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

Wasnington, D.C. 20549	
FORM 10-Q	
(Mark One)	
☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SE	CURITIES EXCHANGE ACT OF 1934
For the quarterly period ended October 1, 2004	
OR	
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SEC	CURITIES EXCHANGE ACT OF 1934
For the transition period from to	
Commission file number 001-	15885
BRUSH ENGINEERED MA' (Exact name of Registrant as specified	
Ohio (State or other jurisdiction of incorporation or organization)	34-1919973 (I.R.S. Employer Identification No.)
17876 St. Clair Avenue, Cleveland, Ohio (Address of principal executive offices)	44110 (Zip Code)
216-486-4200 Registrant's telephone number, includi	ing area code
Indicate by check mark whether the registrant (1) has filed all reports required to be Act of 1934 during the preceding 12 months (or for such shorter period that the regist subject to such filing requirements for the past 90 days. Yes ⊠ No □	
Indicate by check mark whether the registrant is an accelerated filer (as defined in	n Rule 12b-2 of the Act). Yes ⊠ No □
As of October 29, 2004 there were 19,197,447 shares of Common Stock, no par v	value, outstanding.

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PART I FINANCIAL INFORMATION

BRUSH ENGINEERED MATERIALS INC. AND SUBSIDIARIES

Item 1. Financial Statements

The consolidated financial statements of Brush Engineered Materials Inc. and its subsidiaries for the quarter ended October 1, 2004 are as follows:

Consolidated Statements of Income — Third Quarter and Nine Months ended October 1, 2004 and September 26, 2003

Consolidated Balance Sheets — October 1, 2004 and December 31, 2003

Consolidated Statements of Cash Flows — Nine months ended October 1, 2004 and September 26, 2003

Consolidated Statements of Income (Unaudited)

		Third Quarter Ended			Nine Months Ended			
(Dollars in thousands except share and per share amounts)		Oct. 1, 2004		Sept. 26, 2003		Oct. 1, 2004		Sept. 26, 2003
Net sales	\$ 1	25,766	\$	94,156	\$	380,267	\$	295,479
Cost of sales		99,182	_	79,786	_	294,665	_	245,132
Gross margin		26,584		14,370		85,602		50,347
Selling, general and administrative expenses		18,773		14,299		56,981		48,208
Research and development expenses		1,130		998		3,496		3,034
Other-net		965	_	1,376	_	4,284	_	2,352
Operating profit (loss)		5,716		(2,303)		20,841		(3,247)
Interest expense		1,955	_	569	_	6,562	_	2,175
Income (loss) before income taxes		3,761		(2,872)		14,279		(5,422)
Minority interest		_		(2)		_		(24)
Income taxes		330		190		524		641
Net income (loss)	\$	3,431	\$	(3,060)	\$	13,755	\$	(6,039)
Per share of common stock: basic	\$	0.18	\$	(0.18)	\$	0.79	\$	(0.36)
Weighted average number of common shares outstanding	18,9	36,641	16	5,563,098	1′	7,414,097	10	5,562,559
Per share of common stock: diluted	\$	0.18	\$	(0.18)	\$	0.77	\$	(0.36)
Weighted average number of common shares outstanding	19,3	08,693	16	5,563,098	1'	7,756,659	16	5,562,559

See notes to consolidated financial statements.

Consolidated Balance Sheets (Unaudited)

(Dollars in thousands)	Oct. 1, 2004	Dec. 31, 2003
Assets		
Current assets		
Cash and cash equivalents	\$ 27,007	\$ 5,062
Accounts receivable	72,579	55,102
Inventories	96,487	87,396
Prepaid expenses	5,934	5,454
Deferred income taxes	906	291
Total current assets	202,913	153,305
Other assets	15,523	18,902
Long-term deferred income taxes	742	704
Property, plant and equipment	538,844	535,421
Less allowances for depreciation, depletion and impairment	360,420	344,575
	178,424	190,846
Goodwill	7,992	7,859
	\$405,594	\$371,616
Liabilities and Shareholders' Equity		
Current liabilities		
Short-term debt	\$ 15,018	\$ 13,387
Accounts payable	12,478	16,038
Other liabilities and accrued items	39,230	37,366
Unearned revenue	6,484	_
Income taxes	1,272	1,373
Total current liabilities	74,482	68,164
Other long-term liabilities	11,196	14,739
Retirement and post-employment benefits	51,003	49,358
Long-term debt	57,863	85,756
Minority interest in subsidiary	_	26
Shareholders' equity	211,050	153,573
	\$405,594	\$371,616

See notes to consolidated financial statements.

Consolidated Statements of Cash Flows (Unaudited)

	Nine Months Ended	
(Dollars in thousands)	Oct. 1, 2004	Sept. 26, 2003
Net Income (Loss)	\$ 13,755	\$ (6,039)
Adjustments to Reconcile Net Income (Loss) to Net Cash Used in		, , ,
Operating Activities:		
Depreciation, depletion and amortization	17,339	15,320
Amortization of deferred financing costs in interest expense	1,084	242
Derivative financial instrument ineffectiveness	465	58
Decrease (increase) in accounts receivable	(18,013)	(8,919)
Decrease (increase) in inventory	(9,371)	7,142
Decrease (increase) in prepaid and other current assets	362	5,111
Increase (decrease) in accounts payable and accrued expenses	6,961	3,292
Increase (decrease) in interest and taxes payable	(719)	230
Increase (decrease) in deferred income taxes	(1,536)	73
Increase (decrease) in other long-term liabilities	(1,560)	140
Other — net	2,955	1,421
	,	
Net Cash Provided from Operating Activities	11,722	18,071
Cash Flows from Investing Activities:	, .	-,
Payments for purchase of property, plant and equipment	(5,013)	(4,760)
Payments for mine development	(133)	(137)
Proceeds from other investments	14	_
Proceeds from sale of property, plant and equipment	15	34
Net Cash Used in Investing Activities	(5,117)	(4,863)
Cash Flows from Financing Activities:	(0,117)	(.,000)
Proceeds from issuance/(repayment) of short-term debt	3,104	(10,729)
Proceeds from issuance of long-term debt	24	2,000
Repayment of long-term debt	(29,346)	(4,034)
Issuance of common stock	38,749	(.,55.)
Issuance of common stock under stock option plans	2,855	_
issuance of common stock under stock option plans	2,033	
Net Cash Provided from (Used in) Financing Activities	15,386	(12,763)
Effects of exchange rate changes	(46)	2
Effects of exchange rate changes	(10)	
Net Change in Cash and Cash Equivalents	21,945	447
Cash and Cash Equivalents at Beginning of Period	5,062	4,357
one again with a againing of a criou		
Cash and Cash Equivalents at End of Period	\$ 27,007	\$ 4,804
	+ = 1,001	,551

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 October 1, 2004 and December 31, 2003 and the results of operations for the three and nine month periods ended October 1, 2004 and September 26, 2003. All of the adjustments were of a normal and recurring nature. Certain items in the prior year have been reclassified to conform to the 2004 consolidated financial statement presentation.

Note B —Inventories

(Dollars in thousands)	Oct. 1, 2004	Dec. 31, 2003
Principally average cost:		
Raw materials and supplies	\$ 24,314	\$ 24,990
Work in process	75,049	65,212
Finished goods	26,668	20,637
Gross inventories	126,031	110,839
Excess of average cost over LIFO		
Inventory value	29,544	23,443
Net inventories	\$ 96,487	\$ 87,396

Note C —Comprehensive Income (Loss)

The reconciliation between net income (loss) and comprehensive income (loss) for the three and nine month periods ended October 1, 2004 and September 26, 2003 is as follows:

	Third Quarter Ended		Nine Months Ended	
(Dollars in thousands)	Oct. 1, 2004	Sept. 26, 2003	Oct. 1, 2004	Sept. 26, 2003
Net income (loss)	\$3,431	\$(3,060)	\$13,755	\$(6,039)
Cumulative translation adjustment	(267)	344	(398)	274
Change in the fair value of derivative financial instruments	100	2,031	2,453	131
Comprehensive income (loss)	\$3,264	\$ (685)	\$15,810	\$(5,634)

Note D —Segment Reporting

(Dollars in thousands)	Metal Systems	Micro- Electronics	Total Segments	All Other	Total
Third Quarter 2004					
Revenues from external customers	\$ 72,031	\$ 49,038	\$121,069	\$ 4,697	\$125,766
Intersegment revenues	867	285	1,152	3,934	5,086
Operating profit (loss)	(857)	3,900	3,043	2,673	5,716
Third Quarter 2003					
Revenues from external customers	\$ 54,074	\$ 39,355	\$ 93,429	\$ 727	\$ 94,156
Intersegment revenues	572	233	805	3,071	3,876
Operating profit (loss)	(8,036)	3,804	(4,232)	1,929	(2,303)
First Nine Months 2004					
Revenues from external customers	\$225,118	\$150,452	\$375,570	\$ 4,697	\$380,267
Intersegment revenues	2,937	972	3,909	15,416	19,325
Operating profit (loss)	4,114	14,193	18,307	2,534	20,841
First Nine Months 2003					
Revenues from external customers	\$175,951	\$115,316	\$291,267	\$ 4,212	\$295,479
Intersegment revenues	2,290	751	3,041	10,725	13,766
Operating profit (loss)	(14,235)	9,814	(4,421)	1,174	(3,247)

Note E — Income Taxes

A tax provision or benefit was not applied against the income or loss before income taxes in the third quarter and the first nine months of 2004 and 2003 for certain domestic and foreign taxes as a result of the deferred tax valuation allowance recorded in 2003 and previous periods in accordance with SFAS 109, "Accounting for Income Taxes" due to the uncertainty regarding full utilization of the Company's deferred income taxes. The valuation allowance was reduced offsetting a portion of the net tax expense in both the third quarter and first nine months of 2004, while the valuation allowance was increased in the third quarter and first nine months of 2003 offsetting the net tax benefit in those periods. The Company intends to maintain the valuation allowance until additional realization events occur, including the generation of future sustainable taxable income, that would support reversal of all or a portion of the allowance. The tax expense was \$0.3 million in the third quarter 2004 and \$0.2 million in the third quarter 2003 while the year-to-date tax expense was \$0.5 million in 2004 and \$0.6 million in 2003. The expense in each period represents taxes from various state and local jurisdictions and foreign taxes from Japan and Singapore only.

The remaining tax valuation allowance available to be reversed against future income was approximately \$15.3 million at the end of the third quarter 2004.

Note F — Pensions and Other Post-retirement Benefits

		Pension Benefits Third Quarter Ended		
(Dollars in thousands)	Oct. 1, 2004	Sept. 26, 2003	Oct. 1, 2004	Sept. 26, 2003
Components of net periodic benefit cost				
Service cost	\$ 1,060	\$ 1,029	\$ 70	\$ 69
Interest cost	1,725	1,667	696	704
Expected return on plan assets	(2,267)	(2,340)	_	_
Amortization of transition obligation/(asset)	_	(90)	_	_
Amortization of prior service cost	162	162	(28)	(28)
Amortization of net loss/(gain)	(3)	(7)	(211)	83
Net periodic benefit cost	\$ 677	\$ 421	\$ 527	\$828
		n Benefits nths Ended		Benefits nths Ended
(Dollars in thousands)	Oct. 1, 2004	Sept. 26, 2003	Oct. 1, 2004	Sept. 26, 2003
Components of net periodic benefit cost				
Service cost	\$ 3,181	\$ 3,087	\$ 210	\$ 206
Interest cost	5,175	5,001	2,088	2,113
Expected return on plan assets	(6,802)	(7,019)	_	_
Amortization of transition obligation/(asset)	_	(271)	_	_
Amortization of prior service cost	485	485	(84)	(84)

In December 2003, the Financial Accounting Standards Board (FASB) issued FASB Staff Position (FSP) No. 106-1, "Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003." In accordance with FSP 106-1, the Company elected to defer recognizing the effects of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (the Act) in accounting for the health care benefits under SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions," and in providing disclosures related to the health care benefits required by revised SFAS No. 132, "Employers' Disclosures about Pensions and Other Postretirement Benefits." In May 2004, the FASB issued FSP No. 106-2, "Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003." FSP No. 106-2, which requires measures of the accumulated postretirement benefit obligation and net periodic postretirement benefit cost to reflect the effects of the Act, supersedes FSP No. 106-1. The Company adopted FSP No. 106-2 in the third quarter 2004 as proscribed, which resulted in a reduction to the net periodic postretirement benefit cost of \$0.3 million for the nine month period. The adoption also reduced the accumulated postretirement benefit obligation that was reported as of December 31, 2003 by \$3.3 million, from \$45.4 million to \$42.1 million.

(8)

\$ 2,031

(20)

\$ 1,263

32

\$2,246

249

\$2,484

Employer Contributions

Amortization of net loss/(gain)

Net periodic benefit cost

No contributions were made to the pension plan in the first nine months of 2004 and, as a result of recently enacted legislation, the previously estimated contribution of \$1.7 million to be made in 2004 as disclosed in the financial statements for the year ended December 31, 2003, will not be required.

Note G — Stock-Based Compensation

The Company has adopted the disclosure only provisions of SFAS No. 123, "Accounting for Stock-Based Compensation" and applies the intrinsic value method in accordance with APB Opinion No. 25, "Accounting

for Stock Issued to Employees" and related interpretations in accounting for its stock incentive plan. In accordance with SFAS No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure," the following table presents the effect on net income/(loss) and net income/(loss) per share had compensation cost for the Company's stock plans been determined consistent with SFAS No. 123.

	Third Quarter Ended		Nine Mor	nths Ended
(Dollars in thousands except per share amounts)	Oct. 1, 2004	Sept. 26, 2003	Oct. 1, 2004	Sept. 26, 2003
Net income/(loss), as reported	\$3,431	\$(3,060)	\$13,755	\$(6,039)
Less stock-based compensation expense determined under fair value method for all stock options, net of related income tax				
benefit	436	281	1,660	899
			,,,,,,	
Pro forma net income/(loss)	\$2,995	\$(3,341)	\$12,095	\$(6,938)
Basic income/(loss) per share, as reported	\$ 0.18	\$ (0.18)	\$ 0.79	\$ (0.36)
Diluted income/(loss) per share, as reported	0.18	(0.18)	0.77	(0.36)
Basic income/(loss) per share, pro forma	0.16	(0.20)	0.69	(0.42)
Diluted income/(loss) per share, pro forma	0.16	(0.20)	0.68	(0.42)

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

	Third Qua	Third Quarter Ended		ths Ended
	Oct. 1, 2004	Sept. 26, 2003	Oct. 1, 2004	Sept. 26, 2003
Risk free interest rates	3.26%	3.19%	3.26%	3.63%
Dividend yield	0.0%	0.0%	0.0%	0.0%
Volatility	41.8%	39.5%	41.8%	39.5%
Expected lives (in years)	6	8	6	8

Note H — Common Stock Issuance

During the third quarter 2004, the Company issued 2,250,000 shares of common stock at a price of \$18.75 per share. The proceeds, net of underwriting discounts and other fees, were \$38.7 million. The Company used the proceeds to pay down \$5.0 million of the borrowings under the \$35.0 million long-term subordinated note and the outstanding borrowings under the revolving credit agreement. A portion of the proceeds was also held as cash for general corporate purposes. In addition, 115,000 shares of common stock were issued to the holders of the stock warrants (which were initially granted in the fourth quarter 2003 as part of a debt refinancing) as the holders exercised their rights under those warrants. As a result of the stock issuance and the exercise of the warrants, the total outstanding shares of common stock increased by 2,365,000 shares and shareholders' equity increased by the amount of the net proceeds.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

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:

- health issues, litigation and regulation relating to mining bertrandite ore and producing and using beryllium-containing materials;
- our ability to achieve and sustain profitability;

- significant cyclical fluctuations in our customers' businesses;
- the availability of competitive substitute materials for beryllium-containing materials;
- our ability to complete and integrate acquisitions successfully;
- risks associated with our international operations;
- the availability and prices of raw materials;
- seasonal fluctuations in our net sales;
- natural disasters, equipment failures, interruptions in energy supplies and other unexpected events that may affect our business or our customers' businesses;
- increases in energy costs;
- rapid changes in technology, which may make our existing products obsolete;
- our ability to deliver products that are free of defects and meet our customers' specifications;
- risks associated with our lengthy sales and development cycle;
- risks associated with terrorists attacks;
- risks associated with our pension and retiree health obligations;
- risks associated with our tax position;
- risks associated with our indebtedness and our ability to access the financial markets on favorable terms;
- · fluctuations in currency exchange rates; and
- our reliance on funds from our subsidiaries

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee our future results, level of activity, performance or achievement.

Overview

We are an integrated producer of engineered materials used in a variety of electrical, electronic, thermal and structural applications. We manufacture and distribute high-performance beryllium-copper and beryllium-nickel alloys, beryllium metal products, precious metal products, engineered material systems and electronic products. Major applications and markets for these materials include telecommunications and computer, automotive electronics, optical media, industrial components, appliance, aerospace and defense.

Our financial results for the third quarter 2004 and for the first nine months of the year were a strong improvement over 2003. Sales have grown for seven consecutive quarters over the comparable quarter in the prior year. This growth has resulted from improvement in our core markets, expansion of our markets and applications, and share gains. Gross margins also continued to grow in 2004 as a result of the higher volumes and other improvements and despite a significant increase in the cost of copper, one of our major raw materials. We generated an operating profit in each quarter this year and the year-to-date profit of \$20.8 million represents a \$24.0 million improvement over the loss in the first nine months of 2003.

We strengthened our balance sheet by completing a \$38.7 million new share offering in the third quarter 2004. The proceeds were used primarily to reduce outstanding debt, with a portion held as cash. As a result of the offering, our debt to equity ratio has improved, as has our ability to fund future growth opportunities and requirements.

Results of Operations

		Quarter ded		ine Months nded
Millions, except per share data	Oct 1, 2004	Sept 26, 2003	Oct 1, 2004	Sept 26, 2003
Sales	\$125.8	\$ 94.2	\$380.3	\$295.5
Operating Profit (Loss)	5.7	(2.3)	20.8	(3.2)
Net Income (Loss)	3.4	(3.1)	13.8	(6.0)
Diluted E.P.S	\$ 0.18	\$(0.18)	\$ 0.77	\$ (0.36)

Sales of \$125.8 million in the third quarter 2004 were 34% higher than the third quarter 2003 while year-to-date sales of \$380.3 million in 2004 were 29% higher than the first three quarters of 2003. Sales from each of our major product families increased in the third quarter and the first nine months of the year over the comparable periods in 2003. Demand has improved from our key end-use markets, including telecommunications and computer and data storage markets, throughout 2004. The continued development of new products and applications contributed to the year-to-date growth as well.

Our sales are affected by metal prices as changes in precious metal and a portion of the changes in base metal prices, primarily copper, may be passed on to our customers. Sales may also be impacted by foreign currency exchange rates, as changes in the value of the dollar relative to the euro, yen and pound sterling will affect the translated value of foreign currency denominated sales. We estimate that these two factors combined accounted for \$4.2 million of the \$31.6 million growth in the third quarter 2004 sales and \$15.8 million of the \$84.8 million growth in the year-to-date sales.

International sales, including direct exports from the United States as well as sales from foreign operations, were \$42.1 million in the third quarter 2004 compared to \$29.3 million in the third quarter 2003. For the first three quarters of the year, international sales were \$127.3 million in 2004 and \$91.8 million in 2003. International sales were 33% of total sales in the third quarter and year-to-date 2004 periods, an increase from 31% of total sales in both the third quarter and year-to-date 2003 periods. International sales have grown 39% in the first three quarters of 2004 over 2003.

For the first three quarters of 2004, the new sales orders received have exceeded the orders shipped by approximately 3%. The new sales order rate slowed down during the last two months of the third quarter with segments of various markets, including telecommunications and computer, showing signs of softness going forward.

The gross margin of \$26.6 million was 21% of sales in the third quarter 2004, an improvement over the gross margin of \$14.4 million and 15% of sales generated in the third quarter 2003. For the first three quarters of the year, gross margin was \$85.6 million in 2004 and \$50.3 million in 2003. In addition to growing \$35.3 million, the gross margin improved to 23% of sales in the first three quarters of 2004 from 17% of sales in the first three quarters of 2003. The change in margins in the quarter and the first three quarters of the year is due to a combination of higher volumes, improved manufacturing efficiencies and differences in product mix. The higher cost of copper negatively impacted margins to the extent that these costs could not be passed through to customers.

Selling, general and administrative expenses (SG&A) were \$18.8 million, or 15% of sales, in the third quarter 2004, compared to \$14.3 million, also 15% of sales, in the third quarter 2003. SG&A expenses for the first nine months of the year were \$57.0 million, or 15% of sales, in 2004 and \$48.2 million, or 16% of sales, in 2003. The major cause for the increase in SG&A expenses was the incentive compensation expense which was \$2.6 million higher in the third quarter and \$5.5 million higher for the first three quarters of 2004 than the comparable periods in 2003 due to the higher level of profitability in 2004. The currency impact on the translation of the international subsidiaries' expenses was an unfavorable \$0.2 million in the third quarter 2004 and an unfavorable \$0.8 million in the first nine months of the year. Corporate legal costs associated with chronic beryllium disease litigation were \$0.5 million lower in the quarter and \$0.9 million lower in the first

nine months of 2004 than in the respective periods in 2003. Manpower costs, including fringe benefits, were higher in 2004, while other expenses increased in support of the higher volumes of business.

Research and development expenses (R&D) were \$1.1 million in the third quarter 2004 and \$3.5 million in the first nine months of 2004 compared to \$1.0 million and \$3.0 million in the respective periods of 2003. R&D expenses were 1% of sales in both the first three quarters of 2004 and the first three quarters of 2003. The increase in R&D expenses was in support of product development and process improvement activities.

Other-net expense was \$1.0 million in the third quarter 2004 compared to \$1.4 million in third quarter 2003. For the year, other-net expense was \$4.3 million in 2004 and \$2.4 million in 2003. Foreign currency exchange losses were \$0.4 million lower in the third quarter 2004 than the third quarter 2003 but \$2.0 million higher in the first nine months of 2004 compared to the first nine months of 2003. The expense on the directors' deferred compensation plan was unchanged in the third quarter 2004 from the third quarter 2003 while the year-to-date expense was \$0.3 million higher in 2004 than in 2003. Changes in the expense were driven primarily by changes in our stock price. We recorded a loss of \$0.5 million on the valuation of an interest rate swap in the third quarter 2004; the loss on a year-to-date basis was also \$0.5 million. Changes in the swap's valuation were caused primarily by movements in the interest rate yield curve over the future term of the swap. We recorded income of \$1.0 million from the reversal of an environmental reserve associated with property that was sold in the third quarter 2004. The buyer assumed all environmental remediation obligations for the property under the terms of the sales contract. There was no gain or loss on the sale of the property itself. Other-net also includes bad debt expense, which was higher in the third quarter 2004 but unchanged on a year-to-date basis, metal financing fees, cash discounts, amortization of intangible assets, gain or loss on the sale of fixed assets and other non-operating items.

Operating profit was \$5.7 million in the third quarter 2004, an improvement of \$8.0 million over the \$2.3 million loss in the third quarter 2003, while the year-to-date operating profit of \$20.8 million in 2004 was a \$24.0 million improvement over the \$3.2 million loss in the first nine months of 2003. The improved profitability in both the third quarter and the first nine months of 2004 was due to the margin generated by the higher sales and other improvements offset in part by the higher copper cost and expenses.

Interest expense was \$2.0 million in the third quarter 2004 and \$0.6 million in the third quarter 2003. For the first three quarters of the year, interest expense was \$6.6 million in 2004 and \$2.2 million in 2003. Interest expense was higher in 2004 mainly due to the change in debt levels. Balance sheet debt increased by \$51.8 million in December 2003 as a result of the purchase of previously leased assets as part of a debt refinancing. Debt also increased through out the first half of 2004 to support the increase in working capital elements, but then debt was reduced in the third quarter 2004 from a portion of the proceeds from the new share offering.

Income before income taxes of \$3.8 million in the third quarter 2004 improved \$6.6 million over the loss recorded in the third quarter 2003. For the first nine months of 2004, income before income taxes was \$14.3 million compared to a loss of \$5.4 million in the same period in 2003.

A tax provision or benefit was not applied against the income or loss before income taxes in the third quarter or year-to-date periods in 2004 or 2003 for certain domestic and foreign taxes as a result of the deferred tax valuation allowance recorded in previous periods in accordance with SFAS No. 109, "Accounting for Income Taxes", due to the uncertainty regarding the full utilization of the deferred income tax assets. The valuation allowance was reduced in the third quarter and first nine months of 2004 offsetting a portion of the tax expense in those periods, while the allowance was increased offsetting a tax benefit in the third quarter and first nine months of 2003. The tax expense of \$0.3 million in the third quarter 2004 and \$0.2 million in the third quarter 2003 as well as the year-to-date expense of \$0.5 million in 2004 and \$0.6 million in 2003 represents taxes from various state and local jurisdictions and Japan and Singapore only.

Net income was \$3.4 million in the third quarter 2004 compared to a net loss of \$3.1 million in the third quarter 2003 while net income was \$13.8 million in the first nine months of 2004, a \$19.8 million improvement over the net loss of \$6.0 million in the first nine months of 2003.

We aggregate our businesses into two reportable segments – the Metal Systems Group and the Microelectronics Group (MEG). Our mining and extraction operations, as managed by Brush Resources Inc., a wholly owned subsidiary, and various corporate and administrative functions and their related expenses, are not part of either group and are included in the "All Other" column in the segment reporting details in Note D to the consolidated financial statements. The operating profit within All Other increased in the third quarter 2004 over the third quarter 2003 in part due to margins on increased sales from Brush Resources. The previously discussed differences in the interest rate swap and the directors' deferred compensation plan valuation adjustments as well as the \$1.0 million environmental reserve adjustment flowed through the All Other column as well.

Metal Systems Group

		Quarter ided		ine Months Inded
Millions	Oct 1, 2004	Sept 26, 2003	Oct 1, 2004	Sept 26, 2003
Sales	\$72.0	\$54.1	\$225.1	\$176.0
Operating Profit (Loss)	\$ (0.9)	\$ (8.0)	\$ 4.1	\$ (14.2)

The Metal Systems Group consists of Alloy Products, our largest unit, Technical Materials, Inc. (TMI), a wholly owned subsidiary, and Beryllium Products. Sales by each of these units were as follows:

		Quarter nded		ine Months nded
	Oct 1, 2004	Sept 26, 2003	Oct 1, 2004	Sept 26, 2003
Alloy Products	\$48.9	\$36.8	\$156.1	\$119.3
TMI	14.1	9.1	42.4	31.7
Beryllium Products	9.0	8.2	26.6	25.0

Alloy Products manufactures and sells copper and nickel-based alloy systems, the majority of which also contain beryllium, and consists of two major product families – strip and bulk products. Strip products, which include precision strip and thin diameter rod and wire, are sold into the telecommunications and computer, automotive and appliance markets. Major applications for these products include connectors, contacts, switches, relays and shielding. Bulk products are alloys manufactured into rod, tube, plate, bar and other customized forms that are sold into the industrial component, plastic tooling, undersea telecommunications and heavy equipment markets. Applications for bulk products include plastic mold tooling, bushings, bearings and welding rods.

Sales by Alloy Products were \$48.9 million in the third quarter 2004 compared to \$36.8 million in the third quarter 2003 while sales of \$156.1 million in the first three quarters of 2004 were a 31% improvement over sales of \$119.3 million in the first three quarters of 2003. Strip product volumes increased 18% in the quarter and 29% for the first three quarters of 2004 while bulk product volumes grew 49% in the quarter and 29% in the first three quarters of the year. The majority of the growth in sales from Alloy Products throughout 2004 resulted from improvements in the underlying markets, including telecommunications and computer, automotive (particularly in Europe) and industrial components. The improved sales of bulk products in the third quarter also resulted in part from higher demand from the oil and gas market as well as from increased demand from the heavy equipment market for new products. Within strip products, sales of rod and wire products, while higher in the third quarter 2004 than in the third quarter 2003, began to slow down from the higher shipping volumes earlier in 2004. Demand from the plastic tooling market for bulk products was soft in 2004 and capturing the existing demand was complicated by a portion of the market shifting from the U.S. to Asia in the current year. Sales order rates from portions of the telecommunications and computer, automotive and other markets began to soften in the third quarter 2004, which we believe is due in part to excess inventory in the supply chain.

TMI manufactures specialty strip products, including clad inlay and overlay metals, precious and base metal electroplated systems, electron beam welded systems, contour profiled systems and solder coated systems. Applications for TMI products include connectors, contacts and semiconductors. TMI's sales were \$14.1 million in the third quarter 2004, a 55% growth rate over third quarter 2003, while sales in the first three quarters of 2004 of \$42.4 million grew 34% over the first three quarters of 2003. This growth was due to increased demand from the telecommunications and computer market. Demand from the energy market, currently a smaller but developing market for TMI's materials, also contributed to the sales growth in 2004. Sales from all of TMI's major product lines, including plating and CERDIP, were higher in 2004 than in 2003.

Beryllium Products manufactures pure beryllium and beryllium aluminum composites used in high-performance applications that require high stiffness and/or low density. Sales by Beryllium Products were \$9.0 million in the third quarter 2004, up slightly from sales of \$8.2 million in the third quarter 2003. For the first three quarters of the year, sales were \$26.6 million in 2004 and \$25.0 million in 2003. Demand for defense and government-related applications and from the medical and electronics markets remained strong throughout 2004 while demand from the specialty automotive market has declined in the current year. Shipments under the Webb telescope material supply contract, primarily in the first quarter of 2004, also contributed to the year-to-date growth. Additional shipments under this program are scheduled for the fourth quarter 2004.

The gross margin on Metal System Group sales was \$15.4 million, or 21% of sales, in the third quarter 2004 versus \$5.6 million, or 10% of sales, in the third quarter 2003. For the first three quarters of the year, gross margin of \$53.5 million more than doubled the gross margin of \$25.4 million from the first three quarters of 2003. As a percent of sales, the gross margin also improved from 14% in the first nine months of 2003 to 24% in the first nine months of 2004. The margin on the higher sales volumes accounted for approximately \$7.0 million of the total margin improvement in the quarter and \$17.3 million of the year-to-date improvement. Changes in the cost of copper cannot be passed on to customers in all cases and, as a result, the higher cost of copper reduced margins by an estimated \$1.8 million in the quarter and \$6.0 million for the first three quarters of the year. The purchase of the previously leased assets as part of the December 2003 refinancing reduced manufacturing overhead expenses by approximately \$1.5 million in the quarter and \$4.6 million for the first three quarters of 2004 as the depreciation expense on the owned assets was less than the prior lease expense. A favorable product mix (i.e., sales of higher margin products grew more than lower margin products) also contributed to the margin growth in 2004, primarily in the first half of the year. The year-to-date margin benefited from operational improvements, primarily in the first half of the 2004, as the Elmore facility experienced various yield issues during the third quarter 2004. The exchange rate impact on margins was favorable in the third quarter and first nine months of 2004 as compared to the same periods in 2003 while inventory valuation adjustments and various overhead costs, including manpower, were higher in the current year than last year.

SG&A, R&D and other-net expenses of \$16.2 million were \$2.6 million higher in the third quarter 2004 than in the third quarter 2003. The third quarter 2004 year-to-date expenses of \$49.4 million were \$9.7 million higher than the expenses in the comparable period in 2003. Incentive compensation expenses and the currency impact on the translation of the international subsidiaries were main causes of the increased expenses in the quarter and the first nine months of the year. Exchange losses, particularly in the first half of the year, also contributed to the higher expenses in 2004. Various sales volume related expenses, including commissions and travel, were higher in the current year as were manpower costs, as a result of a slight increase in staffing and higher fringe benefit costs.

The operating loss for the Metal Systems Group was \$0.9 million in the third quarter 2004 compared to an operating loss of \$8.0 million in 2003 while year-to-date operating profit of \$4.1 million in 2004 was an \$18.3 million improvement over the \$14.2 million loss in 2003. The growth in profitability resulted from the increased margin from the higher sales volumes and other causes offset in part by the negative impact of the cost of copper and higher expenses.

Microelectronics Group

		Quarter ided		ine Months Inded
Millions	Oct 1, 2004	Sept 26, 2003	Oct 1, 2004	Sept 26, 2003
Sales	\$49.0	\$39.4	\$150.5	\$115.3
Operating Profit	\$ 3.9	\$ 3.8	\$ 14.2	\$ 9.8

The MEG includes Williams Advanced Materials Inc. (WAM), a wholly owned subsidiary, and Electronic Products. Sales by each unit were as follows:

		Third Quarter Ended		ne Months nded
Millions	Oct 1, 2004	Sept 26, 2003	Oct 1, 2004	Sept 26, 2003
WAM	\$41.5	\$31.9	\$127.0	\$92.1
Electronic Products	7.5	7.5	23.5	23.2

WAM manufactures precious, non-precious and specialty metal products, including vapor deposition targets, frame lid assemblies, clad and precious metal preforms, high temperature braze materials and ultra-fine wire. The cost of the precious metal sold by WAM is passed through to the customer and WAM generates its margin on its fabrication efforts and not on the particular metal sold. Metal prices on average have been higher through out 2004 than in the comparable periods in 2003, thereby increasing sales without a proportional flow through to margins. The growth in the underlying volumes was less than the 30% growth in sales in the quarter and 38% growth in sales in the first three quarters of the year.

The growth in WAM's sales in 2004 is driven by strong demand for electronic packaging and physical vapor deposition materials from the telecommunications and computer market, and specifically from the handset/cell phone segment. However, demand from the wireless applications began to slow down late in the third quarter and into the early portion of the fourth quarter. Demand from the microelectronics market for frame lids and other materials was strong during the majority of 2004. Demand from the smaller markets for WAM's products, including defense and medical, also contributed to the sales growth in the first three quarters of 2004, as did WAM's development efforts to provide new products for semiconductor applications.

Electronic Products consists of Brush Ceramic Products Inc. and Zentrix Technologies Inc., two wholly owned subsidiaries. These operations produce beryllia ceramics, electronic packages and circuitry for sale into the telecommunications and computer, medical, electronics, automotive and defense markets. Total Electronic Products sales of \$7.5 million in the third quarter 2004 were unchanged from the third quarter 2003 while third quarter 2004 year-to-date sales of \$23.5 million were up only \$0.3 million over the same period in 2003. Sales of beryllia ceramics and electronic packages were higher in both the third quarter and the first three quarters of 2004 than in the comparable periods in 2003. The higher sales of these materials were mainly due to improved demand from the telecommunications and computer market as demand from the automotive market remained relatively flat. Sales of circuitry declined in the third quarter and the first nine months of 2004, offsetting the majority of the growth in the other products. Commercial applications for circuits have been slow to develop while sales for defense applications continue to be met with program delays.

The gross margin on MEG sales was \$9.7 million in the third quarter 2004 and \$8.0 million in the third quarter 2003. For the first three quarters of the year, the gross margin was \$30.6 million, or 20% of sales, in 2004 and \$23.7 million, or 21% of sales, in 2003. The higher precious metal prices in 2004 serve to reduce the margin percent by increasing the sales value but not necessarily the margin dollars. Improved sales volumes generated an additional \$2.3 million of margin in the third quarter 2004 and \$8.7 million in the first nine months of 2004. Manufacturing efficiencies improved in 2004, particularly within the Buffalo, New York and the Tucson, Arizona operations. Offsetting a portion of these benefits was an increase in manufacturing overhead expenses of \$0.5 million in the third quarter 2004 and \$1.0 million in the first three quarters of 2004. The product mix within the MEG was also unfavorable in both the third quarter and year-to-date periods in 2004.

SG&A, R&D and net-other expenses were \$1.6 million higher in the third quarter 2004 than in the third quarter 2003 and \$2.5 million higher in the first three quarters 2004 than in the comparable period in 2003. Increased administrative costs, including legal and worker's compensation expenses, along with the higher incentive compensation expense were the main causes of the change in expenses between periods.

The operating profit for the MEG was \$3.9 million in the third quarter 2004, a slight improvement over the \$3.8 million profit generated in the third quarter 2003. Operating profit was \$14.2 million in the first three quarters of 2004, an improvement of \$4.4 million over the \$9.8 million profit in the prior year. The MEG's operating profit was 9% of sales in the first three quarters of both years.

Legal

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

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

	Quarter Ended	
	Oct.1, 2004	Jul. 2, 2004
Total cases pending	13	13
Total plaintiffs	60	32
Number of claims (plaintiffs) filed during period ended	3(32)	0(0)
Number of claims (plaintiffs) settled during period ended	2(3)	1(2)
Aggregate cost of settlements during period ended (dollars in thousands)	\$ 90	\$ 6
Number of claims (plaintiffs) otherwise dismissed	1(1)	0(0)
Number of claims (plaintiffs) voluntarily withdrawn	0(0)	0(0)

Additional beryllium claims may arise. We believe that we have substantial defenses in these cases and intend to contest the suits vigorously. Employee cases, in which plaintiffs have a high burden of proof, have historically involved relatively small losses to us. Third party plaintiffs (typically employees of customers or contractors) face a lower burden of proof than do employees or former employees, but these cases are generally covered by varying levels of insurance. Included in the thirteen cases pending as of October 1, 2004 were four purported class actions involving 38 plaintiffs. A reserve was recorded for beryllium litigation of \$1.9 million at October 1, 2004 and \$2.9 million at December 31, 2003. A receivable was recorded of \$2.0 million at October 1, 2004 and \$3.2 million at December 31, 2003 from our insurance carriers as recoveries for insured claims. An additional \$0.5 million was reserved for insolvencies as of October 1, 2004 and \$0.9 million as of December 31, 2003. These insolvencies relate to claims still outstanding as well as claims for which partial payments have been received.

Although it is not possible to predict the outcome of pending litigation against our subsidiaries and us, we provide for costs related to these matters when a loss is probable and the amount is reasonably estimable. Litigation is subject to many uncertainties, and it is possible that some of these actions could be decided unfavorably in amounts exceeding our reserves. An unfavorable outcome or settlement of a pending beryllium case or additional adverse media coverage could encourage the commencement of additional similar litigation. We are unable to estimate our potential exposure to unasserted claims.

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

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

Financial Position

Cash flow provided from operations was \$11.7 million in the first nine months of 2004. Cash received from the sale of goods was \$362.3 million while cash used for goods and expenses totaled \$342.3 million and cash paid for interest and taxes totaled \$8.3 million in the first nine months of 2004. The cash balance was \$27.0 million at the end of the third quarter 2004, an increase of \$21.9 million since the end of 2003. The cash balance increased primarily as a result of the cash flow from operations and proceeds from the new share offering offset in part by capital expenditures and a repayment of debt.

The accounts receivable balance was \$72.6 million at the end of the third quarter 2004, an increase of \$17.5 million since year-end 2003. The majority of the change in receivables was due to the higher sales volumes, with the remainder due to an increase in the average collection period as measured by the days sales outstanding (DSO). The DSO increased in part due to the growth in international sales, which generally take longer to collect.

The inventory balance of \$96.5 million as of the end of the third quarter 2004 was \$9.1 million higher than at the end of the prior year. As with receivables, the inventory increase was in support of the higher sales volumes. Inventory turns, a measure of how quickly inventory on average is sold, improved slightly in the third quarter 2004 compared to the fourth quarter 2003. The majority of the inventory increase was in the Metal Systems Group. The increase in Alloy Products' FIFO valued inventory was a combination of higher production requirements and the increased cost of copper and nickel. Inventory within Beryllium Products increased to support the Webb telescope program shipping schedule, as these materials have longer production times. Inventories within Brush Resources increased in the first half of the year as a result of campaigning the production schedule in order to operate the facility more efficiently, but those inventories started to decline in the third quarter with lower production levels and higher shipments.

Capital expenditures for property, plant and equipment and mine development were \$5.1 million in the first nine months of 2004. Spending by the Metal System Group totaled \$2.8 million, with \$1.9 million of that total spent at the Elmore, Ohio facility in support of various group operations. Spending by the MEG totaled \$1.9 million in the first nine months of 2004, with WAM operations accounting for \$1.5 million of that total. Capital spending has averaged \$1.6 million per quarter for the last 12 quarters, with spending generally limited to small, individual projects rather than large integrated projects. While discreet pieces of equipment may be nearing capacity limitations, we believe that existing manufacturing capacity, coupled with alternative processes and sources for materials, is generally adequate to meet current demand.

We terminated the company-owned life insurance program in the second quarter 2004 and received \$0.8 million representing the cash surrender value of the policies as of the termination date net of the outstanding loans.

Goodwill increased by \$0.1 million during 2004 as result of buying out our minority partner in a joint venture in Taiwan.

Other liabilities and accrued items increased by \$1.9 million during the first nine months of 2004. The main cause of this change was an increase in incentive compensation accruals, which were higher due to the improved profitability in the current year.

Unearned revenue, which is a liability resulting from advance billings for products that have yet to be shipped under long-term sales programs, was \$6.5 million at the end of the third quarter 2004. There was no unearned revenue liability as of the end of 2003.

We completed a stock offering of 2.3 million new shares during the third quarter 2004. The net proceeds, after deducting all fees, were \$38.7 million. The majority of the proceeds were initially used to repay outstanding borrowings under the revolving credit agreement. We retain the ability to re-borrow these funds under the revolving credit agreement in the future. We also used \$5.0 million of the proceeds to repay a portion of the \$35.0 million long-term subordinated note. The remaining portion of the stock proceeds was held as cash to be used for general corporate purposes.

Total balance sheet debt was \$72.9 million at the end of the third quarter 2004, a decline of \$26.3 million for the year. Prior to the pay down with a portion of the proceeds from the share offering in the third quarter, debt had increased in 2004 mainly in support of the higher working capital requirements. As of the end of the third quarter 2004, short-term debt was \$1.6 million higher than at December 31, 2003 while long-term debt declined \$27.9 million during the first nine months of the year.

Precious metal consigned inventories increased \$5.9 million in the first nine months of 2004 in order to support the higher level of MEG sales. Approximately \$1.4 million of this increase was due to metal prices at the end of the third quarter 2004 being higher than at the end of 2003. The notional balance of key off-balance sheet leases was reduced by \$1.2 million during the first three quarters of 2004 as a result of the scheduled payments.

We received \$2.9 million from the exercise of 196,000 employee stock options during the first nine months of 2004.

Cash provided from operations was \$18.1 million in the first nine months of 2003 as the working capital changes and the effects of depreciation more than offset the net loss. Cash received for the sale of goods totaled \$286.6 million while cash paid for goods and expenses was \$266.2 million and cash paid for interest and taxes was \$2.3 million in the first three quarters of 2003. Cash balances totaled \$4.8 million at the end of the third quarter 2003, an increase of \$0.4 million during the year. Accounts receivable increased \$9.4 million in the first nine months of 2003 primarily due to sales volumes, but also due to a longer DSO. Inventories decreased \$6.3 million due to on-going programs to improve inventory utilization as well as yield and manufacturing improvements. Capital expenditures were \$4.9 million in the first nine months of 2003 with the MEG accounting for \$2.4 million and the Metal Systems Group \$1.6 million of that total. Balance sheet debt declined \$12.0 million in the first three quarters of 2003.

Critical Accounting Policies

Deferred Taxes: A valuation allowance was initially recorded against domestic and certain foreign deferred tax assets in the fourth quarter 2002 as a result of our then recent cumulative losses. The deferred tax benefits related to losses incurred in the first nine months of 2003 were offset by an increase in the valuation allowance. However, in the first nine months of 2004, the deferred tax valuation allowance was reduced to offset the domestic federal and certain foreign tax expense that would have been recorded against pre-tax income. In subsequent periods when we generate pre-tax income, a federal tax expense will not be recorded to the extent that the remaining valuation allowance can be used to offset that expense. Once a consistent pattern of pre-tax income is established or other events occur that indicate that the deferred tax assets will be realized, additional portions or all of the remaining valuation allowance will be reversed back to income.

Should we generate pre-tax losses in subsequent periods, a tax benefit will not be recorded and the valuation allowance will be increased. Despite the valuation allowance, we retain the ability to utilize the benefits of the domestic loss carry-forwards and other deferred tax assets on future tax returns.

The recently terminated company-owned life insurance program had provided tax savings and cash benefits for a number of years after its inception in 1986. However, subsequent changes in the tax code served to reduce and eventually eliminate those benefits and current projections showed that continuing the program would result in a net cash outlay and expense going forward. While termination of the program did not impact

income before income taxes on the consolidated statement of income, it did generate a tax liability calculated on the gross book value of the outstanding policies. This tax liability was offset by the use of a net operating loss carry-forward, which in turn resulted in a \$5.3 million reduction in the deferred tax valuation allowance available to reverse against future income. Our projections show that the future annual savings from eliminating the program should exceed this reduction in the available valuation allowance.

Pensions. As a result of recently enacted legislation, we do not believe that the previously estimated pension plan contribution of \$1.7 million, as disclosed in our annual report to shareholders for the year ended December 31, 2003, will be required to be made in 2004.

For additional information regarding our critical accounting policies, please refer to pages 25 to 27 of our annual report to shareholders for the period ended December 31, 2003.

Outlook

Sales in the third quarter 2004 were 2% lower than the second quarter 2004, which is a smaller decline than we have experienced between the second and third quarters in recent years. However, the new sales order entry rate slowed down during the third quarter, partially due to seasonality factors, but also due to excess inventory positions by our customers and downstream demand generators within the supply chain. Demand from Japan and portions of Asia have also slowed recently. Therefore, we are anticipating that sales for the fourth quarter 2004 will be lower than the third quarter 2004, but approximately 10% higher than the fourth quarter 2003 sales of \$105.6 million.

The proceeds from the share offering coupled with the cash flow from operations has resulted in a reduction in debt (which in turn leads to lower interest expense), an increase in cash balances and an improvement in our debt to equity ratio. The offering also improved our liquidity and financing flexibility, as the capacity under the revolving credit agreement remains available for future borrowings.

Item 3. Quantitative and Qualitative Disclosure about Market Risk

We are exposed to movements in the purchase price of base metals, primarily copper. We are only able to cover a portion of this exposure by passing the change in prices through to our customers. We currently do not have any copper swaps or other derivative financial instruments in place to hedge the remaining exposure. Therefore, margins will continue to be adversely affected to the extent that prices for copper remain high and we cannot pass through this higher cost in the form of price increases to our customers.

For additional information regarding the Company's market risks, please refer to pages 27 and 28 of the Company's annual report to shareholders for the period ended December 31, 2003.

Item 4. Controls and Procedures

As of the end of the period covered by this report, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's President, Chairman and Chief Executive Officer, and Vice President Finance and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Exchange Act Rule 13a-15(b). Based upon that evaluation, the Company's management has concluded that the Company's disclosure controls and procedures are effective. There have been no changes in the Company's internal control over financial reporting identified in connection with the evaluation required by Exchange Act rule 13a-15(d) that occurred during the Company's last fiscal quarter 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

We and our subsidiaries 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 October 1, 2004, our subsidiary, Brush Wellman Inc. was a defendant in 13 proceedings in various state and federal courts brought by plaintiffs alleging that they have contracted, or have been placed at risk of contracting, chronic beryllium disease or other lung conditions as a result of exposure to beryllium. Plaintiffs in beryllium cases seek recovery under theories of intentional tort and various other legal theories and seek compensatory and punitive damages, in many cases of an unspecified sum. Spouses of some plaintiffs claim loss of consortium.

During the third quarter of 2004, the number of beryllium cases changed from 13 (involving 32 plaintiffs) as of July 2, 2004 to 13 cases (involving 60 plaintiffs) as of October 1, 2004. During the third quarter, one third party case (involving one plaintiff) was voluntarily dismissed by the plaintiff. One third party case (involving two plaintiffs) was settled and dismissed. One third party case (involving one plaintiff) that had previously been reported as settled, has been dismissed by the court. Two third party cases (involving 12 plaintiffs) were filed in the quarter. In one purported class action that was previously reported on, an amended complaint was filed (involving five additional named plaintiffs). One purported class action (involving 15 named plaintiffs) which was previously reported as having been filed, has been served on the Company.

The 13 pending beryllium cases as of October 1, 2004 fall into two categories: 9 cases involving third-party individual plaintiffs, with 13 individuals (and seven spouses who have filed claims as part of their spouse's case and two children who have filed claims as part of their parent's case); and four purported class actions, involving 38 individuals, as discussed more fully below. Claims brought by third-party plaintiffs (typically employees of our customers or contractors) are generally covered by varying levels of insurance.

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

The second purported class action is Manuel Marin, *et al.* v. Brush Wellman Inc., filed in Superior Court of California, Los Angeles County, case number BC299055, on July 15, 2003. The named plaintiffs are Manuel Marin, Lisa Marin, Garfield Perry and Susan Perry. The defendants are Brush Wellman, Appanaitis Enterprises, Inc. and Doe Defendants 1 through 100. A First Amended Complaint was filed on September 15, 2004, naming five additional plaintiffs. The five additional named plaintiffs are Robert Thomas, Darnell White, Leonard Joffrion, James Jones and John Kesselring. The plaintiffs allege that they have been sensitized to beryllium while employed at the Boeing Company. The plaintiffs' wives claim loss of consortium.

The plaintiffs purport to represent two classes of approximately 250 members each, one consisting of workers who worked at Boeing or its predecessors and are beryllium sensitized and the other consisting of their spouses. They have brought claims for negligence, strict liability – design defect, strict liability – failure to warn, fraudulent concealment, breach of implied warranties, and unfair business practices. The plaintiffs seek injunctive relief, medical monitoring, medical and health care provider reimbursement, attorneys' fees and costs, revocation of business license, and compensatory and punitive damages. Messrs. Marin, Perry, Thomas, White, Joffrion, Jones and Kesselring represent current and past employees of Boeing in California; and Ms. Marin and Ms. Perry are spouses.

The third purported class action is Neal Parker, *et al.* v. Brush Wellman Inc., filed in Superior Court of Fulton County, State of Georgia, case number 2004CV80827, on January 29, 2004. The case was removed to the U.S. District Court for the Northern District of Georgia, case number 04-CV-606, on March 4, 2004. The named plaintiffs are Neal Parker, Wilbert Carlton, Stephen King, Ray Burns, Deborah Watkins, Leonard Ponder, Barbara King and Patricia Burns. The defendants are Brush Wellman; Schmiede Machine and Tool Corporation; Thyssenkrupp Materials NA Inc., d/b/a Copper and Brass Sales; Axsys Technologies, Inc.; Alcoa, Inc.; McCann Aerospace Machining Corporation; Cobb Tool, Inc.; and Lockheed Martin Corporation. Messrs. Parker, Carlton, King and Burns and Ms. Watkins are current employees of Lockheed. Mr. Ponder is a retired employee, and Ms. King and Ms. Burns are family members. The plaintiffs have brought claims for negligence, strict liability, fraudulent concealment, civil conspiracy and punitive damages. The plaintiffs seek a permanent injunction requiring the defendants to fund a court-supervised medical monitoring program, attorneys' fees and punitive damages.

The fourth purported class action is George Paz, *et al.* v. Brush Engineered Materials Inc., *et al.* filed in the U.S. District Court for the Southern District of Mississippi, case number 1:04CV597 on June 30, 2004. The named plaintiffs are George Paz, Barbara Faciane, Joe Lewis, Donald Jones, Ernest Bryan, Gregory Condiff, Karla Condiff, Odie Ladner, Henry Polk, Roy Tootle, William Stewart, Margaret Ann Harris, Judith Lemon, Theresa Ladner and Yolanda Paz. The defendants are Brush Engineered Materials Inc.; Brush Wellman Inc.; Wess-Del, Inc.; and the Boeing Company. Plaintiffs seek the establishment of a medical monitoring trust fund as a result of their alleged exposure to products containing beryllium, attorneys' fees and expenses, and general and equitable relief. The plaintiffs purport to sue on behalf of a class of present or former Defense Contract Management Administration (DCMA) employees who conducted quality assurance work at Stennis Space Center and the Boeing Company at its facility in Canoga Park, California; present and former employees of Boeing at Stennis; and spouses and children of those individuals. Messrs. Paz and Lewis and Ms. Faciane represent current and former DCMA employees at Stennis. Mr. Jones represents DCMA employees at Canoga Park. Messrs. Bryan, Condiff, Ladner, Park, Polk, Tootle and Stewart and Ms. Condiff represent Boeing employees at Stennis. Ms. Harris, Ms. Lemon, Ms. Ladner and Ms. Paz are family members.

Other Claims

As previously reported, the Company, one of its subsidiaries, Brush Wellman Inc., and the Brush Beryllium Co., were defendants in Robert Schultz v. Brush Engineered Materials Inc., *et al.*, filed in Circuit Court, Third Judicial Circuit, Madison County, Illinois, case number 04-L-191 on May 14, 2004. There were 73 other named defendants. Plaintiff alleged that he contracted asbestos-related diseases as a result of working with and around the products of the defendants. On September 24, 2004, defendants Brush Engineered Materials Inc., Brush Wellman Inc., and the Brush Beryllium Co. were dismissed. The case remains pending as to the other defendants.

Item 6. Exhibits

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10.1	Second Amendment dated September 13, 2004 to the Deferred Compensation Plan for Non-employee Directors
11	Statement re computation of per share earnings (filed as Exhibit 11 to Part I of this report)
31.1	Rule 13a-14(a) Certification
31.2	Rule 13a-14(a) Certification
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

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.

BRUSH ENGINEERED MATERIALS INC

Dated: November 4, 2004

/s/ John D. Grampa

John D. Grampa Vice President Finance and Chief Financial Officer

AMENDMENT NO. 2

BRUSH ENGINEERED MATERIALS INC. DEFERRED COMPENSATION PLAN FOR NONEMPLOYEE DIRECTORS (AS AMENDED AS OF MAY 16, 2000)

Recitals

WHEREAS, Brush Engineered Materials Inc. (the "Company") has adopted the Brush Engineered Materials Inc. Deferred Compensation Plan for Nonemployee Directors (As Amended as of May 16, 2000) and as further amended by Amendment No. 1 (the "Plan").

WHEREAS, the Company now desires to amend the Plan further (this "Amendment No. 2"); and

WHEREAS, the Board of Directors of the Company has approved this Amendment No. 2.

Amendment

NOW, THEREFORE, the Plan is hereby amended by this Amendment No. 2, effective as of September 13, 2004, as follows:

- 1. Section 5.1 of the Plan is amended to read as follows:
 - "5.1. *Time of Payment*. Distribution of a Director's Deferred Compensation Account shall commence or be made in the manner described in Section 5.2 hereof as soon as is reasonably practicable, but not later than 60 days, after the earlier of: (i) the date of termination of service as a Director on account of resignation, retirement, death or otherwise, (ii) if so specified on the Director's initial election form (or on the 2005 election form for all current Directors, other than a current Director who has attained age 70 and has so notified the Committee in writing prior to September 13, 2004), the date the Director reaches the age of 70 or older, or (iii) the occurrence of a Change in Control of the Company. However, if the amount credited to any Director's Deferred Compensation Account is less than \$17,500, the distribution shall be in a lump sum on the applicable date."

2. Except as amended by this Amendment No. 2, the Plan shall remain in full force and eff	2. E	xcept as am	ended by this	Amendment No.	2, the Plan s	shall remain i	n full force and effec
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Brush Engineered Materials Inc. and Subsidiaries Computation of Per Share Earnings

	Third Qua	arter Ended Nine Mo		Ionths Ended	
	Oct. 1 2004	Sept. 26 2003	Oct. 1 2004	Sept. 26 2003	
Basic:					
Average shares outstanding	18,936,641	16,563,098	17,414,097	16,562,559	
Net income/(loss)	\$ 3,431,000	\$ (3,060,000)	\$13,755,000	\$ (6,039,000)	
Per share amount	\$ 0.18	\$ (0.18)	\$ 0.79	\$ (0.36)	
Diluted:					
Average shares outstanding	18,936,641	16,563,098	17,414,097	16,562,559	
Dilutive stock options based on the treasury stock method using average market price	372,052	_	342,562	_	
Totals	19,308,693	16,563,098	17,756,659	16,562,559	
Net income/(loss)	\$ 3,431,000	\$ (3,060,000)	\$13,755,000	\$ (6,039,000)	
Per share amount	\$ 0.18	\$ (0.18)	\$ 0.77	\$ (0.36)	

CERTIFICATIONS

I, Gordon D. Harnett, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Brush Engineered Materials Inc. (the "Company");
- 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 Company as of, and for, the periods presented in this report;
- 4. The Company'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)) for the Company and we have:
 - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, 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;
 - evaluated the effectiveness of the Company'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
 - c) disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
- 5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company'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 reasonable likely to adversely affect the Company'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 Company's internal control over financial reporting.

Dated: November 4, 2004 /s/ Gordon D. Harnett
Gordon D. Harnett
Chairman Provident and Chief Franctics Co

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 Brush Engineered Materials Inc. (the "Company");
- 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 Company as of, and for, the periods presented in this report;
- 4. The Company'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)) for the Company and we have:
 - designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, 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) evaluated the effectiveness of the Company'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
 - c) disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
- 5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company'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 reasonable likely to adversely affect the Company'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 Company's internal control over financial reporting.

Dated: November 4, 2004

/s/ John D. Grampa John D. Grampa Vice President Finance and CFO

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

I, Gordon D. Harnett, President, Chairman of the Board and Chief Executive Officer of Brush Engineered Materials Inc. (the "Company"), do hereby certify in accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge,

- 1. The Quarterly Report on Form 10-Q of the Company for the period ending October 1, 2004 (the "Periodic 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 Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 4, 2004

/s/ Gordon D. Harnett

Gordon D. Harnett President, Chairman of the Board and Chief Executive Officer

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

I, John D.Grampa, Vice President Finance and Chief Financial Officer of Brush Engineered Materials Inc. (the "Company"), do hereby certify in accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge,

- 1. The Quarterly Report on Form 10-Q of the Company for the period ending October 1, 2004 (the "Periodic 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 Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 4, 2004

/s/ John D. Grampa

John D. Grampa Vice President Finance and Chief Financial Officer