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

FORM 8-K

CURRENT REPORT

**Pursuant to Section 13 OR 15(d) of The
Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported) September 12, 2006

Brush Engineered Materials Inc.

(Exact name of registrant as specified in its charter)

Ohio

(State or other jurisdiction
of incorporation)

001-15885

(Commission
File Number)

34-1919973

(IRS Employer
Identification No.)

17876 St. Clair Avenue, Cleveland, Ohio

(Address of principal executive offices)

44110

(Zip Code)

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

Not Applicable

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 7.01 Regulation FD Disclosure

On September 12, 2006, Brush Engineered Materials Inc., an Ohio corporation (the “Company”), updated its website with materials that will be presented by Richard J. Hipple, Chairman of the Board, President and Chief Executive Officer and John Grampa, Vice President Finance and Chief Financial Officer, to investors on September 14, 2006. A copy of the presentation is attached hereto as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits

Exhibits:

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
99.1	September 2006 Investor Presentation

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 hereunto duly authorized.

Brush Engineered Materials Inc.

September 12, 2006

By: Michael C. Hasychak

Michael C. Hasychak
Vice President, Treasurer and Secretary



... creating innovative engineered material solutions and services to make our customers competitive on a global basis

... while enhancing earnings growth and stability by broadening technology, market, and geographic reach

***KeyBank Capital Markets
Basic Materials & Packaging Conference
September 14, 2006***

Forward-Looking Statements

These slides contain (and the accompanying oral discussion will contain) “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These statements involve known and unknown risks, uncertainties and other factors that could cause the actual results of the Company to differ materially from the results expressed or implied by these statements, including health issues, litigation and regulation relating to our business, our ability to achieve profitability, significant cyclical fluctuations in our customers’ businesses, competitive substitutes for our products, risks associated with our international operations, including foreign currency rate fluctuations, energy costs and the availability and prices of raw materials and other factors disclosed in periodic reports filed with the Securities and Exchange Commission. Consequently these forward looking statements should be regarded as the Company’s current plans, estimates and beliefs.

The Company does not undertake and specifically declines any obligation to publicly release the results of any revisions to these forward-looking statements that may be made to reflect any future events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events.

Overview

- **Company:** **Brush Engineered Materials Inc.**
founded 1931, publicly traded since 1956
- **NYSE Ticker:** **BW**
- **Shares Outstanding:** **Approximately 19.9 million at 6/30/06**
- **Market Cap:** **Approximately \$400 million at 6/30/06**
- **Component of:** **S&P Super Composite 1500**
Russell 2000
S&P Small Cap 600
- **Annual Revenue:** **\$541 million @ 12/31/05...\$690-\$710 expected in 2006**
- **Diluted EPS:** **\$.92 in 2005...\$1.09 to \$1.17 expected in 2006**
- **Debt to Total Capitalization:** **21% at 12/31/05**

First Half 2006

- Fourteen consecutive quarters of sales growth
- A new high, even after adjusting for metal price inflation
- Sales up 34% to \$355 million
- Pretax profit up 69%
- Earnings per share up 22%

Stronger conditions in most of our markets driving solid sales growth in the first half of 2006

- Strong sales growth driven by
 - Broad based demand increase and new products
 - Added sales from acquisitions
 - Higher metal prices
- Consumer electronics a primary factor
 - Cell phones
 - Hard disk drives
 - Disk drive arms
- Industrial products growth another important factor

Brush Engineered Materials Inc. Profile

- A leading manufacturer of high performance specialty engineered materials ... *an enabling materials technology company*
- Operations, service centers and major office locations in North America, Europe and Asia
- Serving long-term growth oriented global markets from consumer electronics to heavy mining equipment

Advancing the World's Technologies

- Strong customer collaboration ... providing enabling technology solutions and service
- Typical advanced material solutions
 - Strength
 - Reliability
 - Thermal & electrical conductivity
 - Miniaturization
 - Weight reduction
 - Corrosion resistance
 - Reflectivity
- Targeting growth applications in growing markets

Typical End Uses



Notebook and
network computers

Cellular phones and other
wireless communications



Aerospace and
Defense



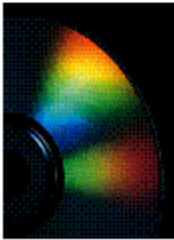
Electronic components
in cars and trucks



Medical



Magnetic & Optical
Data Storage for hard
disk drives

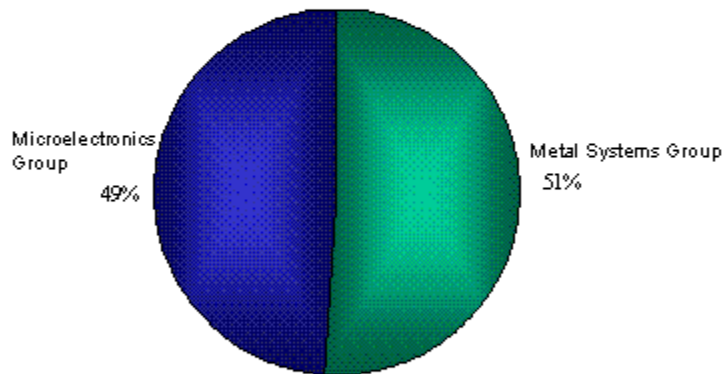


Industrial products
For Oil & Gas and
mining

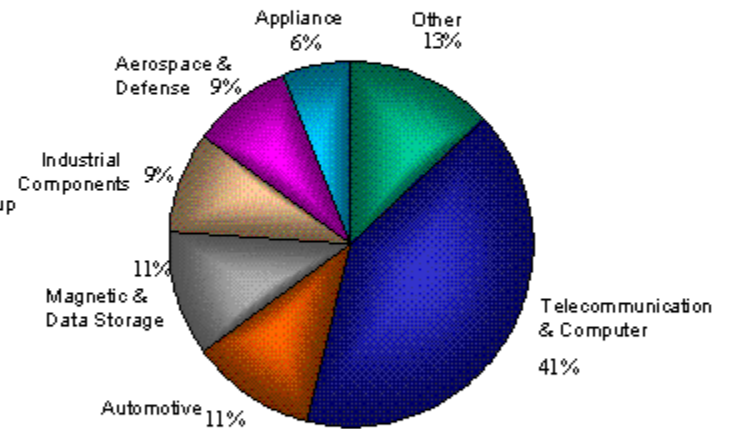


Global Leader in High Performance Engineered Materials

YTD 2006 Revenue by Segment



YTD 2006 Revenue by Market

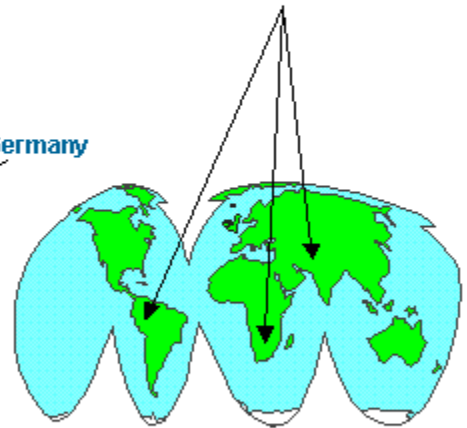
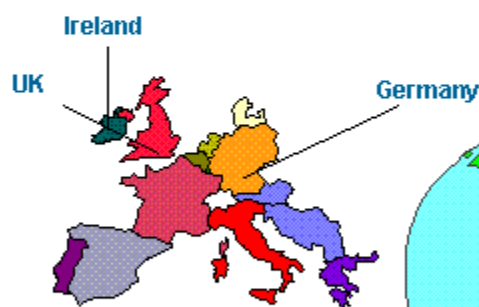
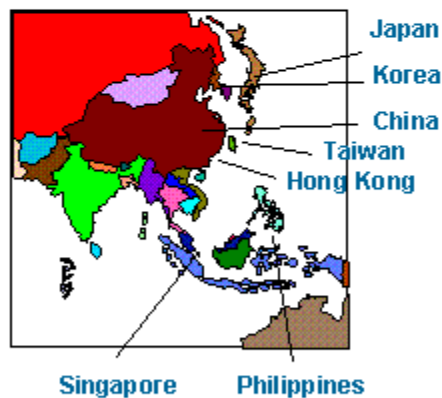


Note: Total 6 month YTD 2006 revenues were \$354.8 million

Global Sales and Distribution Network

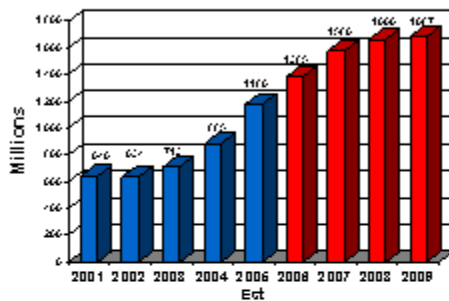
- Operations in the U.S. and ten foreign locations
- International sales YTD Q2 were 33% and growing
- Act globally ... service locally!

◀ ----- Asia / Pacific ----- ▶ ◀ ----- Europe ----- ▶ ◀ - Exports from USA - ▶

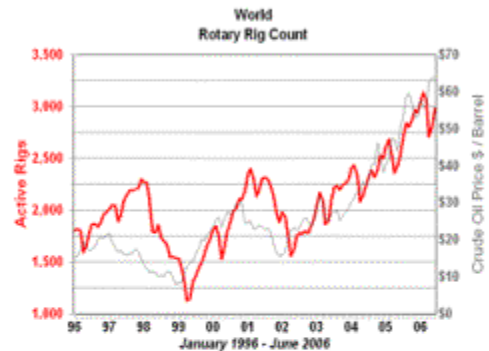


BEM – Targeting Growth Applications in Growing Markets

Disk Drive Head Demand



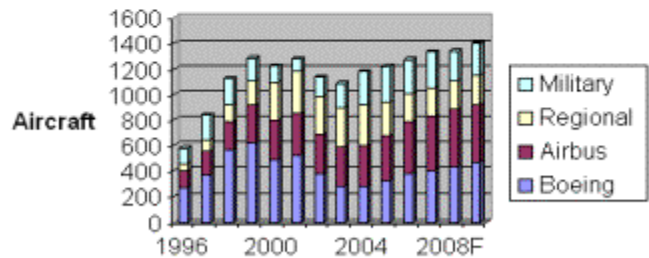
Oil & Gas



Mobile Telecommunications

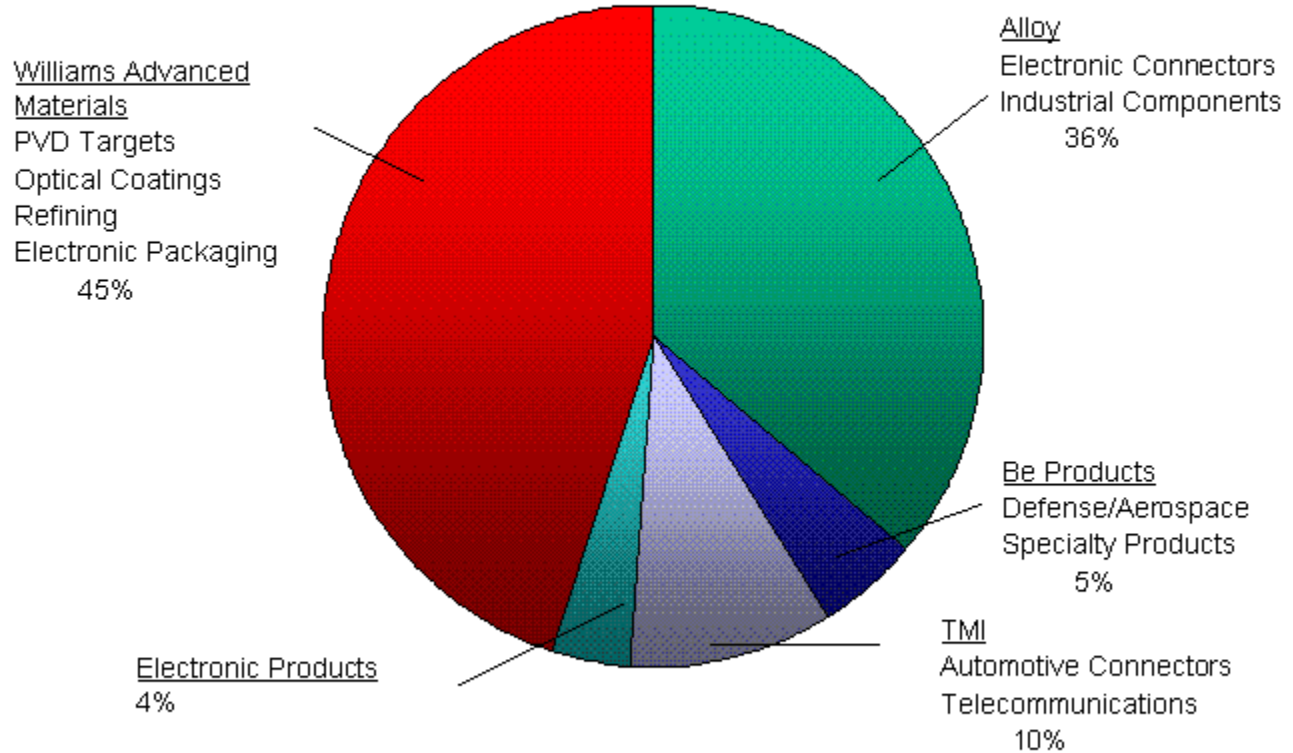


Commercial and Military New Jet Aircraft Forecast



Brush Engineered Materials – Major Business Units

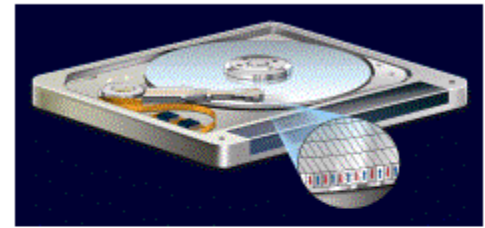
YTD 2006 Revenue



Williams Advanced Materials also has broad capabilities in precious and non-precious materials

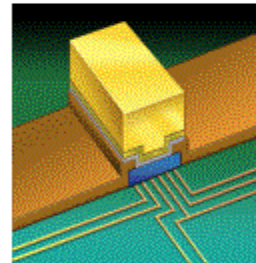
- **Comprehensive product line**

- High purity / proprietary PVD targets
- Micro-electronic packaging materials
- Specialty inorganic chemicals



- **Strong end use markets**

- Data storage
- Wireless/handsets
- semiconductor
- Optical media
- Optics

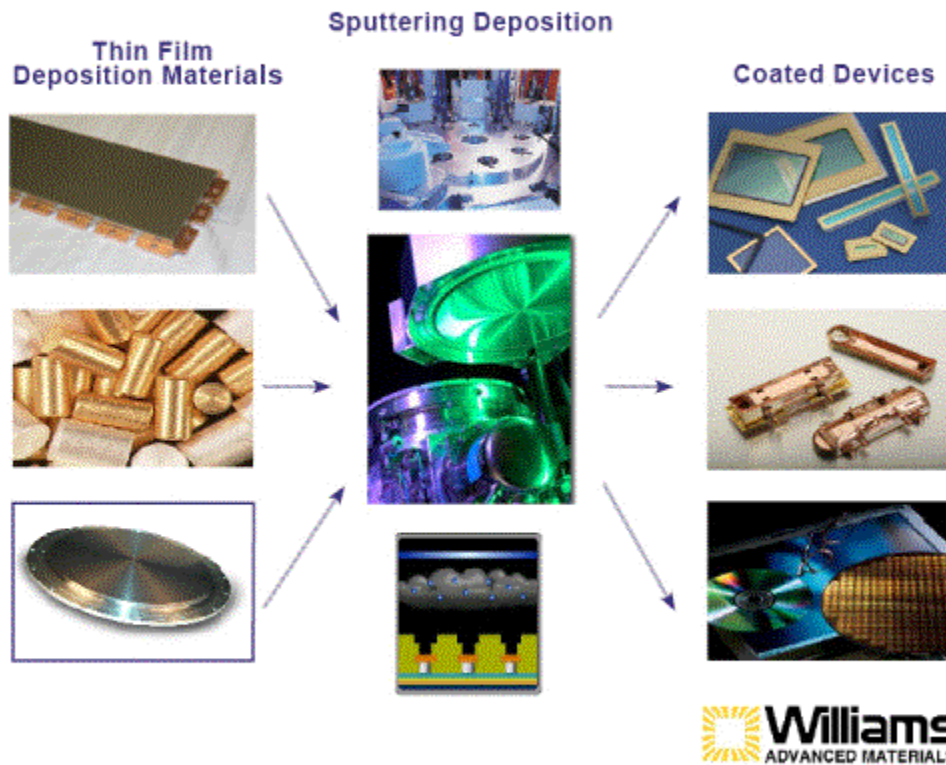


- **Industry leading service and support**

- Global sales and applications support
- "Best-in-class" response times
- Growing business in chamber services
- Low-cost operations in Singapore, Taiwan and the Philippines
- New offices in Korea, Japan, Shanghai, Czech Republic

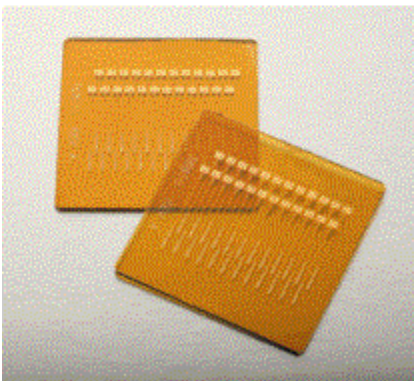


Physical Vapor Deposition (PVD) Process



Building Synergies through Smart Acquisitions

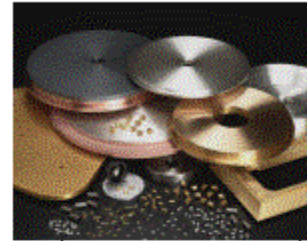
- Acquisitions of OMC Scientific, Thin Film Technology and CERAC augment Williams' technologies, markets and service capabilities
 - Expected to be strongly accretive and open up exciting new market opportunities



Williams Advanced Materials - Physical Vapor Deposition(PVD) Products



Cellular Phone (wireless)



Sputtering Targets

➤ **Markets**

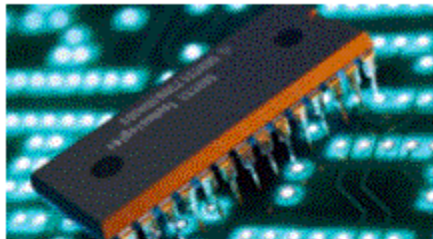
Wireless ICs, semiconductor, optical media, photonics, hard disk drives (disc & thin film heads) and performance films

➤ **Typical End-uses**

RF power amplifiers, LEDs, laser diodes, fiber optic components, integrated circuits, DVDs, hard disks, medical devices, MP3 players, mobile electronics, optical devices

- **Precious Metal Sputtering Targets and Evaporation Materials**
- **Precious Metal Refining and Chamber Services**
- **Non-precious Metal Sputtering Targets and Evaporation Materials**
- **Inorganic chemical targets**

Williams Advanced Materials - Packaging Material Products



Hybrid Microelectronic Device



Solder preforms and clad materials

- **Markets**

- Wireless, Photonics and Hybrid/
Traditional Microelectronic Devices

- **Typical End-uses**

- Cell phones, LEDs, fiber-optic
networks, PC's, military
electronics, avionics, medical
electronics, mobile appliances

- **Combo-Lids® - Frame/lid assembly**

- Hermetic sealing

- **Clad Materials**

- Thermal management

- **Bonding Wire**

- Electronic interconnect

- **Solder Preforms**

- Component attachment

- **Refining**

- Scrap recovery

World's only Fully Integrated Beryllium Producer

**Bertrandite Ore
Mining & Extraction**



Delta, UT

**Casting, Rolling
& Finishing**



Elmore, OH

**Thin Gauge Rolling
& Finishing**



Reading, PA

**Service &
Distribution Centers**



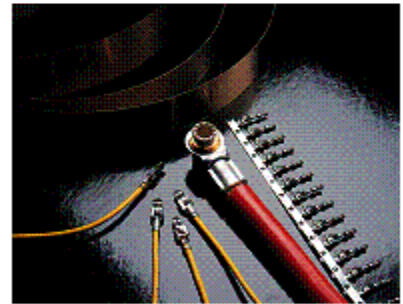
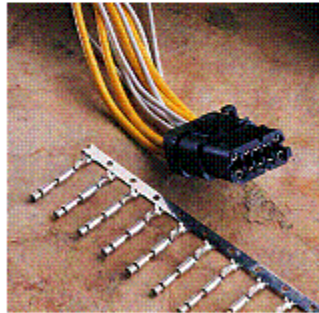
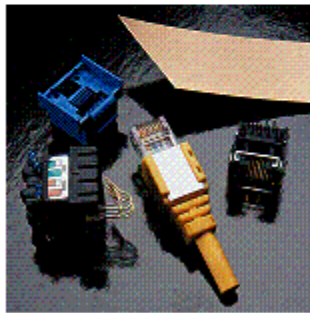
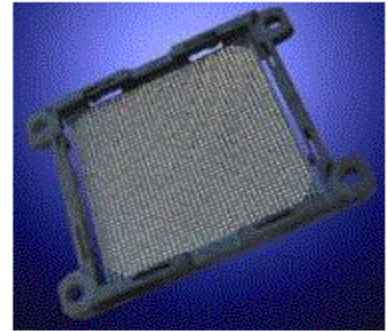
Global Network

Also, new High Be Pebbles Plant underway with DOD Title III funding

Strip Alloy Applications

(strength, conductivity, spring characteristics ... typically 1 % to 2 % Beryllium)

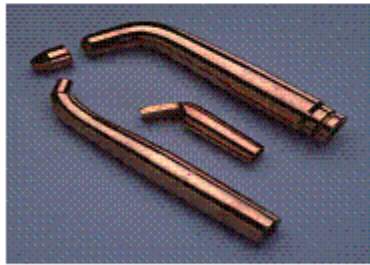
- Current Carrying Springs and Relays
- Integrated Circuitry Sockets
- Electrical and Electronic Connectors
- Air Bag Sensors
- Pressure Responsive Devices
- Fire Extinguisher Sprinkler Heads



Bulk Alloy Applications

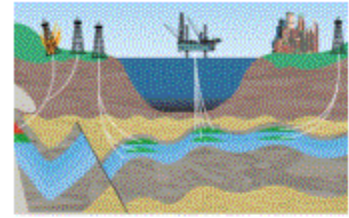
(strength, corrosion resistance, non-galling, conductivity ... typically 1% to 2% Beryllium)

- Aircraft Bushings
- Heavy Equipment Bearing and Wear Applications
- Oilfield well drilling, completion and production equipment
- Plastic Injection & Blow Molds
- Power Generation
- Undersea/Marine Housings for Telecom & Instrumentation
- Welding Electrodes & Dies



Toughmet – a new unique solution for the most challenging wear and load conditions

- **Oil & Gas...deeper drilling...tougher conditions**
 - Rotary steering drills
 - Sour well drilling and completion tools
 - Sub-sea control valves
 - Blow-out preventions
- **Heavy equipment ... larger equipment ... critical uptime**
 - Heavily loaded bushings in mining and construction
 - On highway drive trains
 - Heavy pumps
 - On highway opportunities
- **Aero ... larger planes ... tougher conditions**
 - Landing gear, wheels, and brakes
 - Airframe attachments
 - Fluid power systems
 - Boeing 777, 787; Airbus 380, 350
 - Military

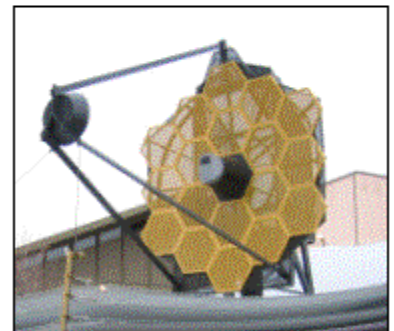
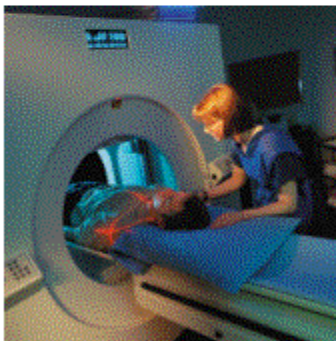


Replacing bronze, stainless, and nickel alloys

Beryllium Products – Applications

(lightweight, strength, dimensional, stability...typically 40% to 100% Beryllium)

- Optical mirrors for NASA space-based telescopes
- Infrared sensors for fighter jet optical targeting, radar and navigation/guidance systems and special ops (FLIR)
- Structural and electronic components for satellites
- X-ray windows in medical, security and commercial imaging systems
- Diaphragms for commercial and concert quality speaker systems



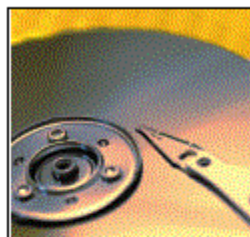
Technical Materials Inc. – solving customers' problems with engineered strip metals

Mill Products

- Specialty cladding and inlay
- Electron beam welding of dissimilar materials
- Profiling shapes by milling and/or grinding
- Close tolerance rolling

Electroplating

- Precious and non-precious metals
- Overall and selective stripe capabilities
- Combination with current TMI technologies



Disk Drive
Arms

Automotive
Control
Components



Specialty
Electronic
Connectors

Automotive, Telecom/Computer, Medical, Energy

New Products – Growing Applications in Growing Markets (all >10% annual growth expected) ... examples

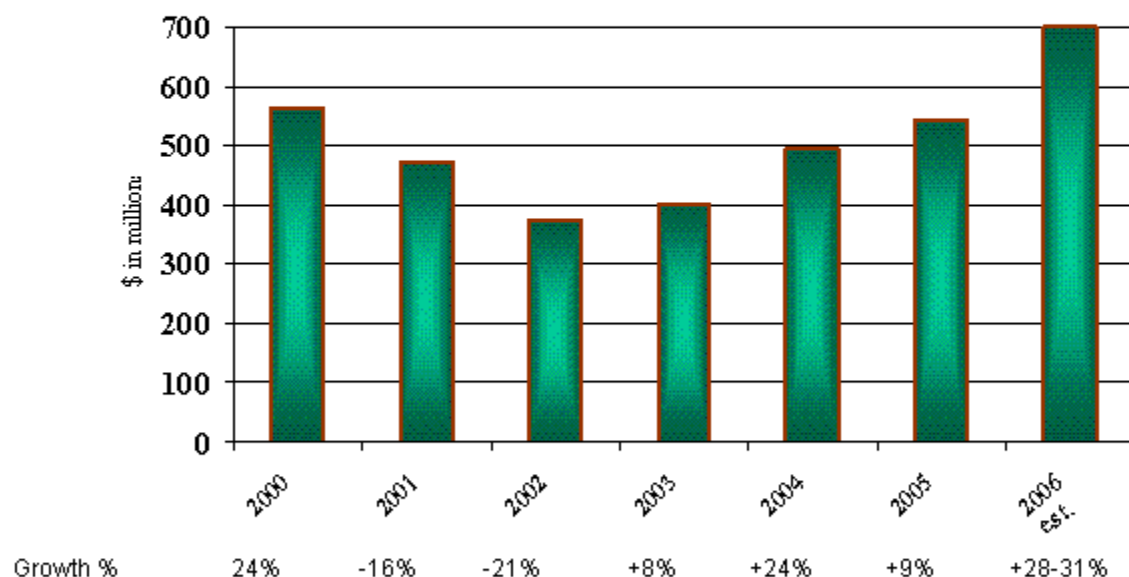
Product	Market	Driver	Division
PVD Magnetic Media	Hard Disk Drive	Increase storage capacity	WAM
PVD - UMB	Consumer Electronics	Miniaturization	WAM
PVD – Evap Pro	Compound Semiconductor	Miniaturization	WAM
Chamber Service	PVD Customers	Service demands	WAM
PVD - Visilid	Optics	IR Wavelength	WAM
Alloy 290B Strip	Portable Elec – i.e., Cell phones	Miniaturization	Alloy
Alloy 390 Strip	Portable Elec	Miniaturization and Power	Alloy
ToughMet	O&G, Aerospace, Heavy Equipment	Reliability	Alloy
Clad Stainless – Aluminum Strip	Hard Disk Drive	Increase storage capacity	TMI

Capacity to Support Profitable Market Growth

- Low capital requirement to expand capacity in Microelectronics Group
- Operating with significant available excess capacity in Metals Systems Group
- Significant on-going productivity and cycle time improvements
- Balance sheet which can support on-going "smart" accretive acquisitions

Annual Revenue: Historical

In 2001, the telecommunications and computer market declined; In 2003, our revenue growth began to return to historical rates



Our on-going performance improvement initiatives are focused on four key areas

- Expanding and diversifying the revenue base
 - Targeting niche growth applications in growing markets
 - New product innovation and service
- Improving operating efficiencies and margins
- Ongoing global expansion
- Strategic acquisitions

Margins have improved through cost reduction and productivity improvement initiatives



* Annual estimated revenue of \$690-\$710 million

Outlook

Assuming no change in recent market trends or metal prices, sales for 2006 are currently expected to be in the range of \$690 to \$710 million ... up 28% to 31%

Order book remains strong across most sectors

- Consumer electronics ... steady growth
- Telecom infrastructure seems to be solid ... driven by Asia build outs ... modest growth
- Magnetic media is healthy and growing ... strong growth, new applications
- Industrial components continues to strengthen ... strong growth
- Defense appears to be healthy ... steady growth, solid second half

Other positive factors playing an important role

- New products adding to our base
- Acquisitions adding to growth and profitability
- Gross margins are improving

Concerns or issues... macro economic related and mid East conflict

- Inventory corrections ... seasonal factors
- Second half demand

Outlook

Assuming no change to the recent projected sales range for the year, earnings in 2006 are expected to be in the range of \$1.09 to \$1.17 per share

Includes an additional \$.34 to \$.36 per share tax expense compared to 2005

- New effective tax rate of 31% to 33% vs 11% in 2005
- The majority of tax expense is non-cash due to sizable NOL's

Pretax income expected to improve by approximately 85% to 100%

- To \$32.0 - \$34.0 million range
- From \$17.0 million (excluding \$3.2 million P.Y. charge)

Gross margin % should improve by as much as 2 to 3 pts, driven by:

- Favorable mix shift
- Recent price increases

Interest expense lower due to debt reductions

In Summary, we are ...

- Encouraged by conditions in most of our markets and our initiatives to grow sales
- Very pleased with progress of acquisitions
- Confident about progress we're making with our margin improvement initiatives
- See a very good 2006

Strategic Highlights

- **Strong, diverse set of markets served**
- **Global market reach**
- **New products and services ... a culture of innovation**
- **Niche oriented product offerings**
- **Acquisitions adding to growth and earnings**
- **Focus on operational excellence paying dividends**
- **Strong cash flow**
- **Strong balance sheet provides liquidity to support growth**

Brush Engineered Materials – Material Solutions for the World's Leading Companies

