

MATERION Corp
Form 10-Q
July 28, 2016
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q
(Mark One)

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

For the quarterly period ended July 1, 2016

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

For the transition period from _____ to _____
Commission file number 001-15885

MATERION CORPORATION
(Exact name of Registrant as specified in charter)

Ohio 34-1919973
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

6070 Parkland Blvd., Mayfield Hts., Ohio 44124
(Address of principal executive offices) (Zip Code)

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

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

As of July 22, 2016 there were 19,967,266 common 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 six months ended July 1, 2016 are as follows:

Consolidated Statements of Income - 2
Second quarter and six months ended July 1, 2016 and July 3, 2015

Consolidated Statements of Comprehensive Income - 3
Second quarter and six months ended July 1, 2016 and July 3, 2015

Consolidated Balance Sheets - 4
July 1, 2016 and December 31, 2015

Consolidated Statements of Cash Flows - 5
Six months ended July 1, 2016 and July 3, 2015

Materion Corporation and Subsidiaries
Consolidated Statements of Income
(Unaudited)

	Second Quarter		Six Months Ended	
	Ended July 1, 2016	July 3, 2015	July 1, 2016	July 3, 2015
(Thousands, except per share amounts)				
Net sales	\$249,776	\$276,855	\$485,287	\$566,879
Cost of sales	204,470	225,528	396,624	463,197
Gross margin	45,306	51,327	88,663	103,682
Selling, general, and administrative expense	32,437	34,594	62,924	72,527
Research and development expense	3,171	3,586	6,623	6,934
Other—net	3,921	36	5,807	(2,122)
Operating profit	5,777	13,111	13,309	26,343
Interest expense—net	512	650	927	1,307
Income before income taxes	5,265	12,461	12,382	25,036
Income tax (benefit) expense	(284)	3,394	1,465	6,985
Net income	\$5,549	\$9,067	\$10,917	\$18,051
Basic earnings per share:				
Net income per share of common stock	\$0.28	\$0.45	\$0.55	\$0.90
Diluted earnings per share:				
Net income per share of common stock	\$0.27	\$0.44	\$0.54	\$0.88
Cash dividends per share	\$0.095	\$0.090	\$0.185	\$0.175
Weighted-average number of shares of common stock outstanding:				
Basic	20,015	20,153	20,016	20,149
Diluted	20,214	20,499	20,220	20,491

Refer to Notes to Consolidated Financial Statements.

Materion Corporation and Subsidiaries
 Consolidated Statements of Comprehensive Income
 (Unaudited)

(Thousands)	Second Quarter Ended		Six Months Ended	
	July 1, 2016	July 3, 2015	July 1, 2016	July 3, 2015
Net income	\$5,549	\$9,067	\$10,917	\$18,051
Other comprehensive income:				
Foreign currency translation adjustment	1,167	316	2,451	(1,254)
Derivative and hedging activity, net of tax	302	(1,104)	(621)	(601)
Pension and post-employment benefit adjustment, net of tax	675	902	2,250	1,804
Other comprehensive income	2,144	114	4,080	(51)
Comprehensive income	\$7,693	\$9,181	\$14,997	\$18,000

Refer to Notes to Consolidated Financial Statements.

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Materion Corporation and Subsidiaries
Consolidated Balance Sheets

(Thousands)	(Unaudited)	
	July 1, 2016	Dec. 31, 2015
Assets		
Current assets		
Cash and cash equivalents	\$ 20,985	\$ 24,236
Accounts receivable	111,752	97,236
Inventories	211,965	211,820
Prepaid expenses	13,663	12,799
Total current assets	358,365	346,091
Long-term deferred income taxes	27,443	25,743
Property, plant, and equipment	856,795	833,834
Less allowances for depreciation, depletion, and amortization	(592,117)	(570,205)
Property, plant, and equipment—net	264,678	263,629
Intangible assets	10,936	13,389
Other assets	5,760	6,716
Goodwill	86,725	86,725
Total Assets	\$ 753,907	\$ 742,293
Liabilities and Shareholders' Equity		
Current liabilities		
Short-term debt	\$ 14,823	\$ 8,990
Accounts payable	30,213	31,888
Salaries and wages	21,665	27,494
Other liabilities and accrued items	23,355	22,035
Income taxes	4,254	2,373
Unearned revenue	2,953	3,695
Total current liabilities	97,263	96,475
Other long-term liabilities	18,049	18,435
Retirement and post-employment benefits	86,864	92,794
Unearned income	43,661	45,953
Long-term income taxes	1,293	1,293
Deferred income taxes	167	110
Long-term debt	13,884	4,276
Shareholders' equity		
Serial preferred stock	—	—
Common stock	211,275	208,967
Retained earnings	506,872	499,659
Common stock in treasury	(152,755)	(148,559)
Accumulated other comprehensive loss	(76,625)	(80,705)
Other equity transactions	3,959	3,595
Total shareholders' equity	492,726	482,957
Total Liabilities and Shareholders' Equity	\$ 753,907	\$ 742,293

Refer to Notes to Consolidated Financial Statements.

Materion Corporation and Subsidiaries
Consolidated Statements of Cash Flows
(Unaudited)

(Thousands)	Six Months Ended	
	July 1, 2016	July 3, 2015
Cash flows from operating activities:		
Net income	\$10,917	\$18,051
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation, depletion, and amortization	23,497	20,117
Amortization of deferred financing costs in interest expense	281	331
Stock-based compensation expense	1,919	3,357
(Gain) loss on sale of property, plant, and equipment	(695)	308
Deferred income tax (benefit) expense	(1,489)	1,931
Changes in assets and liabilities net of acquired assets and liabilities:		
Decrease (increase) in accounts receivable	(13,013)	(4,622)
Decrease (increase) in inventory	1,153	2,150
Decrease (increase) in prepaid and other current assets	(782)	(4,037)
Increase (decrease) in accounts payable and accrued expenses	(7,871)	(16,882)
Increase (decrease) in unearned revenue	(743)	(283)
Increase (decrease) in interest and taxes payable	1,310	3,240
Increase (decrease) in long-term liabilities	(6,221)	(1,801)
Other-net	771	(817)
Net cash provided by operating activities	9,034	21,043
Cash flows from investing activities:		
Payments for purchase of property, plant, and equipment	(14,326)	(16,564)
Payments for mine development	(7,806)	(10,100)
Proceeds from sale of property, plant, and equipment	827	18
Net cash used in investing activities	(21,305)	(26,646)
Cash flows from financing activities:		
Proceeds from issuance of short-term debt	5,805	2,346
Proceeds from issuance of long-term debt	10,000	51,000
Repayment of long-term debt	(399)	(33,110)
Principal payments under capital lease obligations	(425)	(404)
Cash dividends paid	(3,704)	(3,523)
Repurchase of common stock	(2,663)	(2,748)
Net cash provided by financing activities	8,614	13,561
Effects of exchange rate changes	406	(479)
Net change in cash and cash equivalents	(3,251)	7,479
Cash and cash equivalents at beginning of period	24,236	13,150
Cash and cash equivalents at end of period	\$20,985	\$20,629

Refer to Notes to Consolidated Financial Statements.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)

Note A — Accounting Policies

(Dollars in thousands)

Basis of Presentation: In management's opinion, the accompanying consolidated financial statements of Materion Corporation and its subsidiaries (the Company) contain all of the adjustments necessary to present fairly the financial position, results of operations, and cash flows for the interim periods reported. All adjustments were of a normal and recurring nature. Certain amounts in prior years have been reclassified to conform to the 2016 consolidated financial statement presentation.

These financial statements should be read in conjunction with the consolidated financial statements and related notes included in the Company's 2015 Annual Report on Form 10-K. The interim period results are not necessarily indicative of the results to be expected for the full year.

New Pronouncements Adopted: In April 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2015-03, Simplifying the Presentation of Debt Issuance Costs, which requires companies to present debt issuance costs associated with a debt liability as a deduction from the carrying amount of that debt liability on the balance sheet rather than being capitalized as an asset. The Company adopted this ASU effective January 1, 2016, and applied the new guidance on a retrospective basis which resulted in a decrease to Intangible assets, Short-term debt, and Long-term debt, at December 31, 2015, of \$347, \$8, and \$339, respectively.

In July 2015, the FASB issued ASU 2015-11, Simplifying the Measurement of Inventory. Inventory within the scope of this update is required to be measured at the lower of its cost or net realizable value, with net realizable value being the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. This ASU is effective prospectively for fiscal years and interim periods beginning after December 15, 2016, with early adoption permitted. We early adopted this ASU effective January 1, 2016. The adoption did not have a material effect on the consolidated financial statements.

New Pronouncements Issued: In March 2016, the FASB issued ASU 2016-09, Improvements to Employee Share-Based Payment Accounting, which impacts several aspects of accounting for share-based payment transactions, including income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Under the new standard, income tax benefits and deficiencies are to be recognized as income tax expense or benefit in the income statement, and the tax effects of exercised or vested awards will be treated as discrete items in the reporting period in which they occur. An entity will also recognize excess tax benefits regardless of whether the benefit reduces taxes payable in the reporting period. Excess tax benefits will be classified, along with other income tax cash flows, as an operating activity. In regards to forfeitures, the entity may make an entity-wide accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures as they occur. The ASU, which is required to be applied on a modified retrospective basis, will be effective for fiscal years, including interim periods within those fiscal years, beginning after December 15, 2016, with early adoption permitted. The Company is currently evaluating the impact of adopting this new guidance on the consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases, which eliminates the off-balance-sheet accounting for leases. The new guidance will require lessees to report their operating leases as both an asset and liability on the balance sheet and disclose key information about leasing arrangements. The ASU, which is required to be applied on a modified retrospective basis, will be effective for fiscal years, including interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact of adopting this new guidance on the consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers, which supersedes previous revenue recognition guidance. The new standard requires that a company recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration the Company expects to receive

in exchange for those goods or services. Companies will need to use more judgment and estimates than under the guidance currently in effect, including estimating the amount of variable revenue to recognize over each identified performance obligation. Additional disclosures will be required to help users of financial statements understand the nature, amount, and timing of revenue and cash flows arising from contracts. This ASU is effective beginning in fiscal year 2018 with a provision for early adoption in 2017. The standard can be adopted either retrospectively or as a cumulative-effect adjustment as of the date of adoption. The Company is currently evaluating the impact of adopting this new guidance on the consolidated financial statements.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)

No other recently issued or effective ASUs had, or are expected to have, a material effect on the Company's results of operations, financial condition, or liquidity.

Note B — Segment Reporting

(Thousands)	Performance Alloys and Composites	Advanced Materials	Other		Subtotal	Total
			Other ⁽¹⁾	Corporate ⁽²⁾		
Second Quarter 2016						
Net sales	\$ 97,696	\$ 113,557	\$ 38,523	\$ —	\$ 38,523	\$ 249,776
Intersegment sales ⁽³⁾	117	17,429	—	—	—	17,546
Value-added sales	83,350	46,993	25,111	(1,520)	23,591	153,934
Operating profit (loss)	234	7,320	2,272	(4,049)	(1,777)	5,777
Second Quarter 2015						
Net sales	\$ 107,682	\$ 131,370	\$ 38,265	\$ (462)	\$ 37,803	\$ 276,855
Intersegment sales ⁽³⁾	365	16,129	—	—	—	16,494
Value-added sales	91,511	46,705	25,203	(1,060)	24,143	162,359
Operating profit (loss)	9,327	7,436	564	(4,216)	(3,652)	13,111
First Six Months 2016						
Net sales	\$ 188,325	\$ 221,677	\$ 75,285	\$ —	\$ 75,285	\$ 485,287
Intersegment sales ⁽³⁾	179	32,605	—	—	—	32,784
Value-added sales	161,552	89,059	49,745	(2,564)	47,181	297,792
Operating profit (loss)	1,746	12,503	6,371	(7,311)	(940)	13,309
First Six Months 2015						
Net sales	\$ 210,941	\$ 281,287	\$ 74,882	\$ (231)	\$ 74,651	\$ 566,879
Intersegment sales ⁽³⁾	542	33,514	—	—	—	34,056
Value-added sales	177,101	98,432	49,767	(310)	49,457	324,990
Operating profit (loss)	16,130	16,339	2,239	(8,365)	(6,126)	26,343

⁽¹⁾ Other represents the Precision Coatings group, which is a business included in the Other reportable segment.

⁽²⁾ Costs associated with the Company's unallocated corporate functions have been shown separately to better illustrate the financial information for the businesses within the Other reportable segment.

⁽³⁾ Intersegment sales are eliminated in consolidation.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)

Note C — Other-net

Other-net (income) expense for the second quarter and first six months of 2016 and 2015 is summarized as follows:

(Thousands)	Second Quarter		Six Months	
	Ended		Ended	
	July 1, 2016	July 3, 2015	July 1, 2016	July 3, 2015
Foreign currency exchange/translation loss (gain)	\$650	\$(1,729)	\$641	\$(3,313)
Amortization of intangible assets	1,148	1,257	2,296	2,513
Metal consignment fees	1,653	1,833	3,186	3,868
Net loss (gain) on disposal of fixed assets	25	234	(695)	308
Recovery from insurance	—	—	—	(3,800)
Legal settlements	—	(1,325)	—	(1,325)
Other items	445	(234)	379	(373)
Total	\$3,921	\$36	\$5,807	\$(2,122)

Note D — Income Taxes

The Company recorded an income tax benefit of \$0.3 million in the second quarter of 2016, a negative effective tax rate of 5.4% against income before income taxes, and income tax expense of \$3.4 million in the second quarter of 2015, with an effective tax rate of 27.2% against income before income taxes.

In the first six months of 2016, income tax expense of \$1.5 million was calculated using an effective tax rate of 11.8%, while income tax expense of \$7.0 million in the first six months of 2015 was calculated using an effective tax rate of 27.9%.

The difference between the statutory and effective rates in the second quarter and first six months of both years was primarily due to the impact of percentage depletion, the foreign rate differential, and other items. The research and development credit also had a favorable effect on the Company's 2016 effective tax rate.

The Company recorded a discrete tax benefit of \$0.9 million in the second quarter of 2016, resulting from international tax planning initiatives. Discrete items for the first six months of 2016 were a net benefit of \$0.8 million.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)

Note E — Earnings Per Share

The following table sets forth the computation of basic and diluted EPS:

	Second Quarter Ended		Six Months Ended	
	July 1, 2016	July 3, 2015	July 1, 2016	July 3, 2015
(Thousands, except per share amounts)				
Numerator for basic and diluted EPS:				
Net income	\$5,549	\$9,067	\$10,917	\$18,051
Denominator:				
Denominator for basic EPS:				
Weighted-average shares outstanding	20,015	20,153	20,016	20,149
Effect of dilutive securities:				
Stock appreciation rights	63	207	63	198
Restricted stock units	75	83	90	95
Performance-based restricted stock units	61	56	51	49
Diluted potential common shares	199	346	204	342
Denominator for diluted EPS:				
Adjusted weighted-average shares outstanding	20,214	20,499	20,220	20,491
Basic EPS	\$0.28	\$0.45	\$0.55	\$0.90
Diluted EPS	\$0.27	\$0.44	\$0.54	\$0.88

Stock appreciation rights totaling 1,018,778 and 478,048 for the quarters ended July 1, 2016 and July 3, 2015, respectively, and 1,018,778 and 480,985 for the six months ended July 1, 2016 and July 3, 2015, respectively, were excluded from the dilution calculation as their effect would have been anti-dilutive.

Note F — Depreciation and Amortization

The Company received an aggregate of \$63.5 million from the U.S. Department of Defense (DoD) in previous periods for reimbursement of the DoD's share of the cost of the equipment in property, plant, and equipment, and the reimbursements are reported as unearned income, a liability on the Consolidated Balance Sheets. The equipment was placed in service during 2012, and its full cost is being depreciated in accordance with Company policy. The unearned income liability is being reduced ratably with the depreciation expense recorded over the life of the equipment. In the first six months of 2016, the depreciation expense reimbursed for this equipment was \$2.3 million. Unearned income was reduced by \$2.3 million, accordingly, with the offset recorded as a credit to cost of sales. Depreciation, depletion, and amortization expense on the Consolidated Statements of Cash Flows is shown net of the reduction in unearned income.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)

Note G — Inventories

Inventories on the Consolidated Balance Sheets are summarized as follows:

	July 1, 2016	Dec. 31, 2015
(Thousands)		
Raw materials and supplies	\$36,613	\$37,463
Work in process	176,842	180,458
Finished goods	41,211	38,135
Subtotal	\$254,666	\$256,056
Less: LIFO reserve balance	42,701	44,236
Inventories	\$211,965	\$211,820

The liquidation of last in, first out (LIFO) inventory layers reduced cost of sales by \$0.5 million and \$0.8 million in the second quarter of 2016 and 2015, respectively. In the first six months of 2016 and 2015, cost of sales was reduced by \$3.2 million and \$1.9 million, respectively.

Note H — Pensions and Other Post-employment Benefits

The following is a summary of the net periodic benefit cost for the second quarter and first six months of 2016 and 2015 for the domestic pension plans (which include the defined benefit pension plan and the supplemental retirement plans) and the domestic retiree medical plan.

(Thousands)	Pension Benefits		Other Benefits	
	Second Quarter		Second	
	Ended July 1, 2016	July 3, 2015	Quarter Ended July 1, 2016	July 3, 2015
Components of net periodic benefit cost				
Service cost	\$1,946	\$2,231	\$25	\$29
Interest cost	2,595	2,500	141	138
Expected return on plan assets	(3,488)	(3,354)	—	—
Amortization of prior service benefit	(115)	(112)	(374)	(374)
Amortization of net loss	1,430	1,819	—	—
Net periodic benefit cost (benefit)	\$2,368	\$3,084	\$(208)	\$(207)

(Thousands)	Pension Benefits		Other Benefits	
	Six Months		Six Months	
	Ended July 1, 2016	July 3, 2015	Ended July 1, 2016	July 3, 2015
Components of net periodic benefit cost				
Service cost	\$3,891	\$4,461	\$51	\$58
Interest cost	5,190	5,000	282	276
Expected return on plan assets	(6,976)	(6,708)	—	—
Amortization of prior service benefit	(230)	(224)	(748)	(748)
Amortization of net loss	2,861	3,639	—	—
Net periodic benefit cost (benefit)	\$4,736	\$6,168	\$(415)	\$(414)

The Company made contributions to the domestic defined benefit pension plans of \$8.0 million and \$4.0 million in the first six months of 2016 and 2015, respectively.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)

Note I — Accumulated Other Comprehensive Income

Changes in the components of accumulated other comprehensive income, including the amounts reclassified, for the second quarter and first six months of 2016 and 2015 are as follows:

(Thousands)	Gains and Losses on Cash Flow Hedges	Pension and Post-Employment Benefits	Foreign Currency Translation	Total
Balance at April 1, 2016	\$656	\$ (75,221	) \$ (4,204	) \$(78,769)
Other comprehensive income (loss) before reclassifications	98	—	1,167	1,265
Amounts reclassified from accumulated other comprehensive income	382	1,016	—	1,398
Net current period other comprehensive income (loss) before tax	480	1,016	1,167	2,663
Deferred taxes on current period activity	178	341	—	519
Net current period other comprehensive income (loss) after tax	302	675	1,167	2,144
Balance at July 1, 2016	\$958	\$ (74,546	) \$ (3,037	) \$(76,625)
Balance at April 3, 2015	\$4,081	\$ (80,760	) \$ (5,723	) \$(82,402)
Other comprehensive income (loss) before reclassifications	(197	) —	316	119
Amounts reclassified from accumulated other comprehensive income	(1,555	) 1,395	—	(160
Net current period other comprehensive income (loss) before tax	(1,752	) 1,395	316	(41
Deferred taxes on current period activity	(648	) 493	—	(155
Net current period other comprehensive income (loss) after tax	(1,104	) 902	316	114
Balance at July 3, 2015	\$2,977	\$ (79,858	) \$ (5,407	) \$(82,288)
Balance at December 31, 2015	\$1,579	\$ (76,796	) \$ (5,488	) \$(80,705)
Other comprehensive income (loss) before reclassifications	(1,445	) —	2,451	1,006
Amounts reclassified from accumulated other comprehensive income	457	2,030	—	2,487
Net current period other comprehensive income (loss) before tax	(988	) 2,030	2,451	3,493
Deferred taxes on current period activity	(367	) (220	) —	(587
Net current period other comprehensive income (loss) after tax	(621	) 2,250	2,451	4,080
Balance at July 1, 2016	\$958	\$ (74,546	) \$ (3,037	) \$(76,625)
Balance at December 31, 2014	\$3,578	\$ (81,662	) \$ (4,153	) \$(82,237)
Other comprehensive income (loss) before reclassifications	2,439	14	(1,254	) 1,199
Amounts reclassified from accumulated other comprehensive income	(3,392	) 2,790	—	(602
Net current period other comprehensive income (loss) before tax	(953	) 2,804	(1,254	) 597
Deferred taxes on current period activity	(352	) 1,000	—	648
Net current period other comprehensive income (loss) after tax	(601	) 1,804	(1,254	) (51
Balance at July 3, 2015	\$2,977	\$ (79,858	) \$ (5,407	) \$(82,288)

Reclassifications from accumulated other comprehensive income of gains and losses on foreign currency cash flow hedges are recorded in Other-net in the Consolidated Statements of Income. Refer to Note L for additional details on cash flow hedges.

Reclassifications from accumulated other comprehensive income for pension and post-employment benefits are included in the computation of the net periodic pension and post-employment benefit expense. Refer to Note H for additional details on pension and post-employment expenses.

Materion Corporation and Subsidiaries
 Notes to Consolidated Financial Statements
 (Unaudited)

Note J — Stock-based Compensation Expense

Stock-based compensation expense, which includes awards settled in shares and in cash, was \$1.1 million and \$2.3 million in the second quarter and first six months of 2016, respectively, compared to \$1.3 million and \$5.4 million in the same periods of 2015.

The Company granted 221,065 stock appreciation rights (SARs) to certain employees during the first six months of 2016. The weighted average exercise price per share and weighted average fair value per share of the SARs granted during the six months ended July 1, 2016 were \$25.19 and \$8.07, respectively. The Company estimated the fair value of the SARs using the following assumptions in the Black-Scholes model:

Risk-free interest rate	1.25 %
Dividend yield	1.4 %
Volatility	38.0 %
Expected term (in years)	5.7

The Company granted 69,212 stock-settled restricted stock units (RSUs) and 24,780 cash-settled RSUs to certain employees and non-employee directors during the first six months of 2016. The Company measures the fair value of grants of RSUs based on the closing market price of a share of Materion common stock on the date of the grant. The weighted average fair value per share was \$25.96 for stock-settled RSUs granted during the six months ended July 1, 2016. Cash-settled RSUs are accounted for as liability-based compensation awards and adjusted based on the closing price of Materion's common stock over the vesting period of three years.

The Company granted stock-settled and cash-settled performance-based restricted stock units (PRSUs) to certain employees in the first six months of 2016. The weighted-average fair value of the stock-settled PRSUs was \$22.77 per share and will be expensed over the vesting period of three years. The liability for cash-settled PRSUs is re-measured at fair value each reporting period, and the expense is recorded accordingly. The final payout to the employees for all PRSUs will be based upon the Company's return on invested capital and the total return to shareholders over the vesting period relative to a peer group's performance over the same period.

At July 1, 2016, unearned compensation cost related to the unvested portion of all stock-based awards was approximately \$7.0 million, and is expected to be recognized over the remaining vesting period of the respective grants.

Note K — Fair Value of Financial Instruments

The Company measures and records financial instruments at fair value. 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.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)

The following table summarizes the financial instruments measured at fair value in the Consolidated Balance Sheets as of July 1, 2016 and December 31, 2015:

(Thousands)	Total Carrying Value in the Consolidated Balance Sheets		Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		
			2016	2015	2016	2015	2016	2015	2016	2015
		2016	2015	2016	2015	2016	2015	2016	2015
Financial Assets									
Deferred compensation investments	\$1,574	\$2,524	\$1,574	\$2,503	\$—	\$21	\$—	\$—	
Foreign currency forward contracts	176	462	—	—	176	462	—	—	
Total	\$1,750	\$2,986	\$1,574	\$2,503	\$176	\$483	\$—	\$—	
Financial Liabilities									
Deferred compensation liability	\$1,574	\$2,524	\$1,574	\$2,503	\$—	\$21	\$—	\$—	
Foreign currency forward contracts	881	180	—	—	881	180	—	—	
Total	\$2,455	\$2,704	\$1,574	\$2,503	\$881	\$201	\$—	\$—	

The Company uses a market approach to value the assets and liabilities for financial instruments in the table above. Outstanding contracts are valued through models that utilize market observable inputs, including both spot and forward prices, for the same underlying currencies and metals. The carrying values of the other working capital items and debt in the Consolidated Balance Sheet approximate fair values as of July 1, 2016.

Note L — Derivative Instruments and Hedging Activity

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

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

The use of forward contracts locks in a firm rate and eliminates any downside risk 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 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 Audit Committee of 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.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)

Precious Metals. The Company maintains the majority of its precious metal production requirements on consignment in order to reduce its working capital investment and the exposure to metal price movements. When a precious metal product is fabricated and ready for shipment to the customer, the metal is purchased out of consignment at the current market price. The price paid by the Company forms the basis for the price charged to the customer. This methodology allows for changes in either direction in the market prices of the precious metals used by the Company to be passed through to the customer, and reduces the impact changes in prices could have on the Company's margins and operating profit. The consigned metal is owned by financial institutions that charge the Company a financing fee based upon the current value of the metal on hand.

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

The Company refines precious metal containing materials for its customers and typically will purchase the refined metal from the customer at current market prices. In limited circumstances, the customer may want to fix the price to be paid at the time of the order as opposed to when the material is refined. The customer may also want to fix the price for a set period of time. The Company may then elect to enter into a hedge contract, either a forward contract or a swap, to fix the price for the estimated quantity of metal to be purchased, thereby reducing the exposure to adverse movements in the price of the metal.

The Company may from time to time elect to purchase precious metal and hold in inventory rather than on consignment due to potential credit line limitations or other factors. These purchases are typically held for a short duration. A forward contract will be secured at the time of the purchase to fix the price to be used when the metal is transferred back to the consignment line, thereby limiting any price exposure during the time when the metal was owned.

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 and precious metal hedge contracts denominated in the same metal as the underlying exposure.

All derivatives are recorded on the balance sheet at fair value. 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.

Materion Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(Unaudited)

The following table summarizes the notional amount and the fair value of the Company's outstanding derivatives and balance sheet classification as of July 1, 2016 and December 31, 2015:

(Thousands)	July 1, 2016		December 31, 2015	
	Notional Fair Amount	Fair Value	Notional Fair Amount	Fair Value
Prepaid expenses				
Foreign currency forward contracts - yen	\$—	\$—	\$5,138	\$60
Foreign currency forward contracts - euro	11,813	166	18,181	402
	11,813	166	23,319	462
Other assets				
Foreign currency forward contracts - yen	—	—	—	—
Foreign currency forward contracts - euro	915	10	—	—
	915	10	—	—
Other liabilities and accrued items				
Foreign currency forward contracts - yen	5,242	(714)	5,102	(94)
Foreign currency forward contracts - euro	7,503	(148)	10,514	(86)
	12,745	(862)	15,616	(180)
Other long-term liabilities				
Foreign currency forward contracts - yen	541	(19)	—	—
Foreign currency forward contracts - euro	—	—	—	—
	541	(19)	—	—
Total	\$26,014	\$(705)	\$38,935	\$282

All of these contracts were designated and effective as cash flow hedges. No ineffective expense was recorded in the second quarter or first six months of 2016 or 2015.

Changes in the fair value of outstanding cash flow hedges recorded in OCI for the first six months of 2016 and 2015 totaled a decrease of \$1.4 million and an increase of \$2.4 million, respectively. The Company expects to relieve substantially the entire balance in OCI as of July 1, 2016 to the Consolidated Statements of Income during the twelve-month period beginning July 2, 2016. Refer to Note I for additional OCI details.

Note M — Contingencies

Materion Brush Inc., one of the Company's wholly-owned subsidiaries, is a defendant from time to time in proceedings where the plaintiffs allege they have contracted chronic beryllium disease (CBD) or related ailments as a result of exposure to beryllium. 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 may be covered by insurance subject to deductibles which vary based on when the exposure occurred. Reserves are recorded for asserted claims only, and defense costs are expensed as incurred. One CBD case remains outstanding and one case is on appeal as of the end of the second quarter of 2016, and the Company does not expect the resolution of these matters to have a material impact on the consolidated financial statements.

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 \$6.1 million at July 1, 2016 and \$5.7 million at December 31, 2015. Environmental projects tend to be long term, and the final actual remediation costs may

differ from the amounts currently recorded.

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 end markets, including consumer electronics, industrial components, medical, automotive electronics, defense, telecommunications infrastructure, energy, commercial aerospace, science, services, and appliance.

RESULTS OF OPERATIONS

Second Quarter

(Thousands, except per share data)	Second Quarter Ended			
	July 1, 2016	July 3, 2015	\$ Change	% Change
Net sales	\$249,776	\$276,855	\$(27,079)	(10)%
Value-added sales	153,934	162,359	(8,425)	(5)%
Gross margin	45,306	51,327	(6,021)	(12)%
Gross margin as a % of value-added sales	29	% 32	% N/A	N/A
Selling, general, and administrative (SG&A) expense	32,437	34,594	(2,157)	(6)%
SG&A expense as a % of value-added sales	21	% 21	% N/A	N/A
Research and development (R&D) expense	3,171	3,586	(415)	(12)%
R&D expense as a % of value-added sales	2	% 2	% N/A	N/A
Other—net	3,921	36	3,885	10,792%
Operating profit	5,777	13,111	(7,334)	(56)%
Interest expense—net	512	650	(138)	(21)%
Income before income taxes	5,265	12,461	(7,196)	(58)%
Income tax (benefit) expense	(284)	) 3,394	(3,678)	(108)%
Net income	\$5,549	\$9,067	\$(3,518)	(39)%
Diluted earnings per share	\$0.27	\$0.44	\$(0.17)	(39)%

N/A = Not Applicable

Net sales of \$249.8 million in the second quarter of 2016 were \$27.1 million lower than the \$276.9 million recorded in the second quarter of 2015. The decrease in net sales in the second quarter of 2016 was due to lower sales volume offset by the impact of pass-through precious metal and copper prices. Sales volume was lower due primarily to decreased shipments of raw material beryllium hydroxide, weaker demand in the oil and gas sector of the energy end market, and weakness in the automotive electronics end markets. Changes in precious metal and copper prices favorably impacted net sales in the second quarter of 2016 by \$3.6 million when compared to the second quarter of 2015.

Value-added sales is a non-GAAP measure that removes the impact of pass-through metal costs and allows for analysis without the distortion of the movement or volatility in metal prices. Internally, we manage our business on this basis, and a reconciliation of net sales to value-added sales is included herein. Value-added sales of \$153.9 million in the second quarter of 2016 decreased \$8.4 million, or 5% compared to the second quarter of 2015.

Value-added sales to the consumer electronics and defense end markets, which collectively accounted for 38% of our total value added sales, increased \$4.5 million year-over-year. These increases were more than offset by decreased shipments of raw material beryllium hydroxide of \$7.9 million, lower value-added sales to the energy end market of \$1.6 million, and weakness in the automotive electronics end markets of \$1.4 million.

Gross margin in the second quarter of 2016 was \$45.3 million, or \$6.0 million below the \$51.3 million gross margin recorded during the second quarter of 2015. Expressed as a percentage of value-added sales, gross margin declined from 32% in the second

quarter of 2015 to 29% in the second quarter of 2016. The decrease in gross margin was primarily due to lower sales volume and unfavorable product mix.

SG&A expense was \$32.4 million in the second quarter of 2016, or \$2.2 million lower than \$34.6 million in the second quarter of 2015. The decrease in SG&A expense was due primarily to a \$1.6 million reduction in stock-based and annual incentive compensation expense driven by a reduction in operating profit and lower stock prices as compared to the prior-year period. In addition, selling expenses were also lower due to the decrease in sales volume.

R&D expense consists primarily of direct personnel costs for pre-production evaluation and testing of new products, prototypes, and applications. R&D expense was flat as a percentage of value-added sales at approximately 2% in the second quarter of both 2016 and 2015.

Other-net was \$3.9 million of expense in the second quarter of 2016, or a \$3.9 million increase from the second quarter of 2015. Other-net in the second quarter of 2015 included foreign currency exchange gains of \$1.7 million due primarily to the maturity of foreign currency forward contracts compared to a foreign currency exchange loss of \$0.7 million in the second quarter of 2016. Additionally, Other-net in the second quarter of 2015 included a gain of \$1.3 million related to a favorable legal settlement. Refer to Note C to the Consolidated Financial Statements for details of the major components within Other-net.

Interest expense-net was \$0.5 million in the second quarter of 2016 and \$0.7 million in the second quarter of 2015 due to lower average debt outstanding.

Income tax expense for the second quarter of 2016 was a benefit of \$0.3 million versus expense of \$3.4 million in the second quarter of 2015. The negative effective tax rate for the second quarter of 2016 was 5.4% compared to an effective tax rate of 27.2% in the prior-year period. The effects of a discrete item, percentage depletion, the foreign rate differential, and other items were the primary factors for the difference between the effective and statutory rates in the second quarter of 2016 and 2015. The R&D tax credit also had a favorable effect on the Company's second quarter 2016 effective tax rate.

Six Months

	Six Months Ended			
	July 1, 2016	July 3, 2015	\$ Change	% Change
(Thousands, except per share data)				
Net sales	\$485,287	\$566,879	\$(81,592)	(14)%
Value-added sales	297,792	324,990	(27,198)	(8)%
Gross margin	88,663	103,682	(15,019)	(14)%
Gross margin as a % of value-added sales	30%	32%	N/A	N/A
SG&A expense	62,924	72,527	(9,603)	(13)%
SG&A expense as a % of value-added sales	21%	22%	N/A	N/A
R&D expense	6,623	6,934	(311)	(4)%
R&D expense as a % of value-added sales	2%	2%	N/A	N/A
Other—net	5,807	(2,122)	7,929	(374)%
Operating profit	13,309	26,343	(13,034)	(49)%
Interest expense—net	927	1,307	(380)	(29)%
Income before income taxes	12,382	25,036	(12,654)	(51)%
Income tax expense	1,465	6,985	(5,520)	(79)%
Net income	\$10,917	\$18,051	\$(7,134)	(40)%
Diluted earnings per share	\$0.54	\$0.88	\$(0.34)	(39)%

N/A = Not Applicable

Net sales of \$485.3 million in the first six months of 2016 were \$81.6 million lower than the \$566.9 million recorded in the first six months of 2015. The decrease in net sales in the first six months of 2016 was due to lower sales volume and lower pass-through precious metal and copper prices. Sales volume was lower due primarily to decreased shipments of raw material beryllium hydroxide, weaker demand in the oil and gas sector of the energy end market, and weakness in the consumer electronics, industrial components, and automotive electronics end markets. Changes in precious metal and copper prices negatively impacted net sales in the first six months of 2016 by approximately \$11.7 million when compared to the first six months of 2015.

Value-added sales of \$297.8 million in the first six months of 2016 decreased \$27.2 million, or 8% compared to the first six months of 2015. Value-added sales to the defense end market increased \$8.3 million year-over-year. This increase was more than offset by decreased shipments of raw material beryllium hydroxide of \$10.9 million and lower value-added sales to the energy end market of \$5.1 million.

Value-added sales to the consumer electronics end market, our largest end market accounting for approximately 27% of our total value-added sales in the first half of 2016, decreased \$5.5 million or 6% from the first half of 2015. This decrease was primarily related to lower sales volume of our products used in hand-held devices and weakness in the projector display market within our Precision Coatings group due to a transition to new technology.

The industrial components and automotive electronics end market sales, which collectively accounted for 24% of our total value-added sales in the first six months of 2016, decreased \$7.0 million or 9% as compared to the first six months of 2015.

Gross margin in the first six months of 2016 was \$88.7 million, or \$15.0 million below the \$103.7 million gross margin recorded during the first six months of 2015. Expressed as a percentage of value-added sales, gross margin declined from 32% in the first six months of 2015 to 30% in the first six months of 2016. The decrease in gross margin was primarily due to a combination of lower sales volume and unfavorable product mix.

SG&A expense was \$62.9 million in the first six months of 2016, or \$9.6 million lower than \$72.5 million in the first six months of 2015. The decrease in SG&A expense was due primarily to a \$6.7 million reduction in stock-based and annual incentive compensation expense driven by a reduction in operating profit and lower stock prices as compared to the prior-year period. In addition, selling expenses were also lower due to the decrease in sales volume.

R&D expense was flat as a percentage of value-added sales at approximately 2% in the first half of both 2016 and 2015.

Other-net was \$5.8 million of expense in the first six months of 2016 as compared to \$2.1 million of income in the first six months of 2015. Other-net in the first half of 2015 included foreign currency exchange gains of \$3.3 million compared to a foreign currency exchange loss of \$0.6 million in the first half of 2016. Additionally, Other-net in the first half of 2015 included recognized gains of \$5.1 million from settlement agreements on insurance and legal claims in connection with construction of our beryllium pebble facility in Elmore, Ohio. Refer to Note C to the Consolidated Financial Statements for details of the major components within Other-net.

Interest expense-net was \$0.9 million in the first six months of 2016 and \$1.3 million in the first six months of 2015 due to lower average debt outstanding.

Income tax expense for the first six months of 2016 was \$1.5 million versus \$7.0 million in the first six months of 2015. The effective tax rates for the first half of 2016 and 2015 were 11.8% and 27.9%, respectively. The effects of a discrete item, percentage depletion, the foreign rate differential, and other items were the primary factors for the difference between the effective and statutory rates in the first half of 2016 and 2015. The R&D tax credit also had a favorable effect on the Company's effective tax rate in the first six months of 2016.

Value-Added Sales - Reconciliation of Non-GAAP Measure

A reconciliation of net sales to value-added sales, a non-GAAP measure, for each reportable segment and for the total Company for the first quarter of 2016 and 2015 is as follows:

(Thousands)	Second Quarter Ended		Six Months Ended	
	July 1, 2016	July 3, 2015	July 1, 2016	July 3, 2015
Net sales				
Performance Alloys and Composites	\$97,696	\$107,682	\$188,325	\$210,941
Advanced Materials	113,557	131,370	221,677	281,287
Other	38,523	37,803	75,285	74,651
Total	\$249,776	\$276,855	\$485,287	\$566,879

Less: pass-through metal costs

Performance Alloys and Composites	\$14,346	\$16,171	\$26,773	\$33,840
Advanced Materials	66,564	84,665	132,618	182,855
Other	14,932	13,660	28,104	25,194
Total	\$95,842	\$114,496	\$187,495	\$241,889

Value-added sales

Performance Alloys and Composites	\$83,350	\$91,511	\$161,552	\$177,101
Advanced Materials	46,993	46,705	89,059	98,432
Other	23,591	24,143	47,181	49,457
Total	\$153,934	\$162,359	\$297,792	\$324,990

The cost of gold, silver, platinum, palladium, and copper can be quite volatile. Our pricing policy is to directly pass the cost of these metals on to the customer in order to mitigate the impact of metal price volatility on our results from operations. Trends and comparisons of net sales are affected by movements in the market prices of these metals, but changes in net sales due to metal price movements may not have a proportionate impact on our profitability.

Internally, management reviews net sales on a value-added basis. Value-added sales are a non-GAAP measure that deducts the value of the pass-through metal costs from net sales. Value-added sales allow management to assess the impact of differences in net sales between periods, segments, or markets, and analyze the resulting margins and profitability without the distortion of movements in pass-through metal costs. The dollar amount of gross margin and operating profit is not affected by the value-added sales calculation. We sell other metals and materials that are not considered direct pass-throughs, and these costs are not deducted from net sales when calculating value-added sales. Our net sales are also affected by changes in the use of customer-supplied metal. When we manufacture a precious metal product, the customer may purchase metal from us or may elect to provide its own metal, in which case we process the metal on a toll basis and the metal value does not flow through net sales or cost of sales. In either case, we generally earn our margin based upon our fabrication efforts. The relationship of this margin to net sales can change depending upon whether or not the product was made from our metal or the customer's metal. The use of value-added sales removes the potential distortion in the comparison of net sales caused by changes in the level of customer-supplied metal.

By presenting information on net sales and value-added sales, it is our intention to allow users of our financial statements to review our net sales with and without the impact of the pass-through metals.

Segment Results

The Company consists of three reportable segments: Performance Alloys and Composites, Advanced Materials, and Other. The Other reportable segment includes the results of our Precision Optics and Large Area Coatings operating segments, which do not meet the quantitative thresholds for separate disclosure and are collectively referred to as our Precision Coatings group. The Other reportable segment also includes unallocated corporate costs. Refer to Note B to

the Consolidated Financial Statements for additional business segment information.

Performance Alloys and Composites
Second Quarter

(Thousands)	Second Quarter Ended			
	July 1, 2016	July 3, 2015	\$ Change	% Change
Net sales	\$97,696	\$107,682	\$(9,986)	(9)%
Value-added sales	83,350	91,511	(8,161)	(9)%
Operating profit	234	9,327	(9,093)	(97)%

Net sales from the Performance Alloys and Composites segment of \$97.7 million in the second quarter of 2016 were 9% lower than net sales of \$107.7 million in the second quarter of 2015 primarily due to lower sales volume and the impact of lower pass-through metal prices of \$2.2 million.

Value-added sales of \$83.4 million in the second quarter of 2016 were 9% lower than value-added sales of \$91.5 million in the second quarter of 2015. The decrease in value-added sales was primarily driven by lower raw material sales of beryllium hydroxide of \$7.9 million.

Performance Alloys and Composites generated operating profit of \$0.2 million in the second quarter of 2016 compared to \$9.3 million in the second quarter of 2015. The decline in operating profit in the second quarter of 2016 as compared to the second quarter of 2015 was primarily due to lower sales volume, unfavorable product mix, and the negative impact of foreign exchange rate movements of \$2.0 million.

Six Months

(Thousands)	Six Months Ended			
	July 1, 2016	July 3, 2015	\$ Change	% Change
Net sales	\$188,325	\$210,941	(22,616)	(11)%
Value-added sales	161,552	177,101	(15,549)	(9)%
Operating profit	1,746	16,130	(14,384)	(89)%

Net sales from the Performance Alloys and Composites segment of \$188.3 million in the first six months of 2016 were 11% lower than net sales of \$210.9 million in the first six months of 2015 primarily due to lower sales volume and the impact of lower pass-through metal prices of \$5.4 million.

Value-added sales of \$161.6 million in the first six months of 2016 were 9% lower than value-added sales of \$177.1 million in the first six months of 2015. The decrease in value-added sales was primarily driven by lower raw material sales of beryllium hydroxide of \$10.9 million. Additionally, value-added sales to the energy end market were \$3.7 million lower due to a decline in exploration in the oil and gas sector of the market.

Performance Alloys and Composites generated operating profit of \$1.7 million, or 1% of value-added sales, in the first six months of 2016 compared to \$16.1 million, or 9% of value-added sales, in the first six months of 2015. The decline in operating profit in the first half of 2016 as compared to the first half of 2015 was primarily due to lower sales volume and the negative impact of foreign exchange rate movements of \$4.1 million.

Advanced Materials
Second Quarter

(Thousands)	Second Quarter Ended			
	July 1, 2016	July 3, 2015	\$ Change	% Change
Net sales	\$113,557	\$131,370	(17,813)	(14)%
Value-added sales	46,993	46,705	288	1%
Operating profit	7,320	7,436	(116)	(2)%

Net sales from the Advanced Materials segment of \$113.6 million in the second quarter of 2016 were 14% lower than net sales of \$131.4 million in the second quarter of 2015 primarily due to lower sales volume offset by the impact of higher pass-through metal prices of \$4.5 million.

Value-added sales of \$47.0 million in the second quarter of 2016 were 1% higher than value-added sales of \$46.7 million in the second quarter of 2015. Value-added sales in the consumer electronics end market, which represents approximately 46% of total segment value-added sales, were relatively flat when compared to the prior-year period. The Advanced Materials segment generated operating profit of \$7.3 million in the second quarter of 2016 compared to \$7.4 million in the second quarter of 2015. As a percentage of value-added sales, operating profit was 16% in both the second quarter of 2016 and 2015.

Six Months

(Thousands)	Six Months Ended			
	July 1, 2016	July 3, 2015	\$ Change	% Change
Net sales	\$221,677	\$281,287	(59,610)	(21)%
Value-added sales	89,059	98,432	(9,373)	(10)%
Operating profit	12,503	16,339	(3,836)	(23)%

Net sales from the Advanced Materials segment of \$221.7 million in the first six months of 2016 were 21% lower than net sales of \$281.3 million in the first six months of 2015 primarily due to lower sales volume and the impact of lower pass-through metal prices of \$7.0 million.

Value-added sales of \$89.1 million in the first six months of 2016 were 10% lower than value-added sales of \$98.4 million in the first six months of 2015. The decrease in value-added sales was primarily driven by lower value-added sales to the consumer electronics and energy end markets. Value-added sales to the consumer electronics end market, which represents approximately 46% of total segment value-added sales, decreased \$4.0 million due primarily to lower demand for base semiconductor and data storage applications. Value-added sales to the energy end market decreased \$1.4 million in the first half of 2016 compared to the prior-year period due primarily to lower demand from the solar segments of the market.

The Advanced Materials segment generated operating profit of \$12.5 million in the first six months of 2016 compared to \$16.3 million in the first six months of 2015. As a percentage of value-added sales, operating profit was 14% and 17% in the first six months of 2016 and 2015, respectively. The decrease in operating profit in the first six months of 2016 versus the comparable period of 2015 was due to lower sales volume.

Other

Second Quarter

(Thousands)	Second Quarter Ended			
	July 1, 2016	July 3, 2015	\$ Change	% Change
Net sales	\$38,523	\$37,803	720	2 %
Value-added sales	23,591	24,143	(552)	(2)%
Operating profit (loss)	(1,777)	(3,652)	1,875	(51)%

The Other reportable segment in total includes the operating results of the Precision Coatings group and unallocated corporate costs.

Net sales for the Other reportable segment totaled \$38.5 million and \$37.8 million in the second quarter of 2016 and 2015, respectively. Including unallocated corporate costs, the Other reportable segment had an operating loss of \$1.8 million in the second quarter of 2016 and an operating loss of \$3.7 million in the second quarter of 2015.

Within the Other reportable segment, net sales for the Precision Coatings group were \$38.5 million in the second quarter of 2016 as compared to \$38.3 million in the second quarter of 2015, and value-added sales for the second quarter of 2016 and 2015 were \$25.1 million and \$25.2 million, respectively. Higher sales to the consumer electronics and defense end markets were offset by lower sales to the industrial components and automotive electronics end markets.

Within the Other reportable segment, the Precision Coatings group reported an operating profit of \$2.3 million in the second quarter of 2016 as compared to \$0.6 million in the second quarter of 2015. The increase is due primarily to improved product mix and cost reduction initiatives.

Within the Other reportable segment, corporate reported operating expense of \$4.0 million and \$4.2 million in the second quarter of 2016 and 2015, respectively. Lower unallocated corporate costs were primarily due to a \$1.2 million decrease in stock-based and incentive compensation offset by the \$1.3 million insurance settlement gain realized in the prior period as discussed above.

Six Months

(Thousands)	Six Months Ended			
	July 1, 2016	July 3, 2015	\$ Change	% Change
Net sales	\$75,285	\$74,651	634	1 %
Value-added sales	47,181	49,457	(2,276)	(5)%
Operating profit (loss)	(940)	(6,126)	5,186	(85)%

Net sales for the Other reportable segment totaled \$75.3 million and \$74.7 million in the first six months of 2016 and 2015, respectively. Including unallocated corporate costs, the Other reportable segment had an operating loss of \$0.9 million in the first half of 2016 and an operating loss of \$6.1 million in the first half of 2015.

Within the Other reportable segment, net sales for the Precision Coatings group were \$75.3 million in the first six months of 2016 as compared to \$74.9 million in the first six months of 2015, and value-added sales were \$49.7 million and \$49.8 million in the first half of 2016 and 2015, respectively. Higher sales to the industrial components and defense end markets were offset by lower sales to the consumer electronics and automotive electronics end markets.

Within the Other reportable segment, the Precision Coatings group reported an operating profit of \$6.4 million in the first six months of 2016 as compared to \$2.2 million in the first six months of 2015. The increase is due primarily to improved product mix, cost reduction initiatives, and a gain on the sale of equipment of \$0.8 million.

Within the Other reportable segment, corporate reported operating expense of \$7.3 million and \$8.4 million in the first six months of 2016 and 2015, respectively. Lower unallocated corporate costs were primarily due to a \$5.3 million decrease in stock-based and incentive compensation offset by the \$5.1 million insurance and legal settlement gains realized in the prior period as discussed above.

Legal Proceedings

One of our subsidiaries, Materion Brush Inc., is 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 (CBD) or other lung conditions as a result of exposure to beryllium. Plaintiffs in beryllium cases generally 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, often claim loss of consortium.

Currently, there is one beryllium case (involving three plaintiffs) outstanding and one appellate case (involving four plaintiffs/appellants) that is being remanded to the trial court. The Company does not expect the resolution of these matters to have a material impact on the consolidated financial statements. Refer to Item 1 "Legal Proceedings." Additional beryllium claims may arise. Management believes that we have substantial defenses in these types of cases and intends to contest the suits vigorously should they arise. 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 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 our experience with beryllium cases 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 one or more of these cases in the future.

FINANCIAL POSITION

Cash Flow

A summary of cash flows provided by (used in) operating, investing, and financing activities is as follows:

	Six Months Ended		
	July 1, 2016	July 3, 2015	\$ Change
(Thousands)			
Net cash provided by (used in) operating activities	\$9,034	\$21,043	\$(12,009)
Net cash used in investing activities	(21,305)	(26,646)	5,341
Net cash provided by financing activities	8,614	13,561	(4,947)
Effects of exchange rate changes	406	(479)	885
Net change in cash and cash equivalents	\$(3,251)	\$7,479	\$(10,730)

Net cash provided by operating activities totaled \$9.0 million in the first six months of 2016 versus \$21.0 million provided by operating activities in the comparable prior-year period. Net income decreased \$7.1 million and included a decrease of \$1.5 million in non-cash stock-based compensation expense as compared to the prior-year period.

Additionally, the Company contributed \$8.0 million to its domestic defined benefit pension plans in the first six months of 2016 as compared to a contribution of \$4.0 million in the first six months of 2015.

Working capital requirements were approximately \$20 million in both the first six months of 2016 and 2015. Cash flows provided by inventory decreased \$1.0 million compared to the prior-year period due to working capital reduction initiatives. Cash flows used for accounts payable and accrued expenses decreased \$9.0 million compared to the prior-year period primarily

due to lower incentive compensation payments. Cash flows used for accounts receivable increased \$8.4 million. Our three-month trailing days sales outstanding (DSO) was approximately 40 days at July 1, 2016 versus 44 days at December 31, 2015.

Net cash used in investing activities was \$21.3 million in the first six months of 2016 compared to \$26.6 million in the prior-year corresponding period, reflecting decreased payments for mine development activities of \$2.3 million, as well as decreased payments for property, plant, and equipment of \$2.2 million.

Capital expenditures are made primarily for supporting mining and new product development, replacing and upgrading equipment, infrastructure investments, and implementing information technology initiatives. For the full year 2016, the Company expects payments for property, plant, and equipment to range from \$25.0 million to \$30.0 million and mine development expenditures to range from \$8.0 million to \$10.0 million.

Net cash provided by financing activities totaled \$8.6 million in the first six months of 2016 versus \$13.6 million in the comparable prior-year period primarily due to a decrease of \$4.8 million in net borrowings in 2016.

Liquidity

We believe cash flow from operations plus the available borrowing capacity and our current cash balance are adequate to support operating requirements, capital expenditures, projected pension plan contributions, the current dividend and share repurchase programs, environmental remediation projects, and strategic acquisitions. At July 1, 2016, cash and cash equivalents held by our foreign operations totaled \$19.9 million. We do not expect restrictions on repatriation of cash held outside of the United States to have a material effect on our overall liquidity, financial condition, or the results of operations for the foreseeable future.

A summary of key data relative to our liquidity, including the outstanding debt, cash balances, available borrowing capacity, and the debt-to-debt-plus-equity ratio, as of July 1, 2016 and December 31, 2015 is as follows:

	July 1, 2016	December 31, 2015
(Thousands)		
Total outstanding debt	\$28,707	\$ 13,266
Cash	20,985	24,236
Net debt (cash)	7,722	(10,970)
Available borrowing capacity	\$188.6	\$ 221.8
Debt-to-debt-plus-equity ratio	6 %	3 %

Net debt is a non-GAAP measure. We are providing this information because we believe it is more indicative of our overall financial position. It is also a measure our management uses to assess financing and other decisions. We believe that based on our typical cash flow generated from operations, we can support a higher leverage ratio in future periods.

The available borrowing capacity in the table above represents the additional amounts that could be borrowed under our revolving credit facility and other secured lines existing as of the end of each year depicted. The applicable debt covenants have been taken into account when determining the available borrowing capacity, including the covenant that restricts the borrowing capacity to a multiple of the twelve-month trailing earnings before interest, income taxes, depreciation and amortization, and other adjustments. The main cause for the decrease in the available borrowing capacity at July 1, 2016 as compared to December 31, 2015 was the impact of this covenant.

In 2015, we entered into an amendment to our \$375.0 million revolving credit agreement (Credit Agreement). The amendment extends the maturity date of the Credit Agreement from 2018 to 2020 and provides more favorable pricing under certain circumstances. In addition, the amendment provides the Company and its subsidiaries with additional capacity to enter into facilities for the consignment, borrowing, or leasing of precious metals and copper, and provides enhanced flexibility to finance acquisitions and other strategic initiatives. The Credit Agreement is secured by substantially all of the assets of the Company and its direct subsidiaries, with the exception of non-mining real property and certain other assets. The Credit Agreement allows us to borrow money at a premium over LIBOR or prime rate and at varying maturities. The premium resets quarterly according to the terms and conditions available under the Credit Agreement.

The Credit Agreement includes restrictive covenants including incurring restrictions on additional indebtedness, acquisitions, dividends, and stock repurchases. In addition, the Credit Agreement includes covenants subject to a maximum leverage ratio and a minimum fixed charge coverage ratio. We were in compliance with all of our debt covenants as of July 1, 2016 and December 31, 2015. Cash on hand does not affect the covenants or the borrowing capacity under our debt agreements.

Portions of our business utilize off-balance sheet consignment arrangements to finance metal requirements. Expansion of business volumes and/or higher metal prices can put pressure on the consignment line limitations from time to time. As a result we have negotiated increases in the available capacity under existing lines, added additional lines, and extended the maturity dates of existing lines in recent years. The available and unused capacity under the metal financing lines totaled approximately \$182 million as of July 1, 2016. The availability is determined by Board approved levels and actual line capacity.

In January 2014, our Board of Directors approved a plan to repurchase up to \$50.0 million of our common stock. The timing of the share repurchases will depend on several factors, including market and business conditions, our cash flow, debt levels, and other investment opportunities. There is no minimum required repurchase quantity for a given year, and the repurchases may be discontinued at any time. We repurchased 88,445 shares at a cost of \$2.2 million in the second quarter of 2016 and 106,255 shares at a cost of \$2.7 million in the first half of 2016. Since the approval of the repurchase plan, we have purchased 1,008,759 shares at a total cost of \$32.1 million.

In the second quarter and first six months of 2016, we paid cash dividends of \$1.9 million and \$3.7 million, respectively, on our common stock. We intend to pay a quarterly dividend on an ongoing basis, subject to a determination that the dividend remains in the best interest of our shareholders.

OFF-BALANCE SHEET ARRANGEMENTS AND CONTRACTUAL OBLIGATIONS

We maintain the majority of the precious metals and copper 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. The notional value of off-balance sheet precious metals and copper was \$267.9 million as of July 1, 2016, versus \$214.7 million as of December 31, 2015. We were in compliance with all of the covenants contained in the consignment agreements as of July 1, 2016 and December 31, 2015. For additional information on our contractual obligations, refer to our Form 10-K for the year ended December 31, 2015.

CRITICAL ACCOUNTING POLICIES

For additional information regarding critical accounting policies, please refer to our Form 10-K for the year ended December 31, 2015. There have been no material changes in our critical accounting policies subsequent to the issuance of our Form 10-K.

OUTLOOK

The relative strength of our end markets remains mixed. Defense remains strong and consumer electronics, our largest end market, while returning to year-over-year growth in the second quarter, is not anticipated to be as strong as previously forecasted in the second half of 2016. The sequential value-added sales and earnings improvement we experienced in the second quarter of 2016 in spite of a difficult global economic environment was encouraging. We anticipate continued sequential growth in the second half of 2016 as beryllium hydroxide sales return, following our customer's destocking, and as we make progress on both our organic and inorganic growth initiatives.

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:

Actual net sales, operating rates, and margins for 2016;

The global economy;

The impact of any U.S. Federal Government shutdowns and sequestrations;

The condition of the markets which we serve, whether defined geographically or by segment, with the major market segments being: consumer electronics, industrial components, medical, automotive electronics, defense, telecommunications infrastructure, energy, commercial aerospace, and science;

Our ability to successfully complete negotiations with our largest customer regarding the sales of beryllium hydroxide;

Changes in product mix and the financial condition of customers;

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 identifying acquisition candidates and in acquiring and integrating such businesses;

The impact of the results of acquisitions on our ability to fully achieve 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;

The availability of adequate lines of credit and the associated interest rates;

Other financial factors, including the cost and availability of raw materials (both base and precious metals), physical inventory valuations, metal financing fees, tax rates, exchange rates, pension costs and required cash contributions and other employee benefit costs, energy costs, regulatory compliance costs, the cost and availability of insurance, and the impact of our stock price on the cost of incentive compensation plans;

Our ability to strengthen our internal control over financial reporting and disclosure controls and procedures;

The uncertainties related to the impact of war, terrorist activities, and acts of God;

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 success of the realignment of our businesses; and

• The risk factors set forth in Part 1, Item 1A of our Form 10-K for the year ended December 31, 2015.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

For information regarding market risks, refer to our Annual Report on Form 10-K for the year ended December 31, 2015. There have been no material changes in our market risks since the inclusion of this discussion in our Annual Report on Form 10-K.

Item 4. Controls and Procedures

a) Evaluation of Disclosure Controls and Procedures

The Company carried out an evaluation under the supervision and with participation of the Company's management, including the chief executive officer and chief financial officer, of the effectiveness of the design and operation of disclosure controls and procedures as of July 1, 2016 pursuant to Rule 13a-15(b) and 15d-15(b) under the Securities Exchange Act of 1934, as amended (Exchange Act). Based on that evaluation, management, including the chief executive officer and chief financial officer, concluded that disclosure controls and procedures are effective as of July 1, 2016.

b) Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal control over financial reporting that occurred during the quarter ended July 1, 2016 that have materially affected, or are reasonably likely to materially affect, the Company's 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 cases alleging that plaintiffs have contracted, or have been placed at risk of contracting, beryllium sensitization or CBD or other lung conditions as a result of exposure to beryllium (beryllium cases). The plaintiffs in beryllium cases seek recovery under negligence and various other legal theories and demand compensatory and often punitive damages, in many cases of an unspecified sum. Spouses of some plaintiffs claim loss of consortium.

Beryllium Claims

Our subsidiary, Materion Brush Inc., was a defendant in one beryllium case (involving three plaintiffs), and one appellate case (involving four plaintiffs/appellants) that is being remanded to the trial court, as described more fully below.

The Company is one of five defendants in a case filed on October 4, 2013 in the Superior Court of the State of Arizona, Maricopa County, titled Parmar et al. v. Dolphin, Inc. et al., CV 2013-012980. One plaintiff alleges that he contracted CBD from exposures that resulted from his employment at manufacturing facilities of Karsten Manufacturing Corporation (Karsten) in Arizona, and asserts claims for negligence, strict liability, and fraudulent concealment. His wife claims a loss of consortium. Another plaintiff alleges that he has been diagnosed with beryllium sensitization that resulted from his employment at Karsten, and asserts a claim for medical monitoring. Plaintiffs seek compensatory and punitive damages and/or medical monitoring in unspecified sums. On May 4, 2016, the court granted summary judgment for the Company on the fraudulent concealment claim. Trial is set for January 9, 2017.

The Company was one of six defendants in a case filed on April 7, 2015 in the Superior Court of the State of California, Los Angeles County, titled Godoy et al. v. The Argen Corporation et al., BC578085. This was a survival and wrongful death complaint. The complaint alleged that the decedent worked at H. Kramer & Co. in California and alleged that he worked as a dental lab technician at various dental labs in California, and that he suffered from CBD and other injuries as a result of grinding, melting, and handling beryllium-containing products. The complaint alleged causes of action for negligence, strict liability - failure to warn, strict liability - design defect, fraudulent concealment, and breach of implied warranties. Plaintiffs sought punitive damages in connection with the strict liability and fraudulent concealment causes of action. The survival action sought all damages sustained by decedent that he would have been entitled to recover had he lived, including punitive damages. The Company filed a demurrer on May 29, 2015. At a hearing on September 29, 2015, the court sustained the demurrer, dismissing all claims against the Company, without leave to amend the complaint. On February 3, 2016, the plaintiffs filed a notice of appeal. On June 23, 2016, the California Supreme Court in a case titled Ramos v. Brenntag Specialties, 2016 WL 3435777, issued a unanimous opinion disapproving the case precedent upon which the Company's successful demurrer had been based. Based on this decision, the parties stipulated that the judgment entered in favor of the defendants be reversed and the matter remanded to the trial court for further proceedings.

The Company has insurance coverage, which may respond, subject to an annual deductible.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following table presents information with respect to repurchases of common stock made by us during the three months ended July 1, 2016.

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share (1)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2)	Maximum Dollar Value that May Yet Be Purchased Under the Plans or Programs (2)
April 2 through May 6, 2016	17,125	\$ 27.48	17,125	\$ 19,655,858
May 7 through June 3, 2016	57,620	24.06	57,620	18,269,357
June 4 through July 1, 2016	14,028	25.11	13,700	17,925,294
Total	88,773	\$ 24.89	88,445	\$ 17,925,294

(1) Includes 328 shares surrendered to the Company in June by an employee to satisfy tax withholding obligations on stock appreciation rights issued under the Company's stock incentive plan.

(2) On January 14, 2014, we announced that our Board of Directors had authorized the repurchase of up to \$50.0

million of
our common
stock. As of
July 1, 2016,
\$17.9
million may
still be
purchased
under the
program.
During the
three months
ended July
1, 2016, we
repurchased
88,445
shares at an
average
price of
\$24.89 per
share, or
\$2.2 million
in the
aggregate.

Item 4. Mine Safety Disclosures

Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K (17 CFR 229.104) is included in Exhibit 95 to this quarterly report on Form 10-Q.

Item 6. Exhibits

- 31.1 Certification of Chief Executive Officer required by Rule 13a-14(a) or 15d-14(a).
- 31.2 Certification of Chief Financial Officer required by Rule 13a-14(a) or 15d-14(a).
- 32 Certifications of Chief Executive Officer and Chief Financial Officer required by 18 U.S.C. Section 1350.
- 95 Mine Safety Disclosure Pursuant to Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act for the period ended July 1, 2016.
- 101.INS XBRL Instance Document.
- 101.SCH XBRL Taxonomy Extension Schema Document.
- 101.DEF XBRL Taxonomy Extension Definition Linkbase 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.

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

Dated: July 28, 2016

/s/ JOSEPH P. KELLEY

Joseph P. Kelley

Vice President, Finance and Chief Financial Officer

(Principal Financial and Accounting Officer)

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