. 1-15885) dated March 19, 2001), incorporated herein by reference.
- (10au)* Amendment No. 1 to the 1997 Stock Incentive Plan for Non-employee Directors, (filed as Exhibit 10gg to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2003), incorporated herein by reference.
- (10av)* Form of Nonqualified Stock Option Agreement for Non-employee Directors (filed as Exhibit 10mm to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2004), incorporated herein by reference.
- (10aw)* 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 Registration No. 333-63355, filed by Brush Wellman Inc.), incorporated herein by reference.
- (10ax)* 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 Registration No. 333-63353), incorporated herein by reference.
- (10ay)* Amendment No. 1 (effective September 11, 2001) to the 1992 Deferred Compensation Plan for Non-employee Directors (filed as Exhibit 4c to the Company's Post-Effective Amendment No. 1 to Registration Statement Registration No. 333-74296), incorporated herein by reference.
- (10az)* Amendment No. 2 (effective September 13, 2004) to the 1992 Deferred Compensation Plan for Non-employee Directors (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ended October 1, 2004), incorporated herein by reference.
- (10ba)* Amendment No. 3 (effective January 1, 2005) to the 1992 Deferred Compensation Plan for Non-employee Directors (filed as Exhibit 10rr to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2004), incorporated herein by reference.
- (10bb)* Amendment No. 4 (effective April 1, 2009) to the 1992 Deferred Compensation Plan for Non-employee Directors (filed as Exhibit 10bb to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2008), incorporated herein by reference.
- (10bc)* Amended and Restated 2005 Deferred Compensation Plan for Non-employee Directors (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ended September 26, 2008), incorporated herein by reference.
- (10bd)* Amended and Restated 2006 Non-employee Director Equity Plan (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ended September 26, 2008), incorporated herein by reference.
- (10be)* Amended and Restated Executive Deferred Compensation Plan II (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ended March 28, 2008), incorporated herein by reference.
- (10bf)* Amendment No. 1 to the Amended and Restated Executive Deferred Compensation Plan II (filed as Exhibit 10bf to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2008), incorporated herein by reference.
- (10bg)* Amendment No. 2 to the Amended and Restated Executive Deferred Compensation Plan II (filed as Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ended July 3, 2009), incorporated herein by reference.
- (10bh)* 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 (File No. 1-15885) filed by the Company on September 29, 2006), incorporated herein by reference.

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- (10bi)* Trust Agreement between the Company and Fidelity Management Trust Company, dated June 25, 2009 relating to the Executive Deferred Compensation Plan II (filed as Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ended July 3, 2009), incorporated herein by reference.
- (10bj)* 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 (File No. 1-15885) filed by the Company on September 29, 2006), incorporated herein by reference.
- (10bk) 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 Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 1996), incorporated herein by reference.
- (10bl) Amended and Restated Inducement Agreement with the Prudential Insurance Company of America dated May 30, 2003 (filed as Exhibit 10 to the Company's Quarterly Report on Form 10-Q (File No. 1-15885) for the period ended June 27, 2003), incorporated herein by reference.
- (10bm) Supply Agreement between the Defense Logistics Agency and Brush Wellman Inc. for the sale and purchase of beryllium products (filed as Exhibit 10ab to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2004), incorporated herein by reference.
- (10bn) Asset Purchase Agreement by and between Williams Advanced Materials Inc. and Techni-Met, Inc. dated December 20, 2007 (filed as Exhibit 10bw to the Company's Annual Report on Form 10-K (File No. 1-15885) for the year ended December 31, 2007), incorporated herein by reference.
- (10bo) Consignment Agreement dated October 2, 2009 between Brush Engineered Materials Inc. and Canadian Imperial Bank of Commerce (filed as Exhibit 10.1 to the Company's Form 8-K (File No. 1-15885) on October 8, 2009), incorporated herein by reference.
- (10bp) Amendment No. 1 to the Consignment Agreement dated October 2, 2009 between Brush Engineered Materials Inc. and Canadian Imperial Bank of Commerce and CIBC World Markets Inc. (filed as Exhibit 99.1 to the Company's Form 8-K (File No. 1-15885) on March 12, 2010), incorporated herein by reference.
- (10bq) Amendment No. 2 to the Consignment Agreement dated June 11, 2010 between Brush Engineered Materials Inc. and Canadian Imperial Bank of Commerce and CIBC World Markets Inc., (filed as Exhibit 99.1 to the Company's Form 8-K (File No. 1-15885) filed on June 14, 2010), incorporated herein by reference.
- (10br) Amendment No. 3 to the Consignment Agreement dated September 30, 2010 between Brush Engineered Materials Inc. and Canadian Imperial Bank of Commerce and CIBC World Markets Inc. (filed as Exhibit 10.1 to the Company's Form 8-K (File No. 1-15885), on October 4, 2010), incorporated herein by reference.
- (10bs) Amendment No. 4 to the Consignment Agreement dated November 10, 2010 between Brush Engineered Materials Inc. and Canadian Imperial Bank of Commerce and CIBC World Markets Inc. (filed as Exhibit 99.1 to the Company's Form 8-K (File No. 1-15885), on November 12, 2010), incorporated herein by reference.
- (21)# Subsidiaries of the Registrant.
- (23)# Consent of Ernst & Young LLP.
- (24)# Power of Attorney.
- (31.1)# Certification of Chief Executive Officer required by Rule 13a-14(a) or 15d-14(a).
- (31.2)# 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.

* Denotes a compensatory plan or arrangement.

Filed herewith

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

MATERION CORPORATION

By: /s/ RICHARD J. HIPPLE

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

By: /s/ JOHN D. GRAMPA

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

March 9, 2011

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

/s/ RICHARD J. HIPPLE Richard J. Hipple	Chairman of the Board, President, Chief Executive Officer and Director (Principal Executive Officer)	March 9, 2011
/s/ JOHN D. GRAMPA John D. Grampa	Senior Vice President Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	March 9, 2011
/s/ ALBERT C. BERSTICKER* Albert C. Bersticker*	Director	March 9, 2011
/s/ JOSEPH P. KEITHLEY* Joseph P. Keithley*	Director	March 9, 2011
/s/ VINOD M. KHILNANI* Vinod M. Khilnani*	Director	March 9, 2011
/s/ WILLIAM B. LAWRENCE* William B. Lawrence*	Director	March 9, 2011
/s/ WILLIAM P. MADAR* William P. Madar*	Director	March 9, 2011
/s/ WILLIAM G. PRYOR* William G. Pryor*	Director	March 9, 2011
/s/ N. MOHAN REDDY* N. Mohan Reddy*	Director	March 9, 2011
/s/ WILLIAM R. ROBERTSON* William R. Robertson*	Director	March 9, 2011
/s/ JOHN SHERWIN, JR.* John Sherwin, Jr.*	Director	March 9, 2011
/s/ CRAIG S. SHULAR* Craig S. Shular*	Director	March 9, 2011

* The undersigned, by signing his name hereto, does sign and execute this report on behalf of each of the above-named officers and directors of Materion Corporation, pursuant to Powers of Attorney executed by each such officer and director filed with the Securities and Exchange Commission.

By: /s/ JOHN D. GRAMPA

John D. Grampa
Attorney-in-Fact

March 9, 2011

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

MATERION CORPORATION AND SUBSIDIARIES

Years ended December 31, 2010, 2009 and 2008

COL. A	COL. B	COL. C		COL. D	COL. E
(Thousands)	Balance at Beginning of Period	ADDITIONS		Deduction- Describe	Balance at End of Period
		(1) Charged to Costs and Expenses	(2) Charged to Other Accounts-Describe		
Year ended December 31, 2010					
Deducted from asset accounts:					
Allowance for doubtful accounts receivable	\$1,397	\$ 423	\$315(A)	\$ 683(B)	\$1,452
Inventory reserves and obsolescence	4,228	3,309	46(A)	2,974(C)	4,609
Year ended December 31, 2009					
Deducted from asset accounts:					
Allowance for doubtful accounts receivable	1,051	(173)	486(A)	(33)(B)	1,397
Inventory reserves and obsolescence	3,629	2,221	235(A)	1,857(C)	4,228
Year ended December 31, 2008					
Deducted from asset accounts:					
Allowance for doubtful accounts receivable	1,120	142	—	211(B)	1,051
Inventory reserves and obsolescence	3,348	3,551	—	3,270(C)	3,629

Note (A) — Beginning balance from acquisition in that year

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

Note (C) — Inventory write-off

AMENDMENT NO. 5

Dated as of March 4, 2011

to

CREDIT AGREEMENT

Dated as of November 7, 2007

THIS AMENDMENT NO. 5 (“Amendment”) is made as of March 4, 2011 by and among Brush Engineered Materials Inc. (the “Company”), the Foreign Subsidiary Borrowers from time to time party thereto (together with the Company, the “Borrowers”), the financial institutions listed on the signature pages hereof and JPMorgan Chase Bank, National Association, as Administrative Agent (the “Administrative Agent”), under that certain Credit Agreement dated as of November 7, 2007 by and among the Borrowers, the Lenders and the Administrative Agent (as amended, supplemented or otherwise modified from time to time, the “Credit Agreement”). Capitalized terms used herein and not otherwise defined herein shall have the respective meanings given to them in the Credit Agreement.

WHEREAS, the Company has requested that the Lenders and the Administrative Agent agree to certain amendments to the Credit Agreement;

WHEREAS, the Lenders party hereto and the Administrative Agent have agreed to such amendments on the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the premises set forth above, the terms and conditions contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Borrowers, the Lenders party hereto and the Administrative Agent have agreed to enter into this Amendment.

1. Amendments to Credit Agreement. Effective as of the date of satisfaction of the conditions precedent set forth in Section 2 below, the Credit Agreement is hereby amended as follows:

(a) The definition of “Consolidated Funded Debt” set forth in Article 1 of the Credit Agreement is amended to delete the reference to “\$270,000,000” therein and to substitute “\$370,000,000” therefor.

(b) The definition of “Permitted Precious Metals Agreements” set forth in Article 1 of the Credit Agreement is amended to delete the reference to “\$270,000,000” therein and to substitute “\$370,000,000” therefor.

(c) Clause (h) of Section 6.01 of the Credit Agreement is amended to delete the reference to “\$270,000,000” therein and to substitute “\$370,000,000” therefor.

2. Conditions of Effectiveness. The effectiveness of this Amendment is subject to the conditions precedent that (a) the Administrative Agent shall have received (i) counterparts of this Amendment duly executed by the Borrowers, the Required Lenders and the Administrative Agent and (ii) counterparts of the Consent and Reaffirmation attached hereto as Exhibit A duly executed by the

Subsidiary Guarantors and (b) the Company shall have paid, to the extent invoiced, all out-of-pocket expenses of the Administrative Agent (including reasonable attorneys' fees and expenses) in connection with this Amendment and the other Loan Documents.

3. Representations and Warranties of the Borrowers. Each Borrower hereby represents and warrants as follows:

(a) This Amendment and the Credit Agreement, as amended hereby, constitute legal, valid and binding obligations of such Borrower and are enforceable against such Borrower in accordance with their terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

(b) As of the date hereof and giving effect to the terms of this Amendment, (i) no Default shall have occurred and be continuing and (ii) the representations and warranties of the Borrowers set forth in the Credit Agreement, as amended hereby, are true and correct as of the date hereof.

4. Reference to and Effect on the Credit Agreement.

(a) Upon the effectiveness hereof, each reference to the Credit Agreement in the Credit Agreement or any other Loan Document shall mean and be a reference to the Credit Agreement as amended hereby.

(b) Except as specifically amended above, the Credit Agreement and all other documents, instruments and agreements executed and/or delivered in connection therewith shall remain in full force and effect and are hereby ratified and confirmed.

(c) The execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any right, power or remedy of the Administrative Agent or the Lenders, nor constitute a waiver of any provision of the Credit Agreement or any other documents, instruments and agreements executed and/or delivered in connection therewith.

5. Governing Law. This Amendment shall be construed in accordance with and governed by the law of the State of New York.

6. Headings. Section headings in this Amendment are included herein for convenience of reference only and shall not constitute a part of this Amendment for any other purpose.

7. Counterparts. This Amendment may be executed by one or more of the parties hereto on any number of separate counterparts, and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Signatures delivered by facsimile or PDF shall have the same force and effect as manual signatures delivered in person.

[Signature Pages Follow]

IN WITNESS WHEREOF, this Amendment has been duly executed as of the day and year first above written.

BRUSH ENGINEERED MATERIALS INC., as the
Company

By: /s/ Michael C. Hasychak
Name: Michael C. Hasychak
Title: Vice President, Treasurer & Secretary

WILLIAMS ADVANCED MATERIALS
(NETHERLANDS) B.V., as the Dutch Borrower

By: /s/ James P. Marrotte
Name: James P. Marrotte
Title: Class A Director

By: /s/ Cynthia H. Friedman
Name: Cynthia H. Friedman
Title: Class A Director

By: /s/ C. J. Horstmanshof
Name: C. J. Horstmanshof
Title: Class B Director

Signature Page to Amendment No. 5
Brush Engineered Materials Inc. et al
Credit Agreement dated as of November 7, 2007

JPMORGAN CHASE BANK, NATIONAL
ASSOCIATION, individually as a Lender, as Swingline
Lender, as Issuing Bank and as Administrative Agent

By: /s/ William P. McGreehan

Name: William P. McGreehan

Title: Senior Vice President

Signature Page to Amendment No. 5
Brush Engineered Materials Inc. et al
Credit Agreement dated as of November 7, 2007

FIFTH THIRD BANK, individually as a Lender and as
Co-Syndication Agent

By: /s/ Martin H. McGinty

Name: Martin H. McGinty

Title: Vice President

Signature Page to Amendment No. 5
Brush Engineered Materials Inc. et al
Credit Agreement dated as of November 7, 2007

BANK OF AMERICA, N.A., individually as a Lender and
as Co-Syndication Agent

By: /s/ Sandra Guerrieri

Name: Sandra Guerrieri

Title: Vice President

Signature Page to Amendment No. 5
Brush Engineered Materials Inc. et al
Credit Agreement dated as of November 7, 2007

RBS CITIZENS, NATIONAL ASSOCIATION,
individually as a Lender and as Co-Documentation Agent

By: /s/ Patrick F. Dunphy

Name: Patrick F. Dunphy

Title: Senior Vice President

Signature Page to Amendment No. 5
Brush Engineered Materials Inc. et al
Credit Agreement dated as of November 7, 2007

KEYBANK NATIONAL ASSOCIATION, individually as
a Lender and as Co-Documentation Agent

By: /s/ Marcel Fournier

Name: Marcel Fournier

Title: Vice President

Signature Page to Amendment No. 5
Brush Engineered Materials Inc. et al
Credit Agreement dated as of November 7, 2007

WELLS FARGO BANK, NATIONAL ASSOCIATION,
as a Lender

By: /s/ Jason W. Sutton
Name: Jason W. Sutton
Title: Vice President

Signature Page to Amendment No. 5
Brush Engineered Materials Inc. et al
Credit Agreement dated as of November 7, 2007

EXHIBIT A

CONSENT AND REAFFIRMATION

Each of the undersigned hereby acknowledges receipt of a copy of the foregoing Amendment No. 5 to the Credit Agreement dated as of November 7, 2007 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the “Credit Agreement”) by and among Brush Engineered Materials Inc. (the “Company”), the Foreign Subsidiary Borrowers from time to time party thereto (together with the Company, the “Borrowers”), the financial institutions from time to time party thereto (the “Lenders”) and JPMorgan Chase Bank, National Association, as Administrative Agent (the “Administrative Agent”), which Amendment No. 5 is dated as of March 4, 2011 (the “Amendment”). Capitalized terms used in this Consent and Reaffirmation and not defined herein shall have the meanings given to them in the Credit Agreement. Without in any way establishing a course of dealing by the Administrative Agent or any Lender, each of the undersigned consents to the Amendment and reaffirms the terms and conditions of the Subsidiary Guaranty, the Security Agreement and any other Loan Document executed by it and acknowledges and agrees that such agreements and each and every such Loan Document executed by the undersigned in connection with the Credit Agreement remains in full force and effect and is hereby reaffirmed, ratified and confirmed. All references to the Credit Agreement contained in the above-referenced documents shall be a reference to the Credit Agreement as so modified by the Amendment and as the same may from time to time hereafter be amended, modified or restated.

Dated: March 4, 2011

[Signature Page Follows]

BRUSH ENGINEERED MATERIALS INC.

By: /s/ Michael C. Hasychak
Name: Michael C. Hasychak
Title: Vice President, Treasurer & Secretary

BRUSH RESOURCES INC.

By: /s/ Michael C. Hasychak
Name: Michael C. Hasychak
Title: Vice President, Treasurer & Secretary

TECHNICAL MATERIALS, INC.

By: /s/ Michael C. Hasychak
Name: Michael C. Hasychak
Title: Vice President, Treasurer & Secretary

BRUSH WELLMAN INC.

By: /s/ Michael C. Hasychak
Name: Michael C. Hasychak
Title: Vice President, Treasurer & Secretary

WILLIAMS ADVANCED MATERIALS INC.

By: /s/ Michael C. Hasychak
Name: Michael C. Hasychak
Title: Vice President, Treasurer & Secretary

Signature Page to Consent and Reaffirmation to Amendment No. 5
Brush Engineered Materials Inc. et al
Credit Agreement dated as of November 7, 2007

BRUSH ENGINEERED MATERIALS INC. and SUBSIDIARIES
MANAGEMENT PERFORMANCE COMPENSATION PLAN
2011 PLAN YEAR

(as adopted February, 2011)

I. INTRODUCTION

The Management Performance Compensation Plan ("the Plan") provides incentive compensation to eligible employees based principally on annual financial performance. Plan awards have a significant portion based on Company and/or Business Unit performance ("financial performance"), a component that recognizes individual and combined contributions toward personal/team objectives ("Personal/Team Performance"), and, for some participants, a "relative" company peer group financial measure.

II. DEFINITIONS

Plan Year:

The fiscal year for which the Company's Business Unit performance, and any Plan awards are calculated.

Business Unit Performance:

The Executive Staff will designate the Business Units/Subsidiaries that are eligible for participation in the Plan for the Plan Year.

Each business unit has defined financial performance measures, which have in turn been approved by the Compensation Committee of the Board and/or the Executive Staff. These measures are expressed as a Minimum, Target and Maximum. Plan Awards include a "Financial Performance Component" based on the Business Unit performance.

Personal/Team Performance:

An assessment is made of an individual's achievements and his/her contributions to work/project teams during the Plan Year. This assessment is expressed as a percentage of base compensation. The "Personal/Team Performance" component is distinct from the "Financial Performance" component.

Operating Profit ("OP"):

Profit or loss, before interest and taxes, and for domestic and international operations. Operating Profit will include any special write-off or accounting charge and accrued performance or incentive compensation.

Peer Group Return on Invested Capital (ROIC)

The publicly available return on invested capital change for those peer group companies included in the Company's self-declared peer group in comparison to the Company. Due to the delays in reported information, the measurement period will include the fourth quarter of the prior year as well as the first three quarters of the current plan year. This "relative" company peer group financial measure is an independent measure and is not influenced by any other financial performance measure set by the Company for the plan year.

Working Capital:

This is a monthly calculation based on Business Unit/Subsidiary worldwide accounts receivable and FIFO inventory divided by annualized worldwide sales (current month plus prior two months annualized). The result being working capital as a percent of sales. At the end of the year the average of the twelve monthly, annualized sales numbers and twelve monthly working capital numbers (A/R and inventory) are calculated and a percent to sales is calculated based on the averages for the twelve periods. This twelve-month average is the basis for the incentive metric for working capital management.

Other Metrics:

From time to time, other metrics will be adopted that are aligned with a Business Unit's strategy and market challenges. These metrics will be defined and tracked by the corporate accounting department, subject to approval by the Executive Staff.

Base Compensation:

The participant's annual base salary in effect on September 30 of the Plan Year.

III. PARTICIPATION

At the beginning of the Plan Year, the Executive Staff will identify exempt, salaried employees whose responsibilities affect progress on critical issues facing the Company. Those individuals selected by the Executive Staff will be notified of their participation in the Plan, their performance compensation grade and performance compensation opportunity, and their applicable Business Unit designation.

Following the beginning of the Plan Year, the Executive Staff may admit new hires or individuals who are promoted or assigned additional and significant responsibilities. The Executive Staff may also alter performance compensation grade assignments to reflect changed responsibilities of participants during the Plan Year.

An employee who replaces or otherwise assumes the job functions or role of an employee, does not automatically assume the plan participation that had applied to the incumbent. Rather, participation by the new or replacing employee must be individually considered and approved.

Employees who are designated as participants before April 1 of the Plan year are eligible for full participation. Participants who are newly employed on or after April 1 and before July 1 are eligible for half of any award available for Personal/Team and Financial (Business Unit and/or Company) performance.

Participants who transfer from the Exempt Salaried Performance Compensation Plan to the Management Performance Compensation Plan on or after April 1 and before July 1 are eligible for full participation in the Personal/Team performance component and for half participation in the Financial (Business Unit and/or Company) performance component. Their eligibility under the Exempt Salaried Performance Compensation Plan ceases for the Plan Year.

Changes in performance compensation grade assignments will result in prorated participation in awards.

The eligibility of employees hired or with changed job responsibilities after June 30 will not be considered until a possible, subsequent Plan Year.

Normally, employees who are participants in any other annual incentive, commission or performance compensation plan are not eligible. The Executive Staff may consider prorated participation under special circumstances.

With two exceptions, participants must be employed on the last day of the Plan Year in order to be eligible for any performance compensation award. For a participant who becomes eligible for and who elects a severance option under the Chronic Beryllium Disease Policy as amended, any award under the Plan will be prorated to the beginning of the month after the employee exercises the severance option. The second exception pertains to retirement under a Company pension plan, in which case, any award will be prorated to the beginning of the month following the employee's retirement date. In no event will a prorated award be earned where the proration percent is 1/3 or less.

Eligible employees who have been on a leave of absence in excess of 13 weeks during the plan year will have their award reduced on a pro-rata basis to reflect their actual contribution.

IV. PERFORMANCE COMPENSATION OPPORTUNITY FOR FINANCIAL PERFORMANCE

The Compensation Committee of the Board of Directors will establish Minimum, Target and Maximum levels for each financial measurement.

The Executive Staff will assign participants to a specific Business Unit/Subsidiary for the performance compensation opportunity for Financial Performance.

Below is a summary of the performance compensation opportunity for the Plan Year.

Grade	Financial Component	Personal Team
D	20%	0-14%
E	10%	0-14%

Opportunity for participants in Grades A, B and C will be individualized as determined by the Compensation Committee or the Executive Staff.

The "Financial Performance" component of awards (Business Unit, Company, sub-unit, and/or other measurement), will begin once the Minimum level has been attained for Operating Profit. None of the other financial components will result in an award unless the Minimum level for Operating Profit has been met. Performance, which reaches or exceeds the Maximum value of the measure, will result in awards at 200 percent of Target opportunity. Award amounts for levels of achievement between Minimum and Target and between Target and Maximum will be prorated according to the level of achievement.

Financial awards will be prorated for transfers between units (Business Unit and/or Company) according to the length of service by months in each unit during the Plan Year.

V. PERFORMANCE COMPENSATION OPPORTUNITY for PERSONAL/TEAM PERFORMANCE

An Operating Profit “threshold” may be established, which must be achieved in order to make available a bonus opportunity to recognize the Personal/Team performance. If established, meeting this threshold would result in a Personal/Team opportunity payout. This threshold can be different than the Minimum Operating Profit level necessary to create a Financial Performance opportunity.

No awards for Personal/Team performance will be paid if a Threshold is established and is not met.

The “total pool” for Personal/Team performance of participants would typically average about 10 percent of the base compensation of participants, if the Operating Profit metric meets or exceeds Target. Performance below Target could result in the total pool being reduced to a lesser amount. The Business Unit Executive and the Executive Staff will decide allocation of the pool among eligible participants based on their performance throughout the plan year relative to achieving established goals and objectives.

VI. PAYMENT

Distribution of any performance compensation awards under the Plan to participants will be no later than March 15 of the year following the Plan Year.

VIII. GENERAL PROVISIONS

The Executive Staff has authority to make administrative decisions in the interests of the Plan.

The Board of Directors, through its Compensation Committee, shall have final and conclusive authority for interpretation, application, and possible modification of this Plan or established targets. The Board of Directors reserves the right to amend or terminate the Plan at any time. Subject to the preceding sentences, any determination by the Company’s independent accountants shall be final and conclusive as it relates to the calculation of financial results.

This Plan is not a contract of employment.

Subsidiaries of Registrant

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

Name of Subsidiary	State or Country of Incorporation
Materion Advanced Chemicals Inc.	Wisconsin
Materion Advanced Materials Technologies and Services Netherlands B.V.	Netherlands
Materion Advanced Materials Technologies and Services Suzhou Ltd.	China
Materion Advanced Materials Technologies and Services Corp.	New Mexico
Materion Advanced Materials Technologies and Services Far East Pte. Ltd.	Singapore
Materion Advanced Materials Technologies and Services Inc.	New York
Materion Advanced Materials Technologies and Services Taiwan Co. Ltd.	Taiwan
Materion Brush Japan Ltd.	Japan
Materion Brush Singapore Pte. Ltd.	Singapore
Materion Brush GmbH	Germany
Materion Brush Inc.	Ohio
Materion Brush International Inc.	Ohio
Materion Brush Ltd.	England
Materion Ceramics Inc.	Arizona
Materion Czech S.R.O.	Czech Republic
Materion Ireland Holdings Limited	Ireland
Materion Large Area Coatings LLC	Connecticut
Materion Natural Resources Inc.	Utah
Materion Precision Optics and Thin Film Coatings Corporation	California
Materion Precision Optics and Thin Film Coatings Inc.	Massachusetts
Materion Services Inc.	Ohio
Materion Technical Materials Inc.	Ohio
Materion Technologies Inc.	Arizona

Consent of Independent Registered Public Accounting Firm

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;
- (20) Registration Statement Number 333-133429 on Form S-8 dated April 20, 2006; and
- (21) Registration Statement Number 333-145149 on Form S-8 dated August 6, 2007

of our report dated March 9, 2011, with respect to the consolidated financial statements of Materion Corporation (formerly known as Brush Engineered Materials Inc.) and subsidiaries and our report dated March 9, 2011, with respect to the effectiveness of internal control over financial reporting of Materion Corporation (formerly known as Brush Engineered Materials Inc.) and subsidiaries both included in this Annual Report (Form 10-K) of Materion Corporation (formerly known as Brush Engineered Materials Inc.) and subsidiaries for the year ended December 31, 2010.

/s/ Ernst & Young LLP

Cleveland, Ohio
March 9, 2011

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each of the undersigned directors and officers of MATERION CORPORATION, an Ohio corporation (the "Corporation"), hereby constitutes and appoints Richard J. Hipple, John D. Grampa, Michael C. Hasychak and Michael J. Solecki, 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, 2010, 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 2nd day of February, 2011.

/s/ Richard J. Hipple

Richard J. Hipple, Chairman, President,
Chief Executive Officer and Director
(Principal Executive Officer)

/s/ William P. Madar

William P. Madar, Director

/s/ John D. Grampa

John D. Grampa, Senior Vice President
Finance and Chief Financial Officer
(Principal Financial Officer)

/s/ William G. Pryor

William G. Pryor, Director

/s/ Albert C. Bersticker

Albert C. Bersticker, Director

/s/ N. Mohan Reddy

N. Mohan Reddy, Director

/s/ Joseph P. Keithley

Joseph P. Keithley, Director

/s/ William R. Robertson

William R. Robertson, Director

/s/ Vinod M. Khilnani

Vinod M. Khilnani, Director

/s/ John Sherwin, Jr.

John Sherwin, Jr., Director

/s/ William B. Lawrence

William B. Lawrence, Director

/s/ Craig S. Shular

Craig S. Shular, Director

CERTIFICATIONS

I, Richard J. Hipple, certify that:

- 1) I have reviewed this annual report on Form 10-K of Materion Corporation (the “registrant”);
- 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:
 - a) 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;
 - c) 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):
 - a) 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 9, 2011

/s/ Richard J. Hipple

Richard J. Hipple
Chairman, President and
Chief Executive Officer

CERTIFICATIONS

I, John D. Grampa, certify that:

- 1) I have reviewed this annual report on Form 10-K of Materion Corporation (the “registrant”);
- 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:
 - a) 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;
 - c) 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):
 - a) 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 9, 2011

/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 Materion Corporation (the "Company") for the year ended December 31, 2010, 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 9, 2011

/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