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UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

| <u></u> - | |
|---|---|
| Ţ | FORM 10-Q |
| (Mark One) | ORW 10-Q |
| (Mark One) | |
| ☑ QUARTERLY REPORT PURSUANT EXCHANGE ACT OF 1934 | TO SECTION 13 OR 15(d) OF THE SECURITIES |
| For the quarterly period ended July 1, 2011 | |
| ☐ TRANSITION REPORT PURSUANT EXCHANGE ACT OF 1934 | TO SECTION 13 OR 15(d) OF THE SECURITIES |
| For the transit | ion period from to |
| Commissi | on file number 001-15885 |
| | N CORPORATION f Registrant as specified in charter) |
| Ohio | 34-1919973 |
| (State or other jurisdiction of incorporation or organizati | |
| 6070 Parkland Blvd., Mayfield Hts., Ohio (Address of principal executive offices) | 44124 (Zip Code) |
| Registrant's tele | ephone number, including area code: 216-486-4200 |
| of the Securities Exchange Act of 1934 during the | (1) has filed all reports required to be filed by Section 13 or 15(d) preceding 12 months (or for such shorter period that the registrant subject to such filing requirements for the past 90 days. Yes ☑ |
| if any, every Interactive Data File required to be su | has submitted electronically and posted on its corporate Web site, ibmitted and posted pursuant to Rule 405 of Regulation S-T months (or for such shorter period that the registrant was required |
| | is a large accelerated filer, an accelerated filer, a non-accelerated accelerated filer," "accelerated filer" and "smaller e Act. (Check one): |
| Large accelerated filer \square Accelerated filer | ☑ Non-accelerated filer □ Smaller reporting company □ (Do not check if a smaller reporting company) |
| Indicate by check mark whether the registrant Act). Yes □ No ☑ | is a shell company (as defined in Rule 12b-2 of the Exchange |
| As of July 29, 2011 there were 20,437,415 cor | mmon shares, no par value, outstanding. |

PART I FINANCIAL INFORMATION MATERION CORPORATION AND SUBSIDIARIES

Item 1. Financial Statements

The consolidated financial statements of Materion Corporation and its subsidiaries for the second quarter and first half ended July 1, 2011 are as follows:

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Consolidated Statements of Income (Unaudited)

| | Second Quarter Ended | | First Half Ended | |
|--|----------------------|-----------------|------------------|-----------------|
| (Thousands except per share amounts) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 |
| Net sales | \$424,710 | \$325,946 | \$799,515 | \$621,028 |
| Cost of sales | 362,039 | 270,093 | 681,043 | 515,861 |
| Gross margin | 62,671 | 55,853 | 118,472 | 105,167 |
| Selling, general and administrative expense | 34,048 | 30,611 | 65,691 | 60,950 |
| Research and development expense | 2,714 | 1,798 | 5,124 | 3,483 |
| Other-net | 5,064 | 2,946 | 8,735 | 7,031 |
| Operating profit | 20,845 | 20,498 | 38,922 | 33,703 |
| Interest expense – net | 613 | 691 | 1,198 | 1,310 |
| Income before income taxes | 20,232 | 19,807 | 37,724 | 32,393 |
| Income tax expense | 6,360 | 6,088 | 12,034 | 11,953 |
| Net income | \$ 13,872 | \$ 13,719 | \$ 25,690 | \$ 20,440 |
| Net income per share of common stock — basic | \$ 0.68 | \$ 0.68 | \$ 1.26 | \$ 1.01 |
| Weighted-average number of common shares outstanding — | | | | |
| basic | 20,421 | 20,323 | 20,388 | 20,290 |
| Net income per share of common stock — diluted | \$ 0.67 | \$ 0.67 | \$ 1.23 | \$ 1.00 |
| Weighted-average number of common shares outstanding — diluted | 20,832 | 20,600 | 20,812 | 20,534 |
| | | | | |

See Notes to Consolidated Financial Statements.

Consolidated Balance Sheets (Unaudited)

| (Thousands) | July 1, 2011 | Dec. 31, 2010 |
|--|-----------------|------------------|
| Assets | | |
| Current assets | | |
| Cash and cash equivalents | \$ 9,461 | \$ 16,104 |
| Accounts receivable | 149,386 | 139,374 |
| Other receivables | 2,679 | 3,972 |
| Inventories | 182,389 | 154,467 |
| Prepaid expenses | 37,468 | 31,743 |
| Deferred income taxes | 10,241 | 10,065 |
| Total current assets | 391,624 | 355,725 |
| Related-party notes receivable | 90 | 90 |
| Long-term deferred income taxes | 2,042 | 2,042 |
| Property, plant and equipment — cost | 731,727 | 719,953 |
| Less allowances for depreciation, depletion and amortization | (473,743) | (454,085) |
| Property, plant and equipment — net | 257,984 | 265,868 |
| Intangible assets | 34,207 | 36,849 |
| Other assets | 7,831 | 1,900 |
| Goodwill | 72,936 | 72,936 |
| Total assets | \$ 766,714 | \$ 735,410 |
| Liabilities and Shareholders' Equity | | |
| Current liabilities | | |
| Short-term debt | \$ 39,331 | \$ 47,835 |
| Accounts payable | 37,912 | 33,375 |
| Salaries and wages | 22,181 | 34,035 |
| Taxes other than income taxes | 256 | 905 |
| Other liabilities and accrued items | 26,705 | 24,911 |
| Unearned revenue | 2,835 | 2,378 |
| Income taxes | | 3,921 |
| Total current liabilities | 129,220 | 147,360 |
| Other long-term liabilities | 18,092 | 17,915 |
| Retirement and post-employment benefits | 81,588 | 82,502 |
| Unearned income | 59,724 | 57,154 |
| Long-term income taxes | 2,905 | 2,906 |
| Deferred income taxes | 4,010 | 4,912 |
| Long-term debt | 55,693 | 38,305 |
| Shareholders' equity | 415,482 | 384,356 |
| Total liabilities and shareholders' equity | \$ 766,714 | \$ 735,410 |

See Notes to Consolidated Financial Statements.

Consolidated Statements of Cash Flows (Unaudited)

| | First Hal | f Ended |
|---|-----------------|-----------------|
| (Thousands) | July 1, 2011 | July 2, 2010 |
| Net income | \$ 25,690 | \$ 20,440 |
| Adjustments to reconcile net income to net cash used in operating activities: | | |
| Depreciation, depletion and amortization | 22,425 | 17,100 |
| Amortization of deferred financing costs in interest expense | 233 | 282 |
| Derivative financial instrument ineffectiveness | _ | 489 |
| Stock-based compensation expense | 2,191 | 1,988 |
| Changes in assets and liabilities net of acquired assets and liabilities: | | |
| Decrease (increase) in accounts receivable | (8,627) | (58,366) |
| Decrease (increase) in other receivables | 1,293 | 6,229 |
| Decrease (increase) in inventory | (26,805) | (10,276) |
| Decrease (increase) in prepaid and other current assets | (5,561) | (1,147) |
| Decrease (increase) in deferred income taxes | (200) | 6,117 |
| Increase (decrease) in accounts payable and accrued expenses | (6,415) | (1,798) |
| Increase (decrease) in unearned revenue | 454 | (29) |
| Increase (decrease) in interest and taxes payable | (4,346) | (359) |
| Increase (decrease) in long-term liabilities | (1,655) | (1,265) |
| Other — net | (5,814) | (59) |
| Net cash used in operating activities | (7,137) | (20,654) |
| Cash flows from investing activities: | | |
| Payments for purchase of property, plant and equipment | (11,103) | (24,768) |
| Payments for mine development | (183) | (7,425) |
| Reimbursements for capital equipment under government contracts | 2,570 | 14,915 |
| Payments for purchase of business net of cash received | _ | (20,605) |
| Proceeds from transfer of acquired inventory to consignment line | _ | 5,667 |
| Proceeds from sale of property, plant and equipment | 33 | 76 |
| Other investments — net | 13 | 14 |
| Net cash used in investing activities | (8,670) | (32,126) |
| Cash flows from financing activities: | (0,070) | (82,128) |
| Repayments of short-term debt | (8,522) | (14,035) |
| Proceeds from issuance of long-term debt | 42,472 | 70,000 |
| Repayment of long-term debt | (25,083) | |
| Debt issuance costs | (623) | _ |
| Principal payments under capital lease obligations | (441) | (55) |
| Issuance of common stock under stock option plans | 698 | 851 |
| Tax benefit from stock compensation realization | 376 | 164 |
| Net cash provided from financing activities | 8,877 | 56,925 |
| Effects of exchange rate changes | 287 | (317) |
| Net change in cash and cash equivalents | (6,643) | 3,828 |
| Cash and cash equivalents at beginning of period | 16,104 | 12,253 |
| | | |
| Cash and cash equivalents at end of period | \$ 9,461 | \$ 16,081 |

See Notes to Consolidated Financial Statements.

Notes to Consolidated Financial Statements (Unaudited)

Note A — Accounting Policies

In management's opinion, the accompanying consolidated financial statements contain all adjustments necessary to present fairly the financial position as of July 1, 2011 and December 31, 2010 and the results of operations for the second quarter and first half ended July 1, 2011 and July 2, 2010. All adjustments were of a normal and recurring nature. Certain amounts in prior years have been reclassified to conform to the 2011 consolidated financial statement presentation.

Note B — **Inventories**

| (Thousands) | July 1, 2011 | Dec. 31, 2010 |
|--|-----------------|------------------|
| Principally average cost: | | |
| Raw materials and supplies | \$ 57,934 | \$ 43,295 |
| Work in process | 155,585 | 159,081 |
| Finished goods | 59,615 | 32,991 |
| Gross inventories | 273,134 | 235,367 |
| Excess of average cost over LIFO inventory value | 90,745 | 80,900 |
| Net inventories | \$182,389 | \$154,467 |
| | | |

Note C — Pensions and Other Post-employment Benefits

The following is a summary of the second quarter and first half 2011 and 2010 net periodic benefit cost for the domestic defined benefit pension plan and the domestic retiree medical plan.

| | Pension Second Qua | | Other Benefits Second Quarter Ended | |
|---|-----------------------|-----------------|--|-----------------|
| (Thousands) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 |
| Components of net periodic benefit cost | | | | |
| Service cost | \$ 1,516 | \$ 1,244 | \$ 71 | \$ 68 |
| Interest cost | 2,309 | 2,156 | 399 | 434 |
| Expected return on plan assets | (2,685) | (2,536) | _ | _ |
| Amortization of prior service cost | (118) | (132) | (9) | (9) |
| Amortization of net loss | 982 | 711 | _ | _ |
| Net periodic benefit cost | \$ 2,004 | \$ 1,443 | \$ 461 | \$ 493 |

| Pension Benefits First Half Ended | | Other Benefits First Half Ended | | |
|---|-----------------|------------------------------------|-----------------|-----------------|
| (Thousands) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 |
| Components of net periodic benefit cost | | | | |
| Service cost | \$ 3,033 | \$ 2,488 | \$ 142 | \$ 136 |
| Interest cost | 4,618 | 4,312 | 798 | 869 |
| Expected return on plan assets | (5,370) | (5,072) | _ | _ |
| Amortization of prior service cost | (236) | (265) | (18) | (18) |
| Amortization of net loss | 1,963 | 1,422 | _ | _ |
| Net periodic benefit cost | \$ 4,008 | \$ 2,885 | \$ 922 | \$ 987 |

The Company made contributions to the domestic defined benefit pension plan of \$3.6 million in the first half 2011.

Note D — Contingencies

Materion Brush Inc. (formerly known as Brush Wellman Inc.), one of the Company's wholly owned subsidiaries, has been a defendant from time to time in legal proceedings where the plaintiffs allege they have contracted chronic beryllium disease (CBD) or related ailments as a result of exposure to beryllium. Two CBD cases were outstanding as of December 31, 2010. During the first half of 2011, one case was dismissed while the other case was settled for an amount less than \$0.1 million. There were no new CBD cases files during the first half of 2011 and no cases were outstanding as of the end of the second quarter 2011.

The Company will record a reserve for CBD or other litigation when a loss from either settlement or verdict is probable and estimable. Claims filed by third-party plaintiffs where the alleged exposure occurred prior to December 31, 2007 may be covered by insurance subject to an annual deductible of \$1.0 million. Reserves are recorded for asserted claims only and defense costs are expensed as incurred.

The Company has an active environmental compliance program and records reserves for the probable cost of identified environmental remediation projects. The reserves are established based upon analyses conducted by the Company's engineers and outside consultants and are adjusted from time to time based upon ongoing studies, the difference between actual and estimated costs and other factors. The reserves may also be affected by rulings and negotiations with regulatory agencies. The undiscounted reserve balance was \$5.1 million as of July 1, 2011 and \$5.2 million as of December 31, 2010. Environmental projects tend to be long-term and the final actual remediation costs may differ from the amounts currently recorded.

Note E — Comprehensive Income

The reconciliation between net income and comprehensive income for the second quarter and first half ended July 1, 2011 and July 2, 2010 is as follows:

| Second Quarter Ended | | First Half Ended | |
|----------------------|----------------------------------|--|--|
| July 2, 2010 | July 1, 2011 | July 2, 2010 | |
| \$13,719 | \$25,690 | \$20,440 | |
| (440) | 2,068 | (1,346) | |
| (85) | (411) | 447 | |
| 373 | 1,120 | 748 | |
| \$13,567 | \$28,467 | \$20,289 | |
| 9 | \$13,719 (440) (85) 373 | July 2, 2010 July 1, 2011 \$13,719 \$25,690 (440) 2,068 (85) (411) 373 1,120 | |

Note F — Segment Reporting

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.

| | Advanced Material | Performance | Beryllium and | Technical | All |
|-----------------------------|----------------------|-------------|---------------|-----------|----------------------------|
| (Thousands) | Technologies | Alloys | Composites | Materials | Subtotal Other Total |
| Second Quarter 2011 | | | | | |
| Sales to external customers | \$287,299 | \$ 96,636 | \$ 17,729 | \$22,954 | \$424,618 \$ 92 \$424,710 |
| Intersegment sales | 843 | 993 | 32 | 387 | 2,255 — 2,255 |
| Operating profit (loss) | 10,664 | 9,453 | 1,106 | 2,366 | 23,589 (2,744) 20,845 |
| Second Quarter 2010 | | | | | |
| Sales to external customers | \$213,897 | \$ 77,852 | \$ 15,738 | \$18,413 | \$325,900 \$ 46 \$325,946 |
| Intersegment sales | 467 | 2,935 | 144 | 919 | 4,465 — 4,465 |
| Operating profit (loss) | 9,246 | 8,510 | 2,074 | 2,033 | 21,863 (1,365) 20,498 |
| First Half 2011 | | | | | |
| Sales to external customers | \$543,925 | \$181,085 | \$ 31,687 | \$42,615 | \$799,312 \$ 203 \$799,515 |
| Intersegment sales | 1,524 | 1,903 | 222 | 705 | 4,354 — 4,354 |
| Operating profit (loss) | 21,373 | 18,218 | 1,192 | 4,523 | 45,306 (6,384) 38,922 |
| Assets | 331,673 | 248,582 | 123,800 | 27,554 | 731,609 35,105 766,714 |
| First Half 2010 | | | | | |
| Sales to external customers | \$416,907 | \$141,240 | \$ 28,833 | \$33,875 | \$620,855 \$ 173 \$621,028 |
| Intersegment sales | 861 | 6,684 | 177 | 1,311 | 9,033 — 9,033 |
| Operating profit (loss) | 17,711 | 11,838 | 4,231 | 3,074 | 36,854 (3,151) 33,703 |
| Assets | 330,712 | 219,739 | 99,135 | 25,569 | 675,155 40,313 715,468 |

Note G — **Stock-based Compensation Expense**

The Company granted approximately 13,000 shares of restricted stock to its non-employee directors in the second quarter 2011 at a fair market value of \$39.30 per share. The fair value was determined using the closing price of the Company's stock on the grant date and will be amortized over the vesting period of one year.

The Company granted approximately 78,000 shares of restricted stock to certain employees in the second quarter 2011 at a fair value of \$39.30 per share. Another 5,000 shares of restricted stock was granted to an employee in the second quarter 2011 at a fair value of \$36.97 per share. The fair value was determined using the closing price of the Company's stock on the grant date and will be amortized over the vesting period of three years. The holders of the restricted stock will forfeit their shares should their employment be terminated prior to the end of the vesting period.

The Company granted approximately 148,000 stock appreciation rights (SARs) to certain employees in the second quarter 2011 at a strike price of \$39.30 per share. The fair value of the SARs, which was determined on the grant date using a Black-Scholes model, was \$21.47 per share and will be amortized over the vesting period of three years. The SARs expire ten years from the date of the grant.

Total stock-based compensation expense for the above and previously existing awards and plans was \$1.2 million in the second quarter 2011 and \$1.0 million in the second quarter 2010. For the first half of the year, the stock-based compensation expense was \$2.2 million in 2011 and \$2.0 million in 2010.

The Company received \$0.7 million for the exercise of approximately 50,000 shares in the first half of 2011 and \$0.9 million for the exercise of approximately 47,000 shares in the first half of 2010. Approximately 7,000 stock appreciation rights were exercised in the first half of 2011 as well.

Note H — Other-net

Other-net expense for the second quarter and first half 2011 and 2010 is summarized as follows:

| | Second Quarter Ended | | First Half Ended | |
|-----------------------------------|----------------------|-----------------|------------------|-----------------|
| (Thousands) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 |
| Exchange/translation gain (loss) | \$ (674) | \$ 246 | \$(1,019) | \$ (307) |
| Amortization of intangible assets | (1,509) | (1,555) | (3,019) | (3,051) |
| Metal consignment fees | (2,670) | (1,265) | (4,799) | (2,440) |
| Derivative ineffectiveness | _ | _ | _ | (489) |
| Other items | (211) | (372) | 102 | (744) |
| Total | \$(5,064) | \$(2,946) | \$(8,735) | \$(7,031) |

Note I — Income Taxes

The tax expense of \$6.4 million in the second quarter 2011 was calculated by applying a rate of 31.4% against income before income taxes while the tax expense of \$6.1 million in the second quarter 2010 was calculated by applying a rate of 30.7% against the income before income taxes in that period. In the first half of 2011, the tax expense of \$12.0 million was calculated by applying a rate of 31.9% against income before income taxes. In the first half of 2010, a rate of 36.9% was applied against income before income taxes to calculate the expense of \$12.0 million.

The differences between the statutory and effective rates in the second quarter and first half of 2011 and 2010 were due to the impact of the production deduction, percentage depletion, foreign source income and deductions, executive compensation, state and local taxes and other factors.

In addition, the tax expense in the first half of 2010 included a discrete item of \$1.4 million for the reduction in a deferred tax asset. The asset was reduced as a result of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act. This legislation eliminates the income tax deduction related to prescription drug benefits provided to retirees and reimbursed under the Medicare Part D retiree drug subsidy program beginning in 2013.

The tax rate in the second quarter and first half of 2011 was affected by immaterial discrete events.

The effective tax rate was lower in the second quarter 2011 than the first quarter 2011 prior to the impact of any discrete events. This change in the tax rate did not have a material impact on net income or earnings per share in the second quarter 2011.

Note J — Fair Value of Financial Instruments

The Company measures and records financial instruments at their fair values. A fair value hierarchy is used for those instruments measured at fair value that distinguishes between assumptions based on 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 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 July 1, 2011:

| | Fair Value Measurements | | | | |
|--|-------------------------|---|---|--|--|
| (Thousands) | Total | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) | |
| Financial Assets | | | | | |
| Directors' deferred compensation investments | \$ 642 | \$ 642 | \$ — | \$ — | |
| Foreign currency forward contracts | _ | _ | _ | _ | |
| Total | \$ 642 | \$ 642 | \$ | <u>\$</u> | |
| Financial Liabilities | | | | | |
| Directors' deferred compensation liability | \$ (642) | \$ 642 | \$ — | \$ — | |
| Foreign currency forward contracts | (2,176) | _ | (2,176) | _ | |
| Total | \$(2,818) | \$ 642 | \$ (2,176) | \$ | |

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 July 1, 2011.

Note K — Derivative Instruments and Hedging Activity

The Company uses derivative contracts to hedge portions of its foreign currency exposures. The objectives and strategies for using foreign currency derivatives are as follows:

The Company sells products to overseas customers in their local currencies, primarily the euro and yen. The Company uses 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 dollar value of the 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.

The use of foreign currency derivative contracts is governed by policies approved by the Board of Directors. 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 within the confines of the policy. 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 rate movements.

The Company may also use forward contracts to hedge its precious metal exposures. The Company maintains the majority of its precious metals used in production on a consignment basis. The metal is purchased out of consignment when it is shipped to the customer and the purchase price forms the basis for the price to be charged to the customer. This allows for changes in the market prices of the precious metals in either direction to be passed through to the customer and reduces the impact changes in prices could have on the Company's margins and operating profit. However, in certain circumstances, the Company may elect to purchase precious metals to meet a portion of its production requirements. The Company may then hedge the price exposure on this inventory by securing a forward contract. The gain or loss on the forward contract from movements in the market price will generally offset the gain or loss on the disposition of the metal. The use of precious metal derivative contracts is also governed by policies approved by the Board of Directors and monitored by a group of senior financial managers.

The Company will only enter into a derivative contract if there is an underlying identified exposure. Contracts are typically held until maturity. The Company does not engage in derivative trading activities and does not use derivatives for speculative purposes. The Company only uses currency hedge contracts that are denominated in the same currency 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 cash flow hedge, changes in the fair value of the derivative are recognized in other comprehensive income (OCI) until the hedged item is recognized in earnings. The ineffective portion of a derivative's 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. The fair values of the outstanding derivatives are recorded on the balance sheet 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 outstanding foreign currency forward contracts had a notional value of \$36.5 million as of July 1, 2011. All of these contracts were designated as and effective as cash flow hedges. There was no ineffectiveness associated with the outstanding currency contracts. The fair value of these contracts was recorded on the balance sheet as of July 1, 2011 as follows (dollars in thousands):

| Debit (credit) | Fair Value |
|-------------------------------------|---------------|
| Other liabilities and accrued items | \$(2,059) |
| Other long-term liabilities | (117) |
| Total | \$(2,176) |

A summary of the hedging relationships of the outstanding derivative financial instruments designated as cash flow hedges as of July 1, 2011 and July 2, 2010 and the amounts transferred into income for the second quarter and first half then ended is as follows:

| | | Second Qua | rter | Ended | First Half Ended | | | led |
|---|--------|----------------|------|-------------------|------------------|------------------|----|------------------|
| (Thousands) | | uly 1, 2011 | | July 2, 2010 | | July 1, 2011 | | July 2, 2010 |
| Derivative in cash flow hedging relationship | Foreig | gn Currency | | Foreign Currency | F | oreign Currency | F | oreign Currency |
| | Forwar | d Contracts | F | Forward Contracts | Fo | orward Contracts | Fo | orward Contracts |
| Effective portion of hedge: | | | | | | | | |
| Gain (loss) recognized in OCI at the end of the | ¢. | (2.176) | ф | 902 | | | | |
| period | \$ | (2,176) | 2 | 803 | | | | |
| Location of gain (loss) reclassified from OCI into | | | | | | | | |
| income | | Other-net | | Other-net | | Other-net | | Other-net |
| Amount of gain (loss) reclassified from OCI into income | \$ | (625) | \$ | 398 | \$ | (1,235) | \$ | 388 |
| Ineffective portion of hedge and amounts excluded from effectiveness testing: | | , | | | | () | | |
| Location of gain (loss) recognized in income on | | | | | | | | |
| derivative | | Other-net | | Other-net | | Other-net | | Other-net |
| Amount of gain (loss) recognized in income on | | | | | | | | |
| derivative | \$ | _ | \$ | _ | \$ | _ | \$ | _ |

The Company secured a debt obligation with an embedded copper derivative in October 2009. The 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 period as incurred. In the first quarter 2010, the Company secured forward contracts to reduce the variability of the charges against income due to movements in the derivative's fair value. The ineffectiveness on the embedded derivative and the forward contract was zero in the second quarter 2010 and a net \$0.5 million expense in the first half of 2010 and was recorded in other-net on the Consolidated Statements of Income. The forward contract and the embedded copper derivative outstanding at the end of the second quarter 2010 matured in the third quarter of 2010. There was no derivative ineffectiveness recorded in the second quarter or first half of 2011.

During the first quarter 2011, 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 first quarter 2011 and resulted in a loss of \$0.2 million that was recorded in cost of sales on the Consolidated Statements of Income.

The Company expects to relieve \$2.1 million from OCI and charge other-net on the Consolidated Statements of Income in the twelve month period beginning July 2, 2011.

Item 2. 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 \$424.7 million in the second quarter 2011 established a record high, surpassing the prior record set in the first quarter 2011 by 13%. We have established new quarterly sales records in five of the most recent six quarters. Sales in the second quarter 2011 were also 30% higher than sales in the second quarter 2010.

The sales growth in the second quarter 2011 was due to a combination of improved demand from a number of markets (particularly automotive electronics, industrial components and commercial aerospace, medical and energy), higher metal pass-through prices and pricing initiatives.

Gross margin of \$62.7 million in the second quarter 2011 was a \$6.8 million improvement over the second quarter 2010, as a portion of the margin benefits from the higher sales volume and improved pricing was offset by start-up costs associated with the new beryllium facility, higher manufacturing overhead costs and other factors.

Various expenses were higher in the second quarter 2011 compared to the second quarter 2010, including the legal and marketing costs associated with the renaming of the company, metal consignment fees (partially due to the increased market prices of precious metals), retirement plan expenses (driven by the lower discount rate and other factors) and other items.

Operating profit was a solid \$20.8 million in the second quarter 2011, a slight improvement over the operating profit of \$20.5 million in the second quarter 2010. Earnings per share of \$0.67 was unchanged between quarters.

During the second quarter 2011, we entered into a new \$8.0 million long-term debt facility that is designed to finance capital expenditures in the state of Ohio. Subsequent to the end of the second quarter, we negotiated a new five-year revolving credit agreement that provides increased borrowing capacity and more flexible terms than the former agreement.

We finalized the settlement of a chronic beryllium disease case early in the second quarter 2011 for an immaterial amount. As a result, we do not have any chronic beryllium disease litigation pending against us as of the end of the second quarter 2011.

Results of Operations

| | Second Qu | Second Quarter Ended | | |
|-----------------------------------|-----------------|----------------------|-----------------|-----------------|
| (Millions, except per share data) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 |
| Sales | \$ 424.7 | \$ 325.9 | \$ 799.5 | \$ 621.0 |
| Operating profit | 20.8 | 20.5 | 38.9 | 33.7 |
| Income before income taxes | 20.2 | 19.8 | 37.7 | 32.4 |
| Net income | 13.9 | 13.7 | 25.7 | 20.4 |
| Diluted earnings per share | \$ 0.67 | \$ 0.67 | \$ 1.23 | \$ 1.00 |

Sales were \$424.7 million in the second quarter 2011, an improvement of \$98.8 million, or 30%, over sales of \$325.9 million in the second quarter 2010. For the first six months of the year, sales grew 29% from \$621.0 million in 2010 to \$799.5 million in 2011. Sales have improved over the corresponding quarter in the prior year for seven consecutive quarters.

Sales to a number of markets were higher in the second quarter 2011 than the second quarter 2010. However, shipments to the *consumer electronics market*, our largest market, were relatively unchanged in the second quarter

2011 from the second quarter 2010 after having grown significantly over the prior five quarters. *Defense and science* shipments were also relatively unchanged between periods.

Sales to the *industrial components and commercial aerospace market* grew at a double-digit rate in the second quarter 2011 over the second quarter 2010.

Automotive electronics market sales were approximately 30% higher in the second quarter 2011 than the second quarter 2010 due to continued strong demand from domestic and foreign customers.

Sales to the *telecommunications infrastructure* market, one of our smaller markets, grew approximately 20% in the second quarter 2011 over the second quarter 2010 on the strength of shipments for undersea applications.

Sales to the *energy, medical and other markets* also contributed to the sales growth in the second quarter 2011 over the second quarter 2010.

Total sales order entry, while slightly higher than the first quarter 2011, was approximately 5% lower than sales in the second quarter 2011. Order entry had exceeded sales for the prior seven consecutive quarters. Order entry in the second quarter and first half of 2011 was higher than the comparable periods of 2010.

Sales also grew in the second quarter 2011 and the first half of 2011 over the respective periods in the prior year due to the pass-through of higher metal prices. We use gold, silver, platinum, palladium, copper and ruthenium in the manufacture of various products. Our sales are affected by the prices for these metals, as changes in our purchase prices are passed on to our customers in the form of higher or lower selling prices. The net average prices between periods for these metals increased during the second quarter and first half of 2011 over the respective periods in 2010. The net impact of the change in metal prices was an estimated \$63.0 million increase in sales in the second quarter 2011 from the second quarter 2010 and an estimated \$107.5 million increase in sales in the first half of 2011 from the first half of 2010.

Domestic sales improved 35% in the second quarter 2011 and 34% in the first half of 2011 over the comparable periods in 2010. Domestic sales include the majority of the increase in the metal price pass-through. International sales grew 19% in the second quarter 2011 and 15% in the first half of 2011 over the same periods in 2010. International sales were 26% of total sales in the first half of 2011 and 29% of total sales in the first half of 2010. European sales grew 35% in the first half of 2011 and accounted for the majority of the international sales growth during that time period. Sales to Asia grew 4% in the first half of 2011 over the first half of 2010.

Gross margin was \$62.7 million, or 15% of sales, in the second quarter 2011 compared to \$55.9 million, or 17% of sales, in the second quarter 2010. For the first six months of 2011, gross margin was \$118.5 million, an improvement of \$13.3 million from the \$105.2 million of margin generated in the first half of 2010. Gross margin was 15% of sales in the first half of 2011 and 17% of sales in the first half of 2010.

Gross margin in the second quarter and first half of 2011 benefitted from higher sales volumes, higher selling prices in portions of our business and improved operating efficiencies and machine utilization due to the higher production volumes. The change in product mix, which had been favorable in the first quarter 2011, had an immaterial impact on the second quarter 2011 margins. Margins in the first quarter 2010 had been reduced by lower than expected manufacturing yields on welded products at the Elmore, Ohio facility. The causes of the lower yields were identified and resolved in subsequent quarters in 2010.

These margin benefits were partially offset in the second quarter and first half of 2011 by higher costs and inefficiencies associated with the start-up of the new beryllium facility. While the major pieces of equipment were in place, we incurred additional costs for testing the equipment and bringing it up on line. Higher scrap rates on certain nickel products also reduced margins in the first half of 2011.

Manufacturing overhead costs were only 1% higher in the second quarter 2011 than the second quarter 2010 but 7% higher in the first half of 2011 than the first half of 2010. The increase in overhead costs in the first half of 2011 was due to the cost of investments to support the current and projected growth in the business, ongoing support costs for the new beryllium facility and other factors offset in part by various cost savings.

We recorded a \$1.4 million benefit as the estimated margin impact of the projected depletion of a last-in, first out (LIFO) inventory layer associated with the second quarter 2010. We also recorded a \$1.6 million LIFO benefit in the first quarter 2010. There was no corresponding benefit recorded in the second quarter or first half of 2011.

Selling, general and administrative (SG&A) expenses totaled \$34.0 million in the second quarter 2011, an increase of \$3.4 million over the total expense of \$30.6 million in the second quarter 2010. SG&A expenses in the first six months of 2011 were \$65.7 million, or 8% of sales, compared to \$61.0 million, or 10% of sales, in the first six months of 2010.

Legal, administrative and marketing costs associated with changing the company's name totaled \$1.1 million in the second quarter 2011 and \$2.7 million in the first half of 2011. We anticipate that we will incur additional expenses for this program in the second half of 2011, but not to the same extent as in the first half of the year.

Incentive compensation expense under cash-based plans was \$0.2 million lower in the second quarter 2011 than the second quarter 2010 and \$1.4 million lower in the first half of 2011 than the first half of 2010 due to differences in the levels of projected profitability relative to the plan targets.

Stock-based compensation expense was \$0.2 million higher in the second quarter and first half of 2011 than the comparable periods in 2010.

The expense under the domestic defined benefit pension plan was \$0.6 million higher in the second quarter 2011 than the second quarter 2010 and \$1.1 million higher in the first half of 2011 than the first half of 2010. The increased cost was due to a change in the discount rate, the performance of the plan assets and other actuarial and demographic factors. The cost increase was divided primarily between SG&A expense and cost of sales. Other fringe benefit costs, including costs associated with the 401(k) savings plan, were higher in the second quarter 2011 than the second quarter 2010.

Corporate expenses, including various legal compliance and related costs, information technology costs and the costs of other initiatives designed to improve long-term efficiencies and profitability, were higher in the second quarter and first half of 2011 than the corresponding periods in 2010.

Various sales-related expenses increased with the higher sales volume in the first half of 2011 as well.

Research and development (**R&D**) **expenses** were \$2.7 million in the second quarter 2011 compared to \$1.8 million in the second quarter 2010. R&D expenses of \$5.1 million in the first half of 2011 were \$1.6 million higher than the expense of \$3.5 million in the first half of 2010. R&D activities have increased in the first half of 2011 in order to help support our growth opportunities.

Other-net expense was \$5.1 million in the second quarter 2011 compared to \$2.9 million for the second quarter 2010. For this first half of the year, other-net expense totaled \$8.7 million in 2011 and \$7.0 million in 2010. See Note H to the Consolidated Financial Statements for the details of the major components of other-net expense.

The metal consignment fee was \$1.4 million higher in the second quarter 2011 and \$2.4 million higher in the first half of 2011 than the respective periods in 2010 largely due to the increased value of the precious metal on hand. The additional copper pounds held under consignment in 2011 contributed to the higher fee as well.

Exchange and translation gains and losses are a function of the movement in the value of the U.S. dollar versus certain other currencies and in relation to the strike prices in currency hedge contracts.

The amortization of intangible assets of \$1.5 million in the second quarter 2011 and \$3.0 million in the first half of 2011 were relatively unchanged from the respective periods in the prior year.

The derivative ineffectiveness expense of \$0.5 million in the first half of 2010 resulted from movements in the fair values of copper derivatives that did not qualify for hedge accounting. These instruments matured in 2010 and there was no ineffectiveness associated with the outstanding derivatives in the first half of 2011.

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

Operating profit was \$20.8 million in the second quarter 2011 compared to \$20.5 million in the second quarter 2010 as the margin benefits from the higher sales volumes and other factors were predominately offset by the costs of the new beryllium facility, the costs associated with the company name change, higher retirement benefit plan costs, differences in the LIFO inventory benefit and other items. Operating profit was \$38.9 million in the first half of 2011, an improvement of \$5.2 million over the operating profit of \$33.7 million in the first half of 2010.

Interest expense — net of \$0.6 million in the second quarter 2011 was down slightly from the net expense of \$0.7 million in the second quarter 2010. For the first half of the year, interest expense-net was \$1.2 million in 2011 and \$1.3 million in 2010. Average debt levels were slightly lower in the second quarter 2011 than the second quarter 2010 and the average effective borrowing rate was lower by a minor amount. Interest on capital leases was higher in the second quarter and first half of 2011 than the corresponding periods of 2010.

The *income before income taxes* and *the income tax expense* for the second quarter and first half of 2011 and 2010 were as follows:

| | Second Qua | rter Ended | First Half Ended | | |
|----------------------------|-----------------|-----------------|------------------|-----------------|--|
| (Dollars in millions) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 | |
| Income before income taxes | \$ 20.2 | \$ 19.8 | \$ 37.7 | \$ 32.4 | |
| Income tax expense | 6.4 | 6.1 | 12.0 | 12.0 | |
| Effective tax rate | 31.4% | 30.7% | 31.9% | 36.9% | |

The effects of the production deduction, percentage depletion, executive compensation, foreign source income and deductions and other items were major factors for the difference between the effective and statutory rates in the second quarter and first half of 2011 and 2010.

The tax expense of \$12.0 million in the first six months of 2010 also included a discrete item of \$1.4 million recorded in the first quarter 2010 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.

There were no material discrete events recorded in the second quarter or first half of 2011.

Net income was \$13.9 million (or \$0.67 per share, diluted) in the second quarter 2011 compared to net income of 13.7 million (or \$0.67 per share, diluted) in the second quarter 2010. For the first half of 2011, net income was \$25.7 million (or \$1.23 per share, diluted) versus net income of \$20.4 million (or \$1.00 per share, diluted) in the first half of 2010.

Segment Results

Changing our name from Brush Engineered Materials Inc. to Materion Corporation in the first quarter 2011 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 were changed effective with the reporting of the 2010 year-end results. Advanced Material Technologies and Services was renamed Advanced Material Technologies, Specialty Engineered Alloys was changed to Performance Alloys, Beryllium and Beryllium Composites was shortened to Beryllium and Composites, and Engineered Material Systems was changed to Technical Materials.

Results by segment are depicted in Note F to the Consolidated Financial Statements. The results for Materion Services Inc. (formerly known as BEM Services, Inc.), a wholly owned subsidiary that provides administrative and financial services on a cost-plus basis to other units within the organization, and other corporate costs are included in the All Other column of our segment reporting.

The operating loss within All Other was \$1.4 million higher in the second quarter 2011 than the second quarter 2010 and \$3.2 million higher in the first half of 2011 than the first half of 2010. The increased loss in the quarter and first half of the year was due to a combination of costs associated with the company name change in 2011, higher legal compliance costs, increased wages and other items offset in part by lower incentive compensation. The comparison for the first half of the year was also affected by the \$0.5 million of derivative ineffectiveness recorded in the first quarter 2010.

Advanced Material Technologies

| | Second Qu | Second Quarter Ended | | |
|------------------|-----------------|----------------------|-----------------|-----------------|
| (Millions) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 |
| Sales | \$287.3 | \$213.9 | \$543.9 | \$416.9 |
| Operating profit | 10.7 | 9.2 | 21.4 | 17.7 |

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 \$287.3 million in the second quarter 2011 were 34% higher than sales of \$213.9 million in the second quarter 2010, while sales of \$543.9 million in the first half of 2011 were \$127.0 million, or 30%, higher than sales of \$416.9 million in the first half of 2010.

Advanced Material Technologies adjusts its selling prices daily to reflect the current cost of the precious and certain other metals that are sold. The cost of the metal is generally a pass-through to the customer and a margin is generated on the fabrication efforts irrespective of the type or cost of the metal used in a given application. Therefore, the cost and mix of metals sold will affect sales but not necessarily the margins generated by those sales. The prices of gold, silver, platinum and palladium were higher on average in the second quarter and first half of 2011 than the respective periods in 2010. The higher metal price pass-through increased sales by an estimated \$57.7 million in the second quarter 2011 and \$97.9 million in the first half of 2011.

Sales of products manufactured at the Buffalo, New York facility, including targets, lids and wire, were relatively unchanged in the second quarter 2011 from the second quarter 2010 after adjusting for changes in the metal prices. The order entry level, after growing for a number of periods, started to slow down in the second quarter 2011. Sales of these products were higher in the first half of 2011 over the first half of 2010 with that growth due to the increased demand for wireless, handset, semiconductor and other microelectronic applications from the consumer electronics and defense markets.

Sales from the Albuquerque, New Mexico facility, which was acquired in the first quarter 2010, showed significant growth in the second quarter 2011 as sales for architectural glass applications within the energy market and sales of other products to the industrial components market improved. This growth was also partially in jewelry and other miscellaneous forms that typically generate lower margins.

Refining revenue increased in the second quarter and first half of 2011 as a result of additional metal to be reclaimed in the supply chain. Sales for head applications within the data storage sector of the consumer electronics market, after showing modest improvement in the first quarter 2011, slowed down in the second quarter 2011.

Sales of microelectronic packages, one of this segment's smaller product offerings, declined in the second quarter and first half of 2011 from very high levels in the comparable periods in 2010. This decline was expected due to changes in technology within the telecommunications infrastructure market.

Advanced chemical sales grew at double-digit rates in the second quarter and first half of 2011 over the respective periods in the prior year largely due to growth from traditional applications, including semiconductors and security. These materials are also used in LED, solar energy and other applications. The order entry rate for advanced chemical products remained solid throughout the first half of 2011.

Sales of large area specialty coatings, primarily precious metal coated polymer films, showed solid improvement in the second quarter 2011 and first half of 2011 over the corresponding periods in the prior year. The growth was largely due to improved sales to the medical market. We continued to develop new applications for these materials in the medical, energy and other markets.

Precision optic sales improved in the second quarter 2011 over the second quarter 2010 but were slightly lower in the first half of 2011 than the first half of 2010. These products are sold into the medical, defense and science and other markets. Demand for traditional science and deep space applications softened in the first half of 2011 partially due to reductions and delays in government funding.

The order entry rate was essentially equal to sales during the first half of 2011 for this segment.

The gross margin on sales by Advanced Material Technologies was \$31.4 million (11% of sales) in the second quarter 2011 versus \$27.4 million (13% of sales) in the second quarter 2010. Gross margin of \$60.5 million in the first half of 2011 was a \$6.0 million improvement over the gross margin of \$54.5 million generated in the first half of 2010. The gross margin was 11% of sales in the first half of 2011 and 13% of sales in the first half of 2010.

The growth in the margin dollars in the second quarter 2011 and the first half of 2011 was predominately due to the net higher sales volumes. The change in product mix was slightly favorable in the second quarter 2011 but was slightly unfavorable in the first half of 2011. For the first half of the year, manufacturing overhead costs were \$1.7 million higher in 2011 than 2010. The increase in these costs was partially due to the higher production volumes. Gross margin as a percent of sales was lower in the second quarter and first half of 2011 than the comparable periods in 2010 partially as a result of the increased metal price pass-through in sales.

SG&A, R&D and other-net expenses for this segment were \$20.7 million in the second quarter 2011 (7% of sales) compared to \$18.1 million (8% of sales) in the second quarter 2010. These expenses totaled \$39.1 million (7% of sales) in the first half of 2011, an increase of \$2.3 million from expenses of \$36.8 million (9% of sales) in the first half of 2010.

A significant portion of the higher expenses is due to the precious metal consignment fee. These fees were \$1.1 million higher in the second quarter and \$1.7 million higher in the first half of 2011 than the respective periods of 2010 mainly due to the increased value of metal on hand. R&D expenses increased throughout 2011 due to higher activity levels. Corporate charges and incentive compensation expense, after being relatively unchanged in the first quarter 2011 compared to the first quarter 2010, increased in the second quarter 2011 over the second quarter 2010.

Operating profit from Advanced Material Technologies was \$10.7 million in the second quarter 2011 compared to \$9.2 million in the second quarter 2010. Operating profit was \$21.4 million in the first half of 2011, an improvement of \$3.7 million over the operating profit of \$17.7 million in the first half of 2010. Operating profit was 4% of sales in the first half of 2011 and 2010.

Performance Alloys

| | Second Quarter | | | | | | |
|------------------|-----------------|-----------------|-----------------|------------------|--|--|--|
| | En | Ended | | First Half Ended | | | |
| (Millions) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 | | | |
| Sales | \$96.6 | \$77.9 | \$181.1 | \$141.2 | | | |
| Operating profit | 9.5 | 8.5 | 18.2 | 11.8 | | | |

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 exploration and extraction 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. Sales of hydroxide are also made on a limited basis.

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 by Performance Alloys of \$96.6 million in the second quarter 2011 were a 24% improvement over sales of \$77.9 million in the second quarter 2010. Sales of \$181.1 million in the first half of 2011 were \$39.9 million, or 28%, higher than sales of \$141.2 million in the first six months of 2010.

Sales of both strip and bulk products improved in the second quarter and first half of 2011 over the levels in the respective periods of 2010.

Sales to the automotive electronics and industrial components and commercial aerospace markets grew at double-digit rates in the second quarter and first half of 2011 over the comparable periods in 2010. Sales to the telecommunications infrastructure market, including undersea applications, also have grown at double-digit rates in the first half of 2011 over the first half of 2010. Sales to the appliance market were relatively flat in the first half of 2011 versus the first half of 2010.

Sales to the consumer electronics market declined by a modest amount in the second quarter 2011 over the second quarter 2010 and were approximately 4% higher in the first half of 2011 than the first half of 2010. The growth in the first half of the year was fueled in part by solid demand for our strip materials in smart phones and other hand held devices.

Shipments of strip products were 4% higher in the second quarter 2011 than the second quarter 2010 and 3% higher in the first half of 2011 than the first half of 2010. Shipments of thin diameter rod and wire have been strong during the first half of 2011, while the higher beryllium-containing strip products improved during the second quarter 2011 over the second quarter 2010 and first quarter 2011.

Shipments of bulk products grew 13% in the second quarter 2011 over the second quarter 2010 after growing 19% in the first quarter 2011 over the first quarter 2010. The non-beryllium-containing bulk products have grown at double-digit rates in the first half of 2011 over the first half of 2010.

Beryllium hydroxide sales totaled \$3.3 million in the second quarter and \$4.5 million in the first half of 2011. Sales of beryllium hydroxide were \$4.2 million in the first half of 2010, all of which occurred in the second quarter of that year.

The pass-through of higher metal prices accounted for an estimated \$5.3 million of the \$18.7 million difference in sales between the second quarter 2011 and the second quarter 2010 and \$9.2 million of the \$39.9 million difference in sales between the first six months of 2011 and the first six months of 2010.

The order entry rate for Performance Alloys slowed down in the second quarter 2011 from the very high level in the first quarter 2011 and was lower than sales by approximately 17% in the second quarter. Part of this slowdown may be due to an inventory correction in the consumer electronics market.

The gross margin on sales from Performance Alloys was \$22.2 million (23% of sales) in the second quarter 2011 compared to \$19.5 million (25% of sales) in the second quarter 2010. The gross margin was \$41.5 million in the first half of 2011, an improvement of \$6.9 million over the gross margin of \$34.6 million generated in the first half of 2010. Gross margin was 23% of sales in the first half of 2011 and 25% of sales in the first half of 2010.

The growth in the gross margin dollars in the second quarter and first half of 2011 over the respective periods of 2010 was mainly due to the higher sales and production volumes. Pricing changes have also contributed to the margin improvement while the change in product mix was favorable in both the second quarter and first half of 2011. These margin benefits were partially offset by lower yields and higher scrap rates on nickel-containing

products in the first half of 2011. Improvements were made in the second quarter 2011, but the yield rates remained lower than historical levels. The lower yields negatively impacted costs, but did not affect sales.

The previously discussed LIFO inventory benefit of \$1.4 million in the second quarter and \$3.0 million for the first half of 2010 were recorded against Performance Alloys' gross margin. No similar benefit was recorded in the second quarter and first half of 2011.

Total SG&A, R&D and other-net expenses were \$12.7 million (13% of sales) in the second quarter 2011 versus \$11.0 million (14% of sales) in the second quarter 2010. For the first half of 2011, these expenses totaled \$23.3 million (13% of sales) compared to \$22.8 million (16% of sales) in the first half of 2010.

Differences in foreign currency exchange gains and losses accounted for the majority of the difference in the expense levels in the second quarter and first half of 2011 and the comparable periods in 2010. R&D spending grew throughout the first half of 2011 as well. Incentive compensation was slightly higher in the second quarter 2011 than the second quarter 2010, but was \$0.7 million lower in the first half of 2011 than it was in the first half of 2010 due to differences in actual performance versus the plan targets.

Performance Alloys generated an operating profit of \$9.5 million in the second quarter 2011 compared to \$8.5 million in the second quarter 2010. Operating profit improved from \$11.8 million in the first half of 2010 to \$18.2 million in the first half of 2011. The \$6.4 million improvement was due to the margin benefit from the higher sales volume and improved pricing offset in part by the lower yields on nickel products and the increase in expenses. Operating profit was 10% of sales in the first half of 2011 and 8% of sales in the first half of 2010.

Beryllium and Composites

| | Second Qua | Second Quarter Ended | | |
|------------------|-----------------|----------------------|-----------------|-----------------|
| (Millions) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 |
| Sales | \$17.7 | \$15.7 | \$31.7 | \$28.8 |
| Operating profit | 1.1 | 2.1 | 1.2 | 4.2 |

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 by Beryllium and Composites were \$17.7 million in the second quarter 2011 versus \$15.7 million in the second quarter 2010. Sales of \$31.7 million in the first half of 2011 were 10% higher than sales of \$28.8 million in the first half of 2010.

The majority of the sales growth in the second quarter and first half of the year was due to higher shipments to the industrial components market, including non-medical x-ray window applications, from the Fremont facility. Sales in the second quarter 2011 for traditional applications within the defense and science market, while up approximately 40% over the first quarter 2011, were still 4% below the second quarter 2010. Sales of beryllia ceramics to the telecommunications infrastructure market improved by minor amounts in the second quarter and first half of 2011 versus the comparable periods in 2010. Sales to the medical market in the first half of 2011 were relatively unchanged from the first half of 2010.

The order entry rate in the second quarter 2011, while higher than the second quarter 2010 and the first quarter 2011, was still below the level of sales in the second quarter 2011.

Beryllium and Composites generated a gross margin of \$4.4 million (25% of sales) in the second quarter 2011 and \$5.1 million (33% of sales) in the second quarter 2010. Segment gross margin of \$7.5 million in the first half of 2011 was \$1.9 million lower than the gross margin of \$9.4 million in the first half of 2010. Gross margin was 24% of sales in the first half of 2011 and 33% of sales in the first half of 2010.

Gross margin was reduced approximately \$1.1 million in the second quarter 2011 and \$2.2 million in the first half of 2011 as a result of additional costs and inefficiencies associated with the start-up of the new beryllium

facility at the Elmore plant site. Major construction of the facility has been completed, but we incurred additional costs for supplies, maintenance and other items as we worked to bring the equipment on line and resolve other start-up challenges. The plant is designed to produce pure beryllium metal from beryllium hydroxide and it did produce a small, non-production level quantity of pure beryllium during the second quarter. Once operational, the facility will reduce the need to purchase pure beryllium metal from outside suppliers.

The change in product mix was unfavorable in the second quarter and first half of 2011 from the respective periods in the prior year as the products sold in 2011 generated lower contribution margins.

Manufacturing overhead costs were higher in the second quarter and first half of 2011 than the respective periods in 2010, partially due to ongoing normal support costs for the new facility.

Lower manufacturing yields on welded products also negatively impacted gross margin in the second quarter 2010. However, process improvements were implemented and yields improved in the second quarter 2010 over the first quarter 2010.

SG&A, R&D and other-net expenses for Beryllium and Composites totaled \$3.3 million in the second quarter 2011 compared to \$3.1 million in the second quarter 2010. For the first half of the year, expenses totaled \$6.3 million (20% of sales) in 2011 and \$5.1 million (18% of sales) in 2010.

R&D expenses were higher in the second quarter and first half of 2011 than the corresponding periods of 2010 due to increased activity. Corporate charges were also higher while incentive compensation expense was lower in the second quarter and first half of 2011. Differences in other non-operating items contributed to the higher expense level in the first half of 2011.

Operating profit for Beryllium and Composites was \$1.1 million in the second quarter 2011, a decline of \$1.0 million from the \$2.1 million operating profit earned in the second quarter 2010. For the first half of the year, operating profit was \$1.2 million in 2011 and \$4.2 million in 2010. Operating profit was 4% of sales in the first half of 2011 and 15% of sales in the first half of 2010. Operating profit was lower in the second quarter and first half of 2011 than the corresponding periods in 2010 as the margin benefits from the higher sales volumes were more than offset by the plant start-up costs, the unfavorable change in product mix impact on margins, higher expenses and other factors.

Technical Materials

| | Second Qua | Second Quarter Ended | | |
|------------------|-----------------|----------------------|-----------------|-----------------|
| (Millions) | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 |
| Sales | \$23.0 | \$18.4 | \$42.6 | \$33.9 |
| Operating profit | 2.4 | 2.0 | 4.5 | 3.1 |

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 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 \$23.0 million in the second quarter 2011 were a 25% improvement over sales of \$18.4 million in the second quarter 2010. For the first half of the year, sales improved \$8.7 million, or 26%, from \$33.9 million in 2010 to \$42.6 million in 2011. Sales have grown over the comparable quarter in the prior year for seven consecutive quarters.

Sales to the automotive electronics market grew approximately 36% in the second quarter 2011 and 45% in the first half of 2011 over the comparable periods in 2010 and accounted for the majority of the improvement in Technical Materials' sales. Sales to the consumer electronics market also grew in the second quarter 2011 over the second quarter 2010, although sales for disk drive arm applications, a large application for this segment, declined.

Energy market sales softened slightly in the second quarter 2011, but sales to this emerging market were higher in the first half of 2011 than the first half of 2010.

The order entry rate slowed down in the second quarter 2011 from the high level experienced in the first quarter 2011. A portion of the slow down may be due to seasonal factors in the marketplace. For the first half of the year, the order entry rate was 2% less than sales.

Gross margin on Technical Materials' sales was \$4.9 million, or 21% of sales, in the second quarter 2011 compared to \$4.3 million, or 23% of sales, in the second quarter 2010. Gross margin was \$9.3 million in the first half of 2011, an improvement of \$2.0 million over the gross margin of \$7.3 million in the first half of 2010. Gross margin was 22% of sales in the first half of 2011 and 2010.

The majority of the growth in the gross margin in the second quarter and first half of 2011 was due to the higher sales volume. The change in product mix was slightly unfavorable in the second quarter 2011 but was favorable in the first half of 2011. Manufacturing overhead costs increased \$0.2 million in the second quarter and first half of 2011 over the respective periods in 2010.

Total SG&A, R&D and other-net expenses were \$2.5 million in the second quarter 2011 and \$2.2 million in the second quarter 2010. For the first half of the year, these expenses totaled \$4.8 million in 2011 and \$4.2 million in 2010. Selling and marketing expenses, including commissions and travel, were higher as these expenses tend to vary with the level of sales. Fringe benefit costs were also higher in the first half of 2011 than in the first half of 2010. This segment's portion of the precious metal consignment fee was higher in the first half of 2011 than the first half of 2010 due to the increase in metal prices.

Technical Materials generated an operating profit of \$2.4 million in the second quarter 2011 compared to \$2.0 million in the second quarter 2010. Operating profit of \$4.5 million in the first half of 2011 was \$1.4 million higher than the operating profit of \$3.1 million in the first half of 2010. Operating profit was 11% of sales in the first half of 2011 and 9% of sales in the first half of 2010. Operating profit has improved over the corresponding quarter in the prior year for six consecutive quarters.

Legal

One of our subsidiaries, Materion Brush Inc. (formerly known as Brush Wellman Inc.), has been a defendant from time to time 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.

| | July 1, 2011 | Apr. 1, 2011 |
|--|--------------|--------------|
| Total cases pending | 0 | 1 |
| Total plaintiffs | 0 | 3 |
| Number of claims (plaintiffs) filed during period ended | 0(0) | 0(0) |
| Number of claims (plaintiffs) settled during period ended | 1(3) | 0(0) |
| Aggregate cost of settlements during period ended (dollars in thousands) | \$ 0 | \$ 43 |
| Number of claims (plaintiffs) otherwise dismissed | 0(0) | 1(3) |

Onouton Ended

Although the parties agreed to settle and dismiss the one case shown as pending as of April 1, 2011 for \$43,000 during the first quarter 2011, the court did not approve the settlement and dismiss the case until early in the second quarter 2011.

Should new beryllium claims arise, we would 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 any litigation, 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 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 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 a future case.

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 operating results, 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 used in operating activities was \$7.1 million in the first half of 2011 as net income and the effects of depreciation were more than offset by a net increase in working capital items, primarily accounts receivable and inventory. However, cash flow improved in the second quarter 2011 over the first quarter 2011 as we generated \$13.7 million of cash from operations in the second quarter 2011 while having used cash in operations of \$20.8 million in the first quarter 2011.

Cash balances were \$9.5 million as of the end of the second quarter 2011, a decrease of \$6.6 million from year-end 2010.

Accounts receivable totaled \$149.4 million at the end of the second quarter 2011, a \$10.0 million, or 7%, increase over the balance as of December 31, 2010. The growth in receivables was largely due to sales in the second quarter 2011 being approximately 19% higher than sales in the fourth quarter 2010. The impact of the higher sales volume on the receivable balance was partially offset by an improvement in the average collection period. The days sales outstanding, a measure of how quickly receivables are collected, was 32 days as of the end of the second quarter 2011, an improvement of three days from year-end 2010.

We continue to aggressively monitor and manage our credit exposures and the collectability of our receivables. Our bad debt experience remained low as the bad debt expense in the first half of 2011 was only \$0.1 million.

Other receivables totaling \$2.7 million at the end of the second quarter 2011 and \$4.0 million at the end of 2010 primarily represented amounts outstanding for reimbursement of equipment purchased under a government contract. The balances at the end of both periods also included minor amounts due for other non-trade items.

Inventories were \$182.4 million as of July 1, 2011 compared to \$154.5 million as of December 31, 2010. While inventories grew 18% in the first half of 2011, the inventory turnover ratio, a measure of how quickly inventory is sold on average, improved during this same time period and inventories have not been restocked at the same rate as the increase in sales.

The majority of the increase in inventory is in Performance Alloys in response to the higher level of demand. Performance Alloys' pounds in inventory increased by 10% during the first half of 2011. The high level of demand on the factories has also led to longer lead times on certain products, which in turn contributed to the increase in inventory levels.

Inventories within Advanced Material Technologies grew approximately 11% in the first half of 2011. The majority of this segment's metal requirements are maintained through off-balance sheet financing arrangements and the 11% growth is only reflective of the change in the value of owned inventories.

Inventories within Beryllium and Composites increased 13% in the first half of 2011 partially due to the ongoing start-up of the new beryllium facility and the related impact on material flow.

Technical Materials' inventories also showed minor increases in order to support the higher business levels. Their inventory turns improved during the first half of 2011.

We use the LIFO method for valuing a large portion of our domestic inventories. By so doing, the most recent cost of various raw materials, including gold, copper and nickel, is charged to cost of sales in the current period. The older, and often times lower, costs are used to value the inventory on hand. Therefore, current changes in the cost of raw materials subject to the LIFO valuation method have only a minimal impact on changes in the inventory carrying value.

Capital expenditures for the first half of 2011 and 2010 are summarized as follows:

| | First | Half |
|--|--------|--------|
| (Millions) | 2011 | 2010 |
| Capital expenditures | \$11.1 | \$24.8 |
| Mine development | 0.2 | 7.4 |
| Subtotal | 11.3 | 32.2 |
| Reimbursement for spending under government contract | 2.6 | 14.9 |
| Net spending | \$ 8.7 | \$17.3 |

We have a Title III contract with the U.S. Department of Defense (DoD) for the design and development of a new facility for the production of primary beryllium. As noted, the facility was nearing completion in the first half of 2011. The total cost of the project is estimated to be \$95.0 million, with the DoD providing approximately 75% of the funding. The final cost of the project and the DoD's share will be determined based upon the satisfactory completion of the final construction items, resolution of any start-up issues and other factors. Capital spending on this project totaled \$1.6 million in the first half of 2011 and was included within the \$11.1 million of expenditures in the above table. The spending and reimbursement received from the government differed due to the normal lag between when the spending occurs and the government issues the reimbursement. Reimbursements from the DoD are recorded as unearned income and included in other long-term liabilities on the Consolidated Balance Sheets.

Capital expenditures in the first half of 2011 included \$1.5 million for the purchase of a building at the Elmore facility that was previously held under an operating lease.

The remainder of the capital spending was on isolated pieces of equipment and various infrastructure projects across the organization. Major projects undertaken during the first half of 2011 include a new dross reclamation system in Elmore, expansion of the refine and shield kit cleaning operations in Buffalo, expansion of the Singapore facility and upgrades to the electron beam weld equipment in Lincoln.

Intangible assets were \$34.2 million as of the end of the second quarter and \$36.8 million at year end 2010. The decline was due to the current period amortization net of minor additions of deferred financing costs associated with new debt agreements signed in 2011.

Other liabilities and accrued items totaled \$26.7 million at the end of the second quarter 2011 compared to \$24.9 million at year-end 2010. This change is due to an increase in the fair value of derivative financial instruments, higher fringe benefit accruals and other items.

Unearned revenue, which is a liability representing products invoiced to customers but not shipped, was \$2.8 million as of July 1, 2011 and \$2.4 million as of December 31, 2010. Revenue and the associated margin will be recognized for these transactions when the goods ship, title passes and all other revenue recognition criteria are met. Invoicing in advance of the shipment, which is only done in certain circumstances, allows us to collect cash sooner than we would otherwise.

Other long-term liabilities were \$18.1 million as of July 1, 2011, a slight increase from the \$17.9 million balance as of year-end 2010. There were no material changes to the individual components of other long-term liabilities during the first half of 2011.

Unearned income was \$59.7 million at the end of the second quarter 2011 compared to \$57.2 million at year-end 2010. This balance represents reimbursements from the government for equipment purchases for the new beryllium facility made under the Title III program. This liability will be reduced and credited to income ratably with the depreciation expense on the equipment.

The *retirement and post-employment benefit* balance of \$81.6 million at the end of the second quarter 2011 was \$0.9 million lower than the \$82.5 million balance at December 31, 2010. This balance represents the liability under our domestic defined benefit pension plan, the retiree medical plan and other retirement plans and post-employment obligations.

The liability for the domestic pension plan decreased a net \$1.3 million as a result of the contributions to the plan of \$3.6 million and an adjustment to other comprehensive income, a component of shareholders' equity, of \$1.7 million offset in part by the expense in the first half of 2011 of \$4.0 million.

The liability for the other retirement plans changed by minor amounts due to differences between the payments made and the expense recorded during the first half of 2011 and other factors.

Debt totaled \$95.0 million as of the end of the second quarter 2011, an increase of \$8.9 million from the total debt of \$86.1 million at the end of 2010. After increasing \$18.6 million in the first quarter 2011, largely as a result of financing capital expenditures, the growth in accounts receivable and inventory and the payment of 2010 incentive compensation to employees, debt declined \$9.7 million in the second quarter 2011 on the strength of the improved cash flow from operations.

Short-term debt, which included domestic and foreign currency denominated loans, was \$39.3 million as of the end of the second quarter 2011. Long-term debt was \$55.7 million as of the end of the second quarter 2011. We were in compliance with all of our debt covenants as of the end of the second quarter 2011.

In the second quarter 2011, we entered into a new \$8.0 million debt agreement with the Toledo Port Authority and the Dayton Port Authority to fund capital expenditures at our Ohio facilities. Initially, \$1.5 million of the proceeds was used to purchase an existing building at the Elmore plant site that previously was being held under an operating lease. The balance of the proceeds is being held in escrow and will be drawn down as the applicable capital expenditures are incurred. The agreement calls for monthly installment payments and a \$1.1 million balloon payment upon maturity in ten years.

Shareholders' equity was \$415.5 million at the end of the second quarter 2011, an increase of \$31.1 million from the balance of \$384.4 million as of year-end 2010 primarily due to comprehensive income of \$28.5 million (see Note E to the Consolidated Financial Statements). Equity was also affected by stock-based compensation expense, the exercise of stock options and other factors.

Prior Year Financial Position

Net cash used in operating activities was \$20.7 million in the first half of 2010 as net income and the effects of depreciation were more than offset by a net increase in working capital items, primarily receivables and inventory. Receivables increased \$61.3 million, or 73%, during the first half of 2010 as a result of the higher sales volume and a slowdown in the average collection period. Inventories were \$10.2 million, or 8%, higher at the end of the second quarter 2010 than year-end 2009 due to the higher levels of business. The inventory turnover ratio improved during the first half of 2010. The acquisition of Academy Corporation contributed to the growth in receivables and inventory in the first quarter 2010 over the year-end 2009 levels.

Other liabilities and accrued items grew \$1.9 million in the first half of 2010 due to the current period incentive compensation expense, the change in the fair value of outstanding derivatives and other factors. The retirement and post-employment benefit obligation of \$78.6 million as of the end of the second quarter 2010 was \$3.7 million lower than the year-end 2009 balance due to contributions made to the domestic defined benefit plan of \$4.5 million netted against other factors.

Capital expenditures, net of reimbursements from the government for purchases made for the beryllium facility in accordance with the Title III contract, totaled \$17.3 million. Spending included \$7.4 million on mine development at our Utah site.

We purchased the outstanding capital stock of Academy Corporation for \$21.0 million in January 2010. Immediately after the purchase, we transferred ownership of Academy's precious metal inventory to a financial institution for its fair value and consigned it back under our existing consignment lines.

Total debt stood at \$120.5 million at the end of the second quarter 2010, an increase of \$56.0 million from year-end 2009. The increase in debt was used to fund the acquisition of Academy Corporation, capital expenditures and the increase in working capital. Cash on hand of \$16.1 million at the end of the second quarter 2010 was \$3.8 million higher than the year-end 2009 balance.

Off Balance Sheet Arrangements and Contractual Obligations

We maintain the majority of our precious metals that 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. We also maintain a portion of our copper requirements on consignment. The balance outstanding under these off-balance sheet consignment arrangements totaled \$310.9 million at the end of the second quarter 2011 compared to \$211.8 million outstanding as of year-end 2010. The increase in the outstanding balance was due to higher metal prices, additional metal held in the refine system (which has long processing times) and other factors.

We negotiated an increase to the available capacity under the existing off-balance sheet consignment arrangements during the first half of 2011. The available and unused capacity under the metal financing lines totaled approximately \$29.1 million as of July 1, 2011.

We were in compliance with the covenants contained in our consignment agreements as of July 1, 2011.

For additional information on our contractual obligations, please see page 41 of our Annual Report on Form 10-K for the year ended December 31, 2010.

Liquidity

We believe funds from operations plus the available borrowing capacity and the current cash balance are adequate to support operating requirements, capital expenditures, projected pension plan contributions, strategic acquisitions and environmental remediation projects.

The available and unused borrowing capacity under the existing lines of credit, which is subject to limitations set forth in the debt covenants, was \$154.7 million as of the end of the second quarter 2011.

In July 2011, we negotiated a new five-year \$325.0 million revolving credit agreement to replace the former \$240.0 million revolving credit agreement that was scheduled to mature in the fourth quarter 2012 by amending and restating the agreement governing the former facility. In addition to the higher borrowing capacity, various provisions relating to allowable unsecured debt, acquisitions and other items were revised in the new agreement to provide increased flexibility. The key financial covenants in the new agreement, including a leverage ratio and fixed charge coverage ratio, are similar to the former agreement.

The outstanding cash balance was \$9.5 million at the end of the second quarter 2011.

The debt-to-debt-plus-equity ratio, a measure of balance sheet leverage, was 19% at the end of the second quarter 2011 compared to 21% at the end of the first quarter 2011 and 18% at year-end 2010. The movements in debt in the first half of 2011 were partially due to changes in working capital levels. Our normal pattern in recent years is to consume cash in the first quarter and then generate cash over the balance of the year.

While the capacity under the precious metal consignment lines was increased during the first half of 2011, should metal requirements increase in future periods because of higher volumes and/or prices, we may use the available capacity under the existing credit lines to purchase metal and/or require customers to supply more of their own metal.

Critical Accounting Policies

For additional information regarding critical accounting policies, please refer to pages 43 to 46 of our Annual Report on Form 10-K for the year ended December 31, 2010. There have been no material changes in our critical accounting policies since the inclusion of this discussion in our Annual Report on Form 10-K.

Market Risk Disclosures

For information regarding market risks, please refer to pages 47 to 48 of our Annual Report on Form 10-K for the year ended December 31, 2010. There have been no material changes in our market risks since the inclusion of this discussion in our Annual Report on Form 10-K.

Outlook

The order entry rate, while lower than the sales level, was still solid in the second quarter 2011 and was higher than the first quarter 2011. However, the order rate slowed down in the latter part of the quarter and into the early portion of the third quarter. This slow down may be due in part to an inventory correction in the consumer electronics market. Seasonal factors may also have affected the order entry rate as portions of certain markets often slow down in the summer. The overall backlog remains healthy and we are well positioned in the majority of our markets for long-term growth. Even though shipments to our largest market, consumer electronics, were relatively flat in the second quarter 2011, our total sales grew, demonstrating the benefits of our product and market diversification efforts over recent years.

The negative margin impact from the start-up of the new beryllium facility should lessen over the balance of 2011, as we believe the facility should be operational prior to year end. Costs associated with the company name change will continue in the second half of 2011, but these marketing expenses will be lower than the costs incurred on this program during the first half of the year. We are also undertaking a number of initiatives that are designed to improve profitability in the long term, but will add to our cost structure during 2011. Cost control and cost reduction efforts will be implemented where possible to help offset the cost pressures from the higher pension expense, metal consignment fees and other items.

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, automotive electronics, telecommunications infrastructure, medical, energy and services;
- 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;
- The impact of the results of acquisitions 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 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 the Company's stock price on the cost of incentive compensation plans;
- The uncertainties related to the impact of war, terrorist activities and acts of God, including the recent earthquake and tsunami in Japan;
- 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 and product line alignment under the Materion name and Materion brand; and,
- The risk factors set forth in Part 1, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2010.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

For information about our market risks, please refer to our Annual Report on Form 10-K for the year ended December 31, 2010.

Item 4. Controls and Procedures

We carried out an evaluation under the supervision and with participation of 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 July 1, 2011 pursuant to Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended. 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 control over financial reporting identified in connection with the evaluation required by Rule 13a-15 under the Securities Exchange Act of 1934, as amended, that occurred during the quarter ended July 1, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

Item 1. 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 July 1, 2011, our subsidiary, Materion Brush Inc., was not a defendant in any proceedings brought by plaintiffs alleging that they had contracted, or had 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 sought recovery under negligence and various other legal theories and sought compensatory and punitive damages, in many cases of an unspecified sum. Spouses of some plaintiffs claimed loss of consortium.

During the second quarter of 2011, the number of beryllium cases decreased from one case (involving three plaintiffs) to no pending beryllium cases as of July 1, 2011. As previously reported, one case (involving three plaintiffs) settled during the first quarter, but the case had not been dismissed by the court. That case has now been dismissed. No cases were filed during the quarter. The Company has no pending beryllium cases.

The Company has some insurance coverage, subject to an annual deductible.

Item 5. Other Information

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 quarter ended July 1, 2011.

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 quarter ended July 1, 2011, pursuant to the Mine Act, for Materion Natural Resources Inc.:

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 exits 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.

| | Mine Act Section 104(a) | | Mine Act | | | Dollar Value (In thousands) |
|----------|---|-------------------------------------|---|---|--------------------------------------|------------------------------------|
| Mine ID# | Significant & Substantial Citations | Mine Act Secton 104(b) Orders | Section 104(d) Citations & Orders | Mine Act Section 110(b)(2) Violations | Mine Act Section 107(a) Orders | Proposed MSHA Assessments |
| 4200706 | _ | _ | 2 | _ | _ | \$— |

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 ended July 1, 2011, no legal actions are pending.

Item 6. Exhibits

- 3 Amended and Restated Code of Regulations.
- 10.1 Amended and Restated Credit Agreement dated July 13, 2011 among Materion Corporation, Materion Advanced Materials Technologies and Services Netherlands B.V., JPMorgan Chase Bank, N.A. and other lenders from time to time party thereto (filed as Exhibit 10.1 to the Registrant's Form 8-K (File No. 1-15885) filed on July 18, 2011), incorporated herein by reference.
- 10.2 Amendment No. 1 to Amended and Restated Severance Agreement, dated May 4, 2011.
- 10.3 Third Amendment to the Brush Engineered Materials Inc. Amended and Restated Executive Deferred Compensation Plan II, dated July 6, 2011.
- Amendment No. 3 to the Brush Engineered Materials Inc. Key Employee Share Option Plan dated July 12, 2011.
- 10.5 Amended and Restated Materion Corporation 2006 Stock Incentive Plan (as Amended and Restated as of May 4, 2011) (filed as Exhibit 10.1 to the Registrant's Form 8-K (File No. 1-15885) filed on May 5, 2011), incorporated herein by reference.
- 10.6 Amended and Restated Materion Corporation 2006 Non-employee Director Equity Plan (as Amended and Restated as of May 4, 2011) (filed as Appendix B to the Registrant's Proxy Statement (File No. 1-15885) filed on March 25, 2011), incorporated herein by reference.
- 11 Statement regarding computation of per share earnings.
- 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).
- Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- *101.INS XBRL Instance Document
- *101.SCH SBRL Taxonomy Extension Schema Document
- *101.CAL XBRL Taxonomy Extension Calculation Linkbase Document
- *101.LAB XBRL Taxonomy Extension Label Linkbase Document
- *101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

^{*} XBRL (Extensible Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, and otherwise is not subject to liability under these sections.

SIGNATURES

Pursuant to the requirements 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

/s/ John D. Grampa

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

AMENDED AND RESTATED CODE OF REGULATIONS OF MATERION CORPORATION

Shareholder Meetings

- 1. Time And Place Of Meetings. All meetings of the shareholders for the election of directors or for any other purpose will be held at such time and place, within or without the State of Ohio, as may be designated by the Board of Directors or, in the absence of a designation by the Board of Directors, the Chairman of the Board of Directors, if any (the "Chairman"), the President, the Secretary or any other individual entitled to give notice pursuant to Regulation 4. The time of the meeting shall be stated in the notice of meeting. The Board of Director may postpone and reschedule any previously scheduled annual or special meeting of the shareholders.
- 2. Annual Meeting. An annual meeting of the shareholders will be held at such time and place as may be designated pursuant to Regulation 1, at which meeting the shareholders will elect directors to succeed those directors whose terms expire at such meeting and will transact such other business as may be brought properly before the meeting in accordance with Regulation 9. If the annual meeting is not held or if the number of directors elected thereat is not sufficient to replace the directors whose terms expire at that meeting and to fill all other vacancies, directors may be elected at a special meeting called for the purpose of electing directors.
- 3. Special Meetings. (a) Special meetings of shareholders may be called by the Chairman, by the President, by a Vice President, by a majority of the Board of Directors acting with or without a meeting or by any person or persons who hold not less than 50% of all the shares outstanding and entitled to be voted on any proposal to be submitted at the meeting to be called. Special meetings of the holders of shares that are entitled to call a special meeting by virtue of any Preferred Stock Designation may call such meetings in the manner and for the purposes provided in the applicable terms of such Preferred Stock Designation. For purposes of this Amended and Restated Code of Regulations, "Preferred Stock Designation" means the express terms of shares of any class or series of capital stock of the Corporation, whether now or hereafter issued, with rights to distributions senior to those of the Common Stock including, without limitation, any relative, participating, optional or other special rights and privileges of, and any qualifications or restrictions on, such shares.
- (b) Upon written request by any person or persons entitled to call a meeting of shareholders delivered in person or by registered mail to the President or the Secretary, such officer shall forthwith cause notice of the meeting to be given to the shareholders entitled to notice of such meeting in accordance with Regulation 4. If such notice shall not be given within 60 days after the delivery or mailing of such request, the person or persons requesting the meeting may fix the time of the meeting and give, or cause to be given, notice in the manner provided in Regulation 4.
- 4. Notice Of Meetings. Written notice of every meeting of the shareholders called in accordance with these Regulations (including any postponed and rescheduled meeting), stating the time, place and purposes for which the meeting is called, will be given by or at the direction of the President, a Vice President, the Secretary or an Assistant Secretary (or in case of their refusal to give notice by the person or persons entitled to call the meeting under Regulation 3). Such notice will be given by personal delivery, by mail or by electronic medium not fewer than 7 nor more than 60 calendar days before the date of the meeting to each shareholder of record entitled to notice of such meeting. If such notice is mailed, it shall be addressed to the shareholders at their respective addresses as they appear on the records of the Corporation, and notice shall be deemed to have been given on the day so mailed. Notice of adjournment of a meeting need not be given if the time and place to which it is adjourned are fixed and announced at such meeting.
 - 5. Inspectors. Inspectors of election may be appointed to act at any meeting of shareholders in accordance with Ohio law.
- 6. Shareholder Lists. At any meeting of shareholders, an alphabetically arranged list, or classified lists, of the shareholders of record as of the applicable record date who are entitled to vote, showing their respective addresses and the number and classes of shares held by each, shall be produced on the request of any shareholder.

- 7. Quorum. To constitute a quorum at any meeting of shareholders, there shall be present, in person or by proxy, shareholders of record entitled to exercise not less than a majority of the voting power of the Corporation in respect of any one of the purposes for which the meeting is called, unless a greater or lesser number is expressly provided for with respect to a particular class or series of capital stock by the terms of any applicable Preferred Stock Designation. Except as may be otherwise provided in any Preferred Stock Designation, the holders of a majority of the voting power of the Corporation represented in person or by proxy at a meeting of shareholders, whether or not a quorum be present, may adjourn the meeting from time to time. For purposes of this Amended and Restated Code of Regulations, "voting power of the Corporation" means the aggregate voting power of (a) all the outstanding shares of Common Stock of the Corporation and (b) all the outstanding shares of any class or series of capital stock of the Corporation that has (i) rights to distributions senior to those of the Common Stock including, without limitation, any relative, participating, optional or other special rights and privileges of, and any qualifications or restrictions on, such shares and (ii) voting rights entitling such shares to vote generally in the election of directors.
- 8. Voting. Except as otherwise expressly required by law, the Amended and Restated Articles of Incorporation or this Amended and Restated Code of Regulations, at any meeting of shareholders at which a quorum is present, a majority of the votes cast, whether in person or by proxy, on any matter properly brought before such meeting in accordance with Regulation 9 will be the act of the shareholders. An abstention shall not represent a vote cast. A shareholder may revoke any proxy that is not irrevocable by attending the meeting and voting in person or by filing with the Secretary written notice of revocation or a later appointment. The vote upon any question brought before a meeting of the shareholders may be by voice vote, unless otherwise required by law, the Amended and Restated Articles of Incorporation or this Amended and Restated Code of Regulations or unless the presiding officer otherwise determines. Every vote taken by written ballot will be counted by the inspectors of election, if inspectors of election are appointed.
- 9. Order Of Business. (a) The Chairman, or such other officer of the Corporation as is designated by a majority of the total number of directors that the Corporation would have if there were no vacancies on the Board of Directors (such number being referred to as the "Whole Board"), will call meetings of shareholders to order and will act as presiding officer thereof. Unless otherwise determined by the Board of Directors prior to the meeting, the presiding officer of the meeting of shareholders will also determine the order of business and have the authority in his or her sole discretion to regulate the conduct of any such meeting, including, without limitation, (i) by imposing restrictions on the persons (other than shareholders of the Corporation or their duly appointed proxies) who may attend any such shareholders' meeting, (ii) by ascertaining whether any shareholder or his proxy may be excluded from any meeting of shareholders based upon the presiding officer's determination that any such person has unduly disrupted or is likely to disrupt the proceedings of the meeting and (iii) by determining the circumstances in which and time at which any person may make a statement or ask questions at any meeting of shareholders.
- (b) At an annual meeting of the shareholders, only such business will be conducted or considered as is properly brought before the meeting. To be properly brought before an annual meeting, business must be (i) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the President, a Vice President, the Secretary or an Assistant Secretary in accordance with Regulation 4, (ii) otherwise properly brought before the meeting by the presiding officer or by or at the direction of a majority of the Whole Board or (iii) otherwise properly requested to be brought before the meeting by a shareholder of the Corporation in accordance with Regulation 9(c).
- (c) For business to be properly requested by a shareholder to be brought before an annual meeting, the shareholder must (i) be a shareholder of the Corporation of record at the time of the giving of the notice for such annual meeting as provided for in this Amended and Restated Code of Regulations, (ii) be entitled to vote at such meeting and (iii) have given timely written notice of the request to the Secretary. To be timely, a shareholder's notice must be delivered to or mailed and received at the principal executive offices of the Corporation not fewer than 60 nor more than 90 calendar days prior to the annual meeting; *provided*, *however*, that in the event public announcement of the date of the annual meeting is not made at least 75 calendar days prior to the date of the annual meeting and the annual meeting is held on a date more than ten calendar days before or after the first anniversary of the date on which the prior year's annual meeting was held, notice by the shareholder, to be timely, must be so received not later than the close of business on the 10th calendar day following the day on which public announcement is first made of the date of the annual meeting. A shareholder's notice to the Secretary must set forth as to each matter the shareholder proposes to bring before the annual meeting (A) a description in reasonable detail of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (B) the name and address, as they appear on the Corporation's books, of the shareholder proposing such business and of the beneficial owner, if other than the shareholder proposing such business and by the beneficial owner, if other than the shareholder, on whose behalf the proposing such business and by the beneficial owner, if other than the shareholder, on whose behalf the proposing such business and the beneficial owner, if other

than the shareholder, on whose behalf the proposal is made in such business. Notwithstanding the foregoing provisions of this Amended and Restated Code of Regulations, a shareholder must also comply with all applicable requirements of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder with respect to the matters set forth in this Regulation 9(c). For purposes of this Regulation 9 (c) and Regulation 14, "public announcement" means disclosure in a press release reported by the Dow Jones News Service, Associated Press, or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Sections 13, 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or publicly filed by the Corporation with any national securities exchange or quotation service through which the Corporation's stock is listed or traded, or furnished by the Corporation to its shareholders. Nothing in this Regulation 9(c) will be deemed to affect any rights of shareholders to request inclusion of proposals in the Corporation's proxy statement pursuant to Rule 14a-8 under the Securities Exchange Act of 1934, as amended.

- (d) At a special meeting of shareholders, only such business may be conducted or considered as is properly brought before the meeting. To be properly brought before a special meeting, business must be (i) specified in the notice of the meeting (or any supplement thereto) given by or at the direction of the President, a Vice President, the Secretary or an Assistant Secretary (or in case of their failure to give any required notice, the other persons entitled to give notice) in accordance with Regulation 4 or (ii) otherwise brought before the meeting by the presiding officer or by or at the direction of a majority of the Whole Board.
- (e) The determination of whether any business sought to be brought before any annual or special meeting of the shareholders is properly brought before such meeting in accordance with this Regulation 9 will be made by the presiding officer of such meeting. If the presiding officer determines that any business is not properly brought before such meeting, he or she will so declare to the meeting and any such business will not be conducted or considered.
- 10. Report To Shareholders. At the annual meeting, or at the meeting held in lieu thereof, the officers of the Corporation shall lay before the shareholders a financial statement as required by statute.
- 11. Action Without A Meeting. Any action that may be authorized or taken at a meeting of the shareholders may be authorized or taken without a meeting in a writing or writings signed by all of the shareholders who would be entitled to notice of a meeting for such purpose, which writing or writings shall be filed with or entered upon the records of the Corporation.

Directors

- 12. Function. Except where the law, the Amended and Restated Articles of Incorporation or this Amended and Restated Code of Regulations requires action to be authorized or taken by the shareholders, all of the authority of the Corporation shall be exercised by or under the direction of the Board of Directors.
- 13. Number, Terms And Election Of Directors. (a) The directors of the corporation, other than those who may be expressly elected by virtue of the terms of any Preferred Stock Designation, shall be classified with respect to the time for which they severally hold office into three classes. Except as may be otherwise provided in any Preferred Stock Designation, each class will consist of not less than three directors, unless and until the number of directors of any such class is changed in accordance with this Regulation 13. The number of directors of any class will be determined from time to time by (i) the affirmative vote of the holders of a majority of the voting power of the Corporation, voting together as a single class, or (ii) a vote of a majority of the Whole Board.
- (b) The directors first appointed to Class I will hold office for a term expiring at the annual meeting of shareholders to be held in 2001; the directors first appointed to Class II will hold office for a term expiring at the annual meeting of shareholders to be held in 2002; and the directors first appointed to Class III will hold office for a term expiring at the annual meeting of shareholders to be held in 2003. The members of each class will hold office until their successors are elected. At each annual meeting beginning in 2001, directors will be elected for a term of three years from the date of their election and until the election of their successors.
- (c) At each annual meeting of the shareholders of the Corporation, the successors to the directors whose terms expire at that meeting shall be elected by a plurality of all the votes cast at such meeting. Cumulative voting in the election of directors shall be permitted as provided by statute. Election of directors of the Corporation need not be by written ballot unless requested by the presiding officer or by the holders of a majority of the voting power of the Corporation present in person or represented by proxy at a meeting of the shareholders at which directors are to be elected. Directors may also be elected by a majority of the votes cast at a special meeting called for the purpose of electing directors or as may otherwise be provided by any Preferred Stock Designation.

- 14. Newly Created Directorships And Vacancies. Except as may be otherwise provided in any Preferred Stock Designation, any vacancy (including newly created directorships resulting from any increase in the number of directors and any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal, or other cause) may be filled by (i) the affirmative vote of a majority of the remaining directors then in office, even though less than a quorum of the Board of Directors, (ii) sole remaining director or (iii) the affirmative vote of the holders of a majority of the Voting Power of the Corporation, voting together as a single class, after a vote to increase the number of directors at a meeting called for that purpose in accordance with this Amended and Restated Code of Regulations. Any director elected in accordance with this Regulation 14, any Preferred Stock Designation or applicable statute will hold office for the remainder of the full term of the class of directors in which the new directorship was created or the vacancy occurred and until such director's successor has been elected.
- 15. Removal. Except as may otherwise be provided by any Preferred Stock Designation, all Directors, for whatever terms elected, shall hold office subject to applicable statutory provisions as to the creation of vacancies and removal. No decrease in the number of directors constituting the Board of Directors may shorten the term of any incumbent director.
- 16. Nominations Of Directors; Election. (a) Except as may be otherwise provided in any Preferred Stock Designation, only persons who are nominated in accordance with this Regulation 16 will be eligible for election at a meeting of shareholders to be members of the Board of Directors of the Corporation.
- (b) Nominations of persons for election as directors of the Corporation may be made only at a meeting of shareholders (i) by or at the direction of the Board of Directors or a committee thereof or (ii) by any shareholder who is a shareholder of record at the time of giving of notice provided for in this Regulation 16, who is entitled to vote for the election of directors at such meeting, and who complies with the procedures set forth in this Regulation 16. All nominations by shareholders must be made to the Secretary in proper written form and must be timely.
- (c) To be timely, a shareholder's notice must be delivered to or mailed and received at the principal executive offices of the Corporation, in the case of a special meeting of the shareholders, at the time the meeting request is made in accordance with Regulation 3, or, in the case of an annual meeting, not fewer than 60 nor more than 90 calendar days prior to such annual meeting; *provided*, *however*, that in the event that public announcement of the date of the annual meeting is not made at least 75 calendar days prior to the date of the annual meeting and the annual meeting is held on a date more than one week before or after the first anniversary of the date on which the prior year's annual meeting, was held, notice by the shareholder to be timely must be so received not later than the close of business on the 10th calendar day following the day on which public announcement is first made of the date of the annual meeting.
 - (d) To be in proper written form, such shareholder's notice must set forth or include:
 - (i) the name and address, as they appear on the Corporation's books, of the shareholder giving the notice and of the beneficial owner, if any, on whose behalf the nomination is made;
 - (ii) a representation that the shareholder giving the notice is a holder of record of stock of the Corporation entitled to vote at such annual meeting and intends to appear in person or by proxy at the annual meeting to nominate the person or persons specified in the notice;
 - (iii) the class and number of shares of stock of the Corporation owned beneficially and of record by the shareholder giving the notice and by the beneficial owner, if any, on whose behalf the nomination is made;
 - (iv) a description of all arrangements or understandings between or among any of (A) the shareholder giving the notice, (B) the beneficial owner on whose behalf the notice is given, (C) each nominee and (D) any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the shareholder giving the notice;
 - (v) such other information regarding each nominee proposed by the shareholder giving the notice as would be required to be included in a proxy statement filed pursuant to the proxy rules of the Securities and Exchange Commission had the nominee been nominated, or intended to be nominated, by the Board of Directors; and

- (vi) the signed consent of each nominee to serve as a director of the Corporation if so elected.
- (e) The presiding officer of any annual meeting may, if the facts warrant, determine that a nomination was not made in accordance with this Regulation 16, and if he or she should so determine, he or she will so declare to the meeting, and the defective nomination will be disregarded. Notwithstanding the foregoing provisions of this Regulation 16, a shareholder must also comply with all applicable requirements of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder with respect to the matters set forth in this Regulation 16.
- 17. Resignation. Any director may resign at any time by giving written notice of his resignation to the Chairman or the Secretary. Any resignation will be effective upon actual receipt by any such person or, if later, as of the date and time specified in such written notice.
- 18. Regular Meetings. Regular meetings of the Board of Directors shall be held immediately after the annual meeting of the shareholders and at such other time and place either within or without the State of Ohio as may from time to time be determined by a majority of the Whole Board. Notice of regular meetings of the Board of Directors need not be given.
- 19. Special Meetings. Special meetings of the Board of Directors may be called by the Chairman, by the President, by a Vice President, by the Secretary or by any two directors. Notice of special meetings, stating the place, date and hour, shall be given to each director by whom such notice is not waived. Notice must be given either personally or by mail, telephone, telegram, telex, facsimile or similar medium of communication not less than twenty-four hours before the designated hour for such meeting. Special meetings of the Board of Directors may be held at such time and place either within or without the State of Ohio as is determined by a majority of the Whole Board or specified in the notice of any such meeting.
- 20. Quorum And Vote. At all meetings of the Board of Directors, a majority of the total number of directors then in office will constitute a quorum for the transaction of business. Except as may be otherwise provided in any Preferred Stock Designation or by this Amended and Restated Code of Regulations, the act of a majority of the directors present at any meeting at which a quorum is present will be the act of the Board of Directors. If a quorum is not present at any meeting of the Board of Directors, the directors present thereat may adjourn the meeting from time to time to another time or place, without notice other than announcement at the meeting, until a quorum is present.
- 21. Action Without A Meeting. Any action that may be authorized or taken at a meeting of the Board of Directors may be authorized or taken without a meeting in a writing or writings signed by all the directors, which writing or writings shall be filed with or entered upon the records of the Corporation.
- 22. Participation In Meetings By Communications Equipment. Meetings of the Board of Directors or of any committee of the Board of Directors may be held through any means of communication equipment if all persons participating can hear each other, and such participation will constitute presence in person at such meeting.
- 23. Committees. The Board of Directors may from time to time create an executive committee or any other committee or committees of directors to act in the intervals between meetings of the Board of Directors and may delegate to such committee or committees any of its authority other than that of filling vacancies among the Board of Directors or in any committee of the Board of Directors. Each committee shall consist of one or more directors. The Board of Directors may appoint one or more directors as alternate members of any such committee to take the place of absent committee members at meetings of such committee. Unless otherwise ordered by the Board of Directors, a majority of the members of any committee appointed by the Board of Directors pursuant to this Regulation 23 shall constitute a quorum at any meeting thereof, and the act of a majority of the members present at a meeting at which a quorum is present shall be the act of such committee. Action may be taken by any such committee without a meeting by a writing or writings signed by all of its members. Any such committee shall prescribe its own rules for calling and holding meetings and its method of procedure, subject to any rules prescribed by the Board of Directors, and will keep a written record of all action taken by it.
- 24. Compensation. The Board of Directors may establish the compensation and expense reimbursement policies for directors in exchange for service on the Board of Directors and on committees of the Board of Directors, for attendance at meetings of the Board of Directors or committees of the Board of Directors, and for other services by directors to the Corporation or any of its subsidiaries.
 - 25. Bylaws. The Board of Directors may adopt Bylaws for the conduct of its meetings and those of any committees of

the Board of Directors that are not inconsistent with the Amended and Restated Articles of Incorporation or this Amended and Restated Code of Regulations.

Officers

- 26. Generally. The Corporation may have a Chairman, elected by the directors from among their number, and shall have a President, who shall also be a director, a Secretary and a Treasurer. The Corporation may also have one or more Vice Presidents and such other officers and assistant officers as the Board of Directors may deem appropriate. If the Board of Directors so desires, it may elect a Chief Executive Officer to manage the affairs of the Corporation, subject to the direction and control of the Board of Directors. All of the officers shall be elected by the Board of Directors. Notwithstanding the foregoing, by specific action, the Board of Directors may authorize the Chairman or the President to appoint any person to any office other than Chairman, President, Secretary or Treasurer. Any number of offices may be held by the same person, and no two offices must be held by the same person. Any of the offices, other than the office of President, Secretary and Treasurer, may be left vacant from time to time as the Board of Directors may determine. In case of the absence or disability of any officer of the Corporation or for any other reason deemed sufficient by a majority of the Board of Directors, the Board of Directors may delegate the absent or disabled officer's powers or duties to any other officer or to any director.
- 27. Authority And Duties Of Officers. The officers of the Corporation shall have such authority and shall perform such duties as are customarily incident to their respective offices, or as may be specified from time to time by the Board of Directors, regardless of whether such authority and duties are customarily incident to such office.
- 28. Compensation. The compensation of all officers and agents of the Corporation who are also members of the Board of Directors of the Corporation will be fixed by the Board of Directors or by a committee of the Board of Directors. The Board of Directors may fix the compensation of the other officers and agents of the Corporation, or delegate the power to fix such compensation, to the Chief Executive Officer or any other officer of the Corporation.
- 29. Succession. The officers of the Corporation will hold office until their successors are elected pursuant to Regulation 26. Any officer may be removed at any time by the affirmative vote of a majority of the Whole Board. Any vacancy occurring in any office of the Corporation may be filled by the Board of Directors or by the Chairman or President as provided in Regulation 26.

Stock

- 30. Transfer And Registration Of Certificates. The Board of Directors shall have authority to make such rules and regulations as it deems expedient concerning the issuance, transfer and registration of certificates for shares and the shares represented thereby and may appoint transfer agents and registrars thereof.
- 31. Substituted Certificates. Any person claiming a certificate for shares to have been lost, stolen or destroyed (i) shall make an affidavit or affirmation of that fact, (ii) shall give the Corporation and its registrar or registrars and its transfer agent or agents a bond of indemnity satisfactory to the Board of Directors or a committee thereof or to the President or a Vice President and the Secretary or the Treasurer and (iii) shall, if required by the Board of Directors or a committee thereof or the officers named in this Regulation 31, advertise the fact that the certificate has been lost, stolen or destroyed, whereupon a new certificate may be executed and delivered of the same tenor and for the same number of shares as the one alleged to have been lost, stolen or destroyed.
- 32. Voting Of Shares Held By The Corporation. Unless otherwise ordered by the Board of Directors, the President, in person or by proxy or proxies appointed by him, shall have full power and authority on behalf of the Corporation to vote, act and consent with respect to any shares issued by other corporations and owned by the Corporation.
- 33. Record Dates And Owners. (a) In order that the Corporation may determine the shareholders entitled to notice of or to vote at any meeting of shareholders or any adjournment thereof, or to designate an agent to act on behalf of the shareholders to call a special meeting of shareholders, or to take any other collective action on behalf of the shareholders, the Board of Directors may fix a record date, which will not be fewer than 7 nor more than 60 calendar days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining shareholders entitled to notice of or to vote at a meeting of shareholders will be the date next preceding the day on which notice is given, or, if notice is waived, the date next preceding the day on which the meeting is held.

(b) The Corporation will be entitled to treat the person in whose name shares are registered on the books of the Corporation as the absolute owner thereof, and will not be bound to recognize any equitable or other claim to, or interest in, such share on the part of any other person, whether or not the Corporation has knowledge or notice of the claim or interest, except as expressly provided by applicable law.

Indemnification and Insurance

34. Indemnification.

- (a) The Corporation shall indemnify, to the full extent then permitted by law, any director or officer or former director or officer of the Corporation who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a member of the Board of Directors or an officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The Corporation shall pay, to the full extent then required by law, expenses, including attorney's fees, incurred by a member of the Board of Directors in defending any such action, suit or proceeding as they are incurred, in advance of the final disposition thereof.
- (b) To the full extent then permitted by law, the Corporation may indemnify employees, agents and other persons and may pay expenses, including attorney's fees, incurred by any employee, agent or other person in defending any action, suit or proceeding as such expenses are incurred, in advance of the final disposition thereof.
- (c) The indemnification and payment of expenses provided by this Regulation 34 shall not be exclusive of, and shall be in addition to, any other rights granted to any person seeking indemnification under any law, the Amended and Restated Articles of Incorporation, any agreement, vote of shareholders or disinterested members of the Board of Directors, or otherwise, both as to action in official capacities and as to action in another capacity while he or she is a member of the Board of Directors or an officer, employee or agent of the Corporation, and shall continue as to a person who has ceased to be a member of the Board of Directors, trustee, officer, employee or agent and shall inure to the benefit of the heirs, executors, and administrators of such a person.
- 35. Insurance. The Corporation may, to the full extent then permitted by law and authorized by the Board of Directors, purchase and maintain insurance or furnish similar protection, including but not limited to trust funds, letters of credit or self-insurance, on behalf of or for any persons described in Regulation 34 against any liability asserted against and incurred by any such person in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify such person against such liability. Insurance may be purchased from or maintained with a person in which the Corporation has a financial interest.
- 36. Agreements. The Corporation, upon approval by the Board of Directors, may enter into agreements with any persons who the Corporation may indemnify under this Amended and Restated Code of Regulations or under law and may undertake thereby to indemnify such persons and to pay the expenses incurred by them in defending any action, suit or proceeding against them, whether or not the Corporation would have the power under law or this Amended and Restated Code of Regulations to indemnify any such person.

General

- 37. Fiscal Year. The fiscal year of the Corporation will end on the thirty-first day of December in each calendar year or such other date as may be fixed from time to time by the Board of Directors.
- 38. Seal. The seal of the Corporation shall be circular in form with the name of the Corporation stamped around the margin and the word "Seal" stamped across the center.
- 39. Amendments. Except as otherwise provided by law or by the Amended and Restated Articles of Incorporation or this Amended and Restated Code of Regulations, these Regulations or any of them may be amended in any respect or repealed at any time, either (i) by the affirmative vote of the holders of a majority of the voting power of the Corporation, voting together as a single class, or (ii) to the extent as may be permitted by Chapter 1701 of the Ohio Revised Code in effect from time to time, by the Board of Directors.

AMENDMENT NO. 1 TO AMENDED AND RESTATED SEVERANCE AGREEMENT

THIS AMENDMENT NO. 1 TO AMENDED AND RESTATED SEVERANCE AGREEMENT (this "Amendment"), dated as of May 4, 2011, is made and entered by and between Materion Corporation (formerly named Brush Engineered Materials Inc.), an Ohio corporation (the "Company"), and Gregory Chemnitz (the "Executive").

The Company and the Executive hereby agree to amend the Amended and Restated Severance Agreement, dated July 30, 2008 (the "Agreement"), between the Company and the Executive as set forth in this Amendment.

- 1. Paragraphs (1), (6), and (7) of Annex A of the Agreement are hereby amended by deleting the phrase "two times" wherever it appears therein and replacing it with the phrase "three times".
- 2. Paragraph 3(a) of Annex A of the Agreement is hereby amended by deleting the phrase "24 months" where it appears therein and replacing it with the phrase "36 months".
- 3. Paragraph 3(b) of Annex A of the Agreement is hereby amended by deleting the phrase "the following year" where it appears therein and replacing it with the phrase "the following two years".

IN WITNESS WHEREOF, the parties have caused this Amendment to be duly executed and delivered as of the date first written above.

MATERION CORPORATION

/s/ Michael C. Hasychak

Name: Michael C. Hasychak

Title: Vice President, Treasurer & Secretary

/s/ Gregory R. Chemnitz

Gregory R. Chemnitz

Vice President, General Counsel

THIRD AMENDMENT TO HENCINEEDED MATERIALS INC.

BRUSH ENGINEERED MATERIALS INC. AMENDED AND RESTATED EXECUTIVE DEFERRED COMPENSATION PLAN II

The Brush Engineered Materials Inc. Amended and Restated Executive Deferred Compensation Plan II (the "Plan"), adopted on June 29, 2008, is here by amended in the following respects effective March 8, 2011, for the purpose of reflecting name changes.

- 1. Section 2.2 of the Plan is amendment and restated as follows:
 - 2.2 <u>Annual Excess Compensation</u> means for a Plan Year a Participant's Base Salary for services performed during the Plan Year, performance compensation payable in the Plan Year under the Materion Corporation and Subsidiaries Management Performance Compensation Plan, and incentive compensation payable in cash, cash equivalents, equity and equity-based amounts in the Plan Year under the Materion Corporation and Subsidiaries Long-Term Incentive Plan, whether or not such compensation is reportable on Form W-2 for the Plan Year, but only to the extent that such compensation exceeds the limit imposed on compensation taken into account under the Materion Corporation Savings and Investment Plan by reason of Code Section 401(a)(17) as determined by the Plan Administrator.
- 2. Section 2.7 of the Plan is amended and restated as follows:
 - 2.7 Company means Materion Corporation, an Ohio corporation.
- 3. Section 2.15 of the Plan is amended and restated as follows:
 - 2.15 <u>Plan</u> means the plan, the terms and provisions of which are herein set forth, and as it may be amended or restated from time to time, designated as the "Materion Corporation Executive Deferred Compensation Plan II."
- 4. The first sentence of Section 4.2 of the Plan is amended and restated as follows:

There shall be credited to each Participant's Account for each Plan Year an amount equal to three percent of his or her Annual Excess Compensation, or such other percent as may be established from time to time by action of the Board to maintain parity with the matching contribution rate available under the Materion Inc. Savings and Investment Plan.

WITNESS WHEREOF, Materion Corporation has caused this Amendment to be executed by its duly authorized officer this 6th day of July, 2011.

MATERION CORPORATION

By /s/ Michael C. Hasychak

Name: Michael C. Hasychak

Title: Vice President, Treasurer & Secretary

AMENDMENT NO. 3 TO BRUSH ENGINEERED MATERIALS INC. KEY EMPLOYEE SHARE OPTION PLAN

Materion Corporation, an Ohio corporation, hereby adopts this Amendment No. 3 to the Brush Engineered Materials Inc. Key Employee Share Option (the "Plan") for the purpose of reflecting name changes.

I.

Section 1.6 of the Plan is amended to provide as follows:

1.6 "Corporation" means Materion Brush Inc., an Ohio corporation, in respect of periods prior to the Effective Time, and Materion Corporation, an Ohio corporation, in respect of periods from and after the Effective Time, and any successor to Materion Corporation.

II.

Section 1.17 of the Plan is amended to provide as follows:

1.17 "Plan" means the Materion Brush Inc. Key Employee Share Option Plan in respect of periods prior to the Effective Time and the Materion Corporation Key Employee Share Option Plan in respect of periods from and after the Effective Time, as the same may be amended or restated from time to time.

III.

The foregoing changes to the Plan shall be effective as of March 8, 2011.

WITNESS WHEREOF, Materion Corporation has caused this Amendment to be executed by its duly authorized officer this 12th day of July, 2011.

MATERION CORPORATION

By /s/ Michael C. Hasychak

Name: Michael C. Hasychak

Title: Vice President, Treasurer & Secretary

MATERION CORPORATION AND SUBSIDIARIES COMPUTATION OF PER SHARE EARNINGS

| | Second Quarter Ended | | Six Months Ended | |
|---|----------------------|-----------------|------------------|-----------------|
| | July 1, 2011 | July 2, 2010 | July 1, 2011 | July 2, 2010 |
| Basic: | | | | |
| Average shares outstanding | 20,421,000 | 20,323,000 | 20,388,000 | 20,290,000 |
| Net income | \$13,872,000 | \$13,719,000 | \$25,690,000 | \$20,440,000 |
| Per share amount | \$ 0.68 | \$ 0.68 | \$ 1.26 | \$ 1.01 |
| Diluted: | | | | |
| Average shares outstanding | 20,421,000 | 20,323,000 | 20,388,000 | 20,290,000 |
| Dilutive stock securities based on the treasury stock | | | | |
| method using average market price | 411,000 | 277,000 | 424,000 | 244,000 |
| Totals | 20,832,000 | 20,600,000 | 20,812,000 | 20,534,000 |
| Net income | \$13,872,000 | \$13,719,000 | \$25,690,000 | \$20,440,000 |
| Per share amount | \$ 0.67 | \$ 0.67 | \$ 1.23 | \$ 1.00 |

CERTIFICATIONS

I, Richard J. Hipple, certify that:

- 1) I have reviewed this quarterly report on Form 10-Q 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.

/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 quarterly report on Form 10-Q 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.

/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 Quarterly Report on Form 10-Q of Materion Corporation (the "Company") for the quarter ended July 1, 2011, 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.

/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