BRUSH ENGINEERED MATERIALS INC

FORM 8-K
(Current report filing)

Filed 8/24/2007 For Period Ending 8/24/2007

Address	17876 ST. CLAIR AVE.
	CLEVELAND, Ohio 44110
Telephone	216-383-4062
CIK	0001104657
Industry	Metal Mining
Sector	Basic Materials
Fiscal Year	12/31

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) August 24, 2007

Brush Engineered Materials Inc.

(Exact name of registrant as specified in its charter)

Ohio	001-15885	34-1919973
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

17876 St. Clair Avenue, Cleveland, Ohio	44110
(Address of principal executive offices)	(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))

Item 7.01 Regulation FD Disclosure

On August 24, 2007, Brush Engineered Materials Inc., an Ohio corporation (the "Company"), updated the "Current Investor Update," a slide presentation on its website, a copy of which is attached hereto as Exhibit 99.1. This slide presentation shows the Company's corporate strategy and the financial results through the second quarter of 2007.

Item 9.01 Financial Statements and Exhibits

Exhibits:

Exhibit Number	Description of Exhibit
99.1	Current Investor Update

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.

August 24, 2007

By: *Michael C. Hasychak*
Michael C. Hasychak
Vice President, Treasurer and Secretary

Brush Engineered Materials Inc. Profile

- Publicly traded since 1956: NYSE-listed since 1972
- Founded 1931 as Brush Beryllium Company, recently celebrated 75th anniversary
  - Building off earlier pioneering technical work at Brush Laboratories
  - Initial scope was development of commercial markets
- With onset of WW II and post war period, significant growth in defense and eventually, aerospace applications
- Mid-70s: major expansion of new commercial markets
- Today, commercial markets represent 90% + of revenues

BRUSH ENGINEERED MATERIALS

Brush Engineered Materials Inc. Profile

- A leading manufacturer of high performance specialty engineered materials and services … *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

Brush Engineered Materials

A common culture across our operating companies

- Collaborating with customers worldwide to solve material application challenges … *with a focus on enabling technology and services*
- "Own" a Niche orientation … non-commodity
- Focus on global growth and service
- Realigning product and service portfolios towards favorable trends … targeted to achieve strong profitable growth
- Employees who are *passionately* focused on exceeding customer expectations

BRUSH ENGINEERED MATERIALS

Overview

- Company: Brush Engineered Materials Inc.
  founded 1931, publicly traded since 1956
- NYSE Ticker: BW
- Shares Outstanding: Approximately 20.7 million at 6/30/07
- Market Cap: Approximately $900 million at 6/30/07
- Component of: S&P Super Composite 1500
  Russell 2000
  S&P Small Cap 600
- Annual Revenue: $763 million @ 12/31/06, over $ 1 billion expected in 2007
- Diluted EPS: $2.45 for 2006 which includes a favorable tax valuation allowance benefit of $1.07, or $1.38 excluding the allowance
- Debt to Total Capitalization: 11% at 6/30/07

BRUSH ENGINEERED MATERIALS

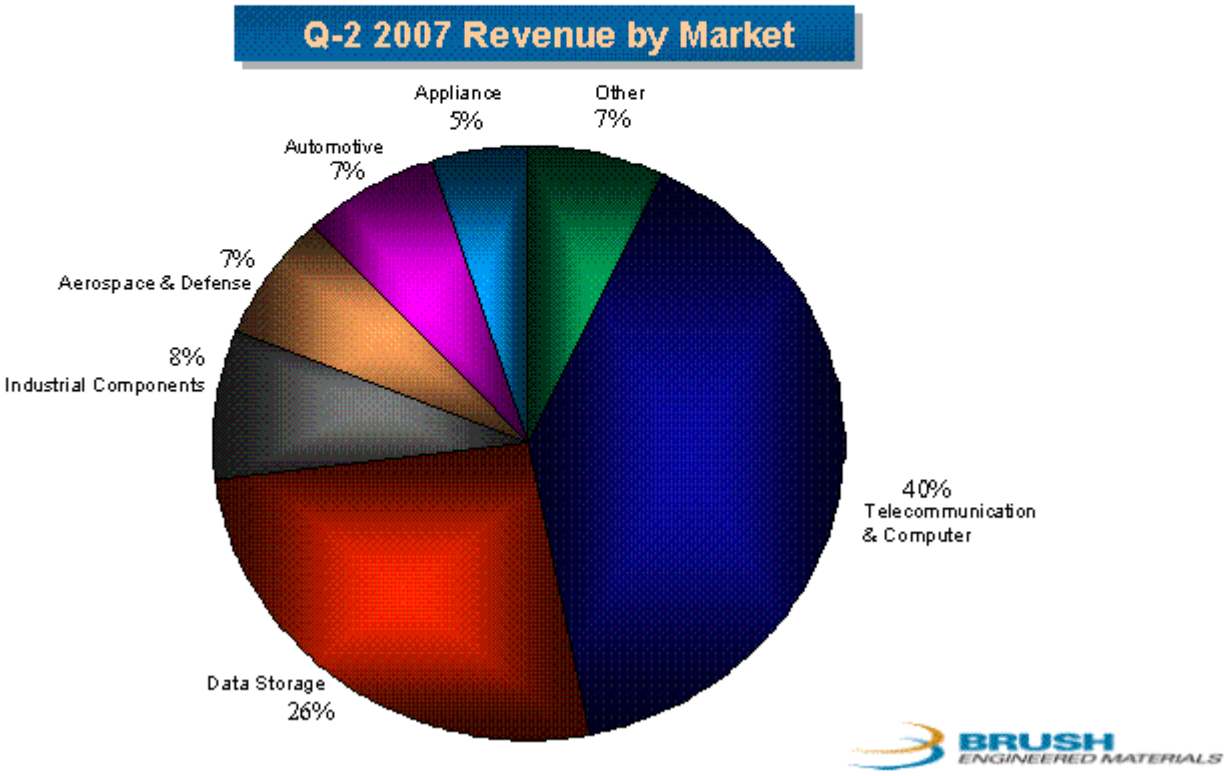
Second Quarter 2007 Recap

- Quarterly Revenue
  - Up $46.5 million or 25% compared to second quarter 2006
  - The eighteenth consecutive quarter where sales were higher than the comparable quarter the previous year
  - Metal prices accounted for approximately 3% of the sales increase and organic growth was 22%
  - International sales were 42% of the total

- EPS
  - Earnings per share of $0.38 diluted compared to $0.35 diluted for the second quarter of 2006
  - Includes ($0.15) per share charge related to an isolated production ramp-up quality issue and ($0.13) per share non-cash lower of cost or market inventory charge due to the decline in the market price of ruthenium
  - Partially offsetting these charges is a margin benefit of $0.14 per share related to the sale of low-cost ruthenium that was in the production system at the beginning of the year
  - The net impact of the above three items was ($0.14) per share

BRUSH ENGINEERED MATERIALS

Global Leader in High Performance Engineered Materials



Advancing the World's Technologies

- Strong customer collaboration … providing enabling technology solutions and service

- Materials that meet design challenges requiring
  - Strength
  - Electrical conductivity
  - Weight reduction
  - Reflectivity
  - Reliability
  - Miniaturization
  - Corrosion resistance
  - Thermal conductivity

- Targeting growth applications in growing markets

BRUSH ENGINEERED MATERIALS

Typical End Uses

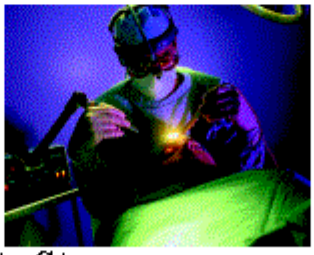
Notebook and network computers

Cellular phones, I-Pods and other wireless communication devices

Defense

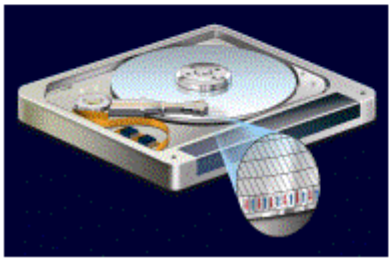
Electronic components in cars and trucks

Commercial Aerospace

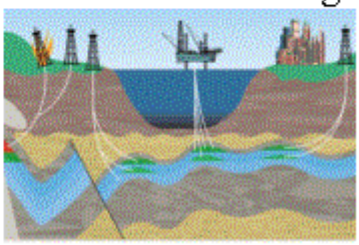


Industrial products For Oil & Gas and Mining

Medical Devices



Magnetic Data Storage for hard disk drives



BRUSH ENGINEERED MATERIALS

Investment Highlights and Strengths

- Global Leader in High Performance Engineered Materials
- Unique Status as Fully Integrated Provider of Beryllium-Containing Products
- Broad Metallurgical Capabilities in Precious and Non-precious Metals
- Global Sales and Distribution Network
- Sales Based on End User Specifications
- Niche Oriented Product Offerings
- Strong Value Proposition in Served Markets
- Strategic Customer Relationships
- Significant Technical Capabilities
- Positive Long-term Market Trends
- Strong Growth in New Products, a culture of Innovation
- High Barriers to Entry
- Capacity to Support Profitable Market Growth
- Strong Balance Sheet
- Strong Cash Flow

BRUSH ENGINEERED MATERIALS

Brush Engineered Materials Inc.
Organized into Four Separate Reportable Segments

- Advanced Material Technologies and Services

  Advanced Material Technologies and Services consists of Williams Advanced Materials Inc. (WAM)

- Specialty Engineered Alloys

  The Specialty Engineered Alloys segment consists of Alloy Products which includes bulk and strip form copper-based alloy products, hydroxide and the Company's line of ToughMet® materials

- Beryllium and Beryllium Composites

  The Beryllium and Beryllium Composites segment consists of Beryllium Products including beryllia ceramic manufactured by Brush Ceramic Products Inc.

- Engineered Material Systems

  The Engineered Material Systems segment is comprised of Technical Materials, Inc.

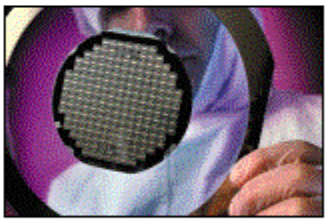
BRUSH ENGINEERED MATERIALS

Advanced Material Technologies and Services
YTD Q2-2007 Sales: $264.9 million

Williams Advanced Materials (WAM)

$264.9 million; 55%

- Precious metal and specialty alloys for high reliability applications
- Products include precious and non-precious metal vapor deposition targets, frame lid assemblies, clad and precious metal preforms, high-temperature braze materials and ultra fine wire
- Industries served include magnetic and optical data storage, semi-conductor, performance film, wireless/photonics and precision optics



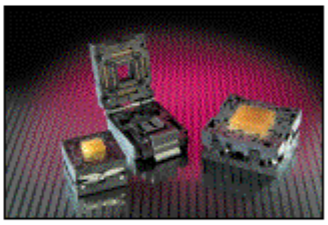
BRUSH ENGINEERED MATERIALS

Specialty Engineered Alloys
YTD Q2-2007 Sales: $145.9 million

Alloy Products

$145.9 million; 30%

- Copper and nickel-based alloy materials, most of which incorporate beryllium
- Strip products are used in electronic connectors including PDA's, wireless communications equipment, notebook and network computers and automotive electronics that require high strength, formability and electrical conductivity
- Bulk products are rod, bar, tube and plate products for heavy equipment and aerospace bushings and bearings, oil & gas components and plastic mold materials where strength, corrosion and wear resistance, thermal conductivity and lubricity are critical performance requirements



BRUSH ENGINEERED MATERIALS

Beryllium and Beryllium Composites
YTD Q2-2007 Sales: $31.7 million

Beryllium Products

$31.7 million; 7%

- Pure beryllium and aluminum-beryllium composites for high-performance applications, principally for medical, space and defense applications where stiffness, strength, lightweight, dimensional stability, reflectivity and x-ray/nuclear properties are critical.

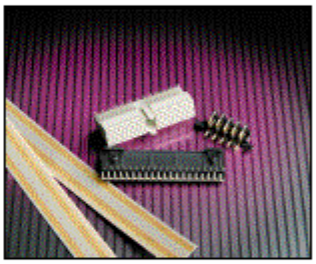
BRUSH ENGINEERED MATERIALS

Engineered Material Systems
YTD Q2-2007 Sales: $33.6 million

Technical Materials, Inc. (TMI)

$33.6 million; 7%

- Engineered material systems, including clad, plated and electron beam welded metals used in demanding connector applications
- Combines precious and non-precious metals in strip form for use in complex electrical components for telecommunications systems, computers and automotive electronics



BRUSH ENGINEERED MATERIALS

Fully Integrated Beryllium Producer

- Beryllium and beryllium alloys are critical to many high performance applications
  - Strong
  - Lightweight
  - Good formability
  - High reliability
  - Thermal and electrical conductivity
  - Corrosion and wear resistant
- Operate the only active bertrandite ore mine in the developed world
  - 7,500 acres in Juab County, Utah
  - Approximately 100 years of proven reserves

Bertrandite Ore Mining & Extraction

Delta, UT

Casting, Rolling & Finishing

Elmore, OH

Thin Gauge Rolling & Finishing

Reading, PA

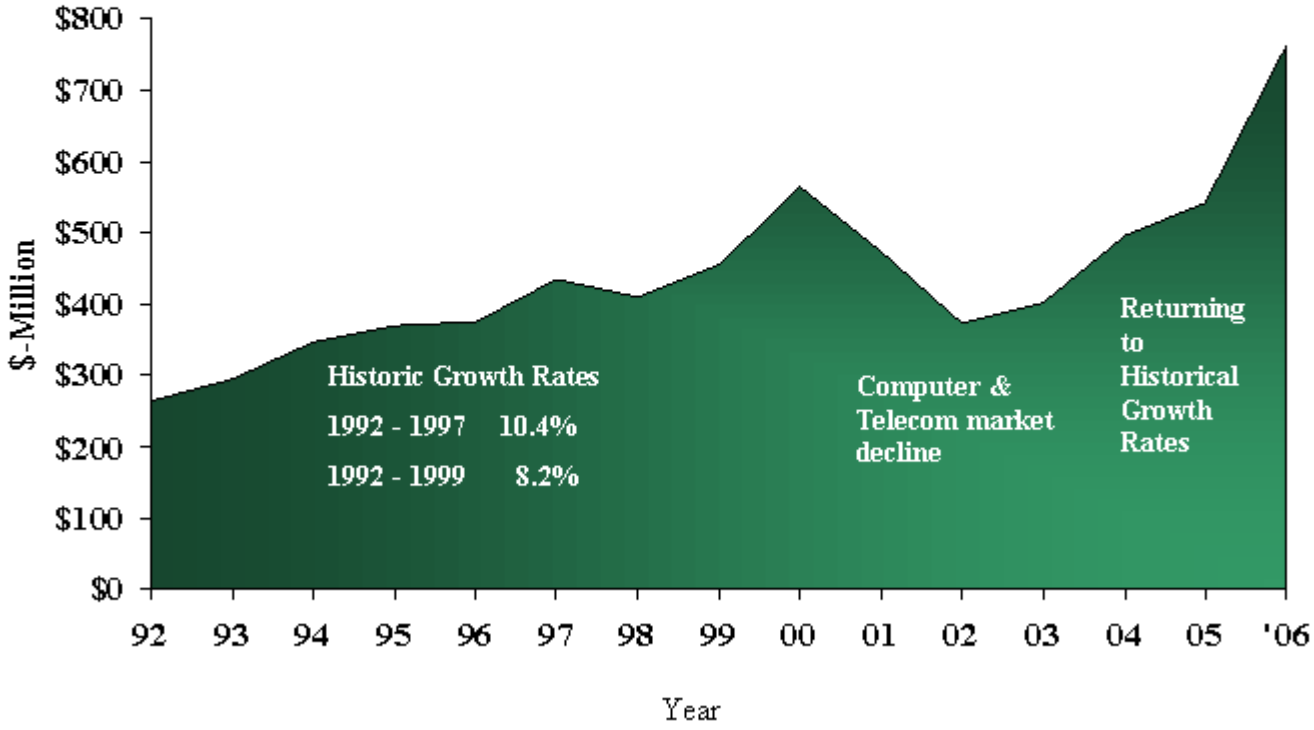
Service & Distribution Centers

Global Network

Key Financial Statistics

$in millions	2004	2005	2006	YTD Q2 2007
Sales	$496.3	$541.3	$763.1	$483.9
EBIT	25.0	19.5	43.8	49.5
EPS	.86	.92	2.45	1.52
G.P.%	22.4%	20.3%	21.2%	23.0%
O.P.%	5.0%	3.6%	5.7%	10.2%
Depreciation & Amort.	23.8	22.8	24.0	12.0
Capital Spending	10.1	14.2	15.5	17.3
Debt	72.5	57.2	48.9	41.6
Cash	49.6	10.6	15.6	12.1
Debt/Total Cap.	26%	21%	15%	11%

In 2001, the computer and telecom market decline drove sales back to mid-90's levels
In 2003, growth began to return to historical rates
In 2004, 2005 and 2006 growth accelerated

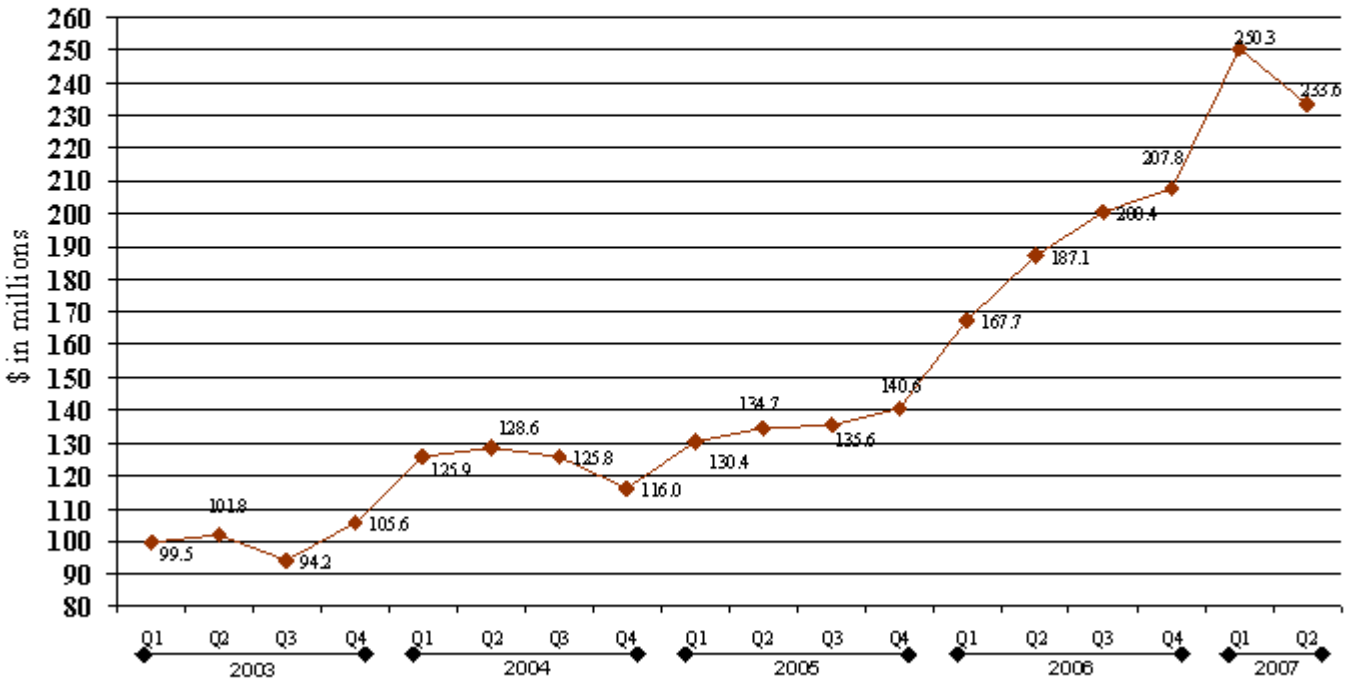


The decline in the telecom/computer market resulted in a 50% drop in the market segment's revenue comparing 2003 to 2000. Since then, this market continues to grow, driven by consumer electronics.

$ in millions

	2000	2003	2004	2005	2006	Change 05-06
Telecom/Computer	$277	$139	$206	$213	$319	$106
Magnetic and Optical Data Storage	56	53	52	67	94	27
Aerospace and Defense	34	37	49	58	80	22
Automotive Electronics	62	53	59	53	73	20
Industrial Components	62	42	43	51	66	15
Appliance	19	27	33	46	46	--
Medical	--	--	--	22	39	17
All Other	54	50	55	31	46	15
	$564	$401	$497	$541	$763	$222

The 2nd quarter 2007 was the eighteenth consecutive quarter where sales were higher than the comparable quarter of the prior year.



Positive Market Trends

- Electronic component manufacturers are being driven by end user demands to produce products that are smaller, lighter and faster
- Increased electronic component performance characteristics require materials that have enhanced mechanical, electrical and thermal properties
- Growing opportunity for thin film physical vapor deposition (PVD) products in the data storage and semiconductor markets
- Spending and conditions in the telecommunications and computer market have improved
- Conditions continue to be strong in the oil and gas, undersea, aerospace and heavy equipment markets.

Brush has generated year-over-year sales growth in eighteen consecutive quarters

Capacity to Support Profitable Market Growth

Well-positioned to support rapid sales growth with minimal incremental cash investment

- Operating with available excess capacity in Alloy Products
  - Minor debottlenecking investments are required
- WAM's Brewster, New York facility is doubling its capacity in 2007

Our on-going value creation initiatives are focused in three key areas

Growth

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

Margin Improvement

- Lean sigma-driven operating efficiency improvement
- New higher value add products
- Cost reductions

Fixed and Working Capital Utilization

- Inventory turn improvement
- Lean sigma-driven factory utilization gains

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 Semi-conductor	Miniaturization	WAM
Chamber Service	PVD Customers	Service demands	WAM
PVD - Visilid	Optics	IR Wavelength	WAM
Alloy 390 Strip	Portable Elec	Miniaturization and	Alloy
ToughMet	O&G, Aerospace, Heavy Equipment	Reliability	Alloy
Clad Stainless-Aluminum Strip	Hard Disk Drive	Increase storage capacity	TMI

Balance Sheet

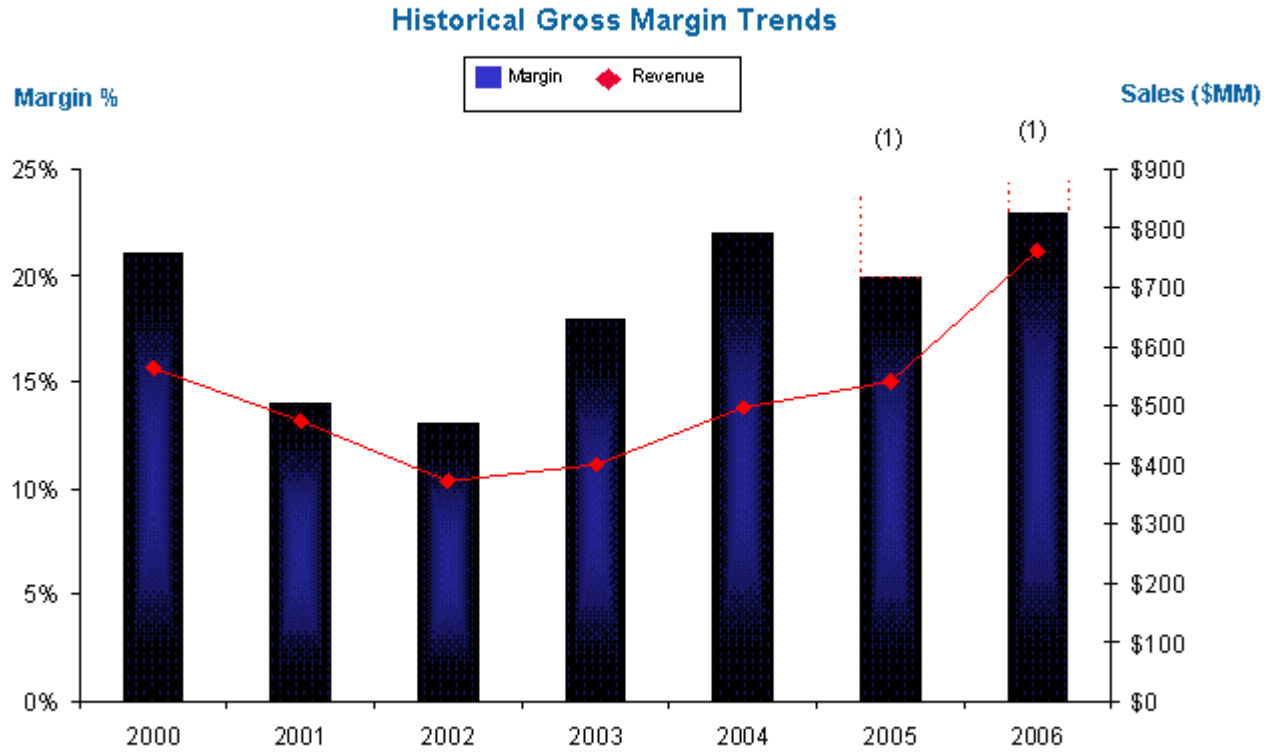
($ in millions)

	2000	2004	2005	2006	YTD 2nd Qtr 2007
Balance Sheet Debt	$128.4*	$ 72.5	$57.2	$48.9	$41.6
Debt to Debt Plus Equity	36%	26%	21%	15%	11%

*2000 Balance Sheet debt includes major equipment lease

**Note - Excludes precious metal consignment and other leases of:	$18.9	$30.2	$55.5	$72.1	$56.7

Margins have improved through cost reduction and productivity improvement initiatives



(1) Represents approximate G.P.% at 2004 metal prices

Segment Sales Review

$ in millions

	2005		2006		YTD Q2 2007	
	$	%	$	%	$	%
Advanced Material Technologies and Services	$209.5	38%	$343.4	45%	$264.9	55%
Specialty Engineered Alloys	213.8	39%	275.6	36%	145.9	30%
Beryllium and Beryllium Composites	53.1	10%	57.6	7%	31.7	7%
Engineered Material Systems	49.9	9%	68.7	9%	33.6	7%
Other	14.9	4%	17.8	3%	7.7	1%
TOTAL	$541.3	100%	$763.1	100%	$483.8	100%

BRUSH ENGINEERED MATERIALS

Segment Earnings

$ in millions			YTD Q2
	2005	2006	2007
Advanced Material Technologies and Services	$20.4	$30.5	$36.8
Specialty Engineered Alloys	(5.4)	7.9	6.7
Beryllium and Beryllium Composites	9.8	7.4	4.6
Engineered Material Systems	0.7	2.7	1.3
Other	(6.0)	(4.7)	0.1
TOTAL	$19.5	$43.8	$49.5

BRUSH ENGINEERED MATERIALS

Brush Engineered Materials Inc.
Organized into Four Separate Reportable Segments

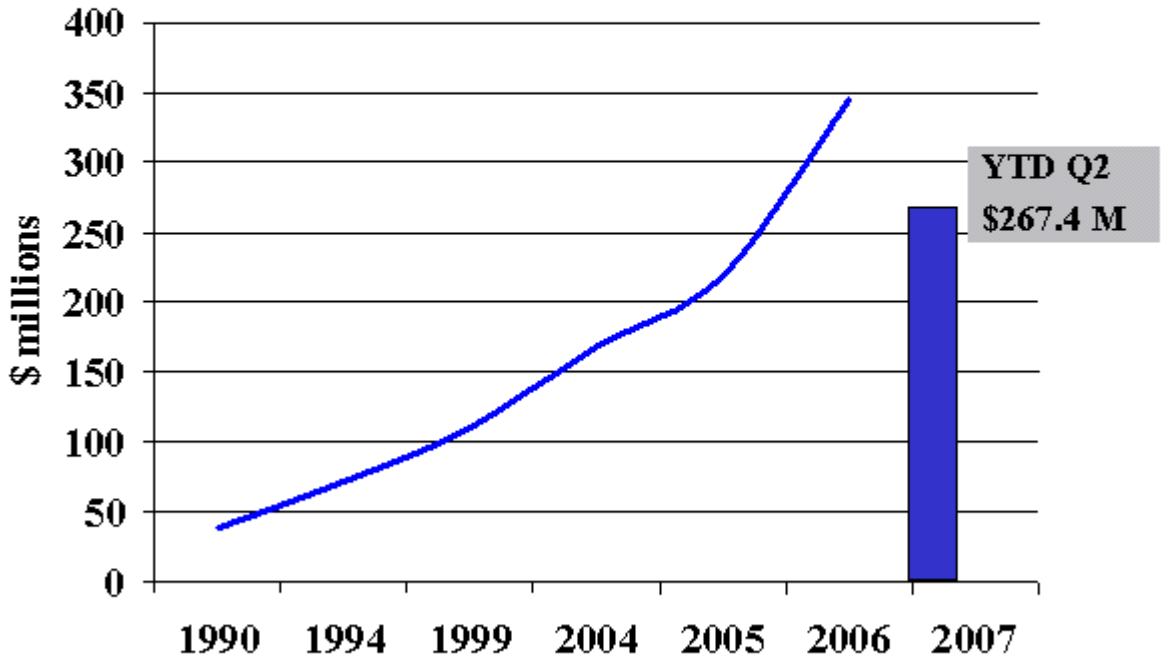
- ***Advanced Material Technologies and Services***
- Specialty Engineered Alloys
- Beryllium and Beryllium Composites
- Engineered Material Systems

What We Do

Williams Advanced Materials develops, manufactures and markets materials and services of unique value for the Magnetic and Optical Data Storage, Wireless, Photonics, Semiconductor, Optics, Security, Hybrid Microelectronics, Defense and Performance Coating industries. We also support emerging technologies such as Photovoltaic, TFT/LCD, Memory, FCCL, Medical and Nanotechnology. Williams' products are primarily based on specialty metal products used in high reliability and performance applications.

Williams
ADVANCED MATERIALS

Sales History



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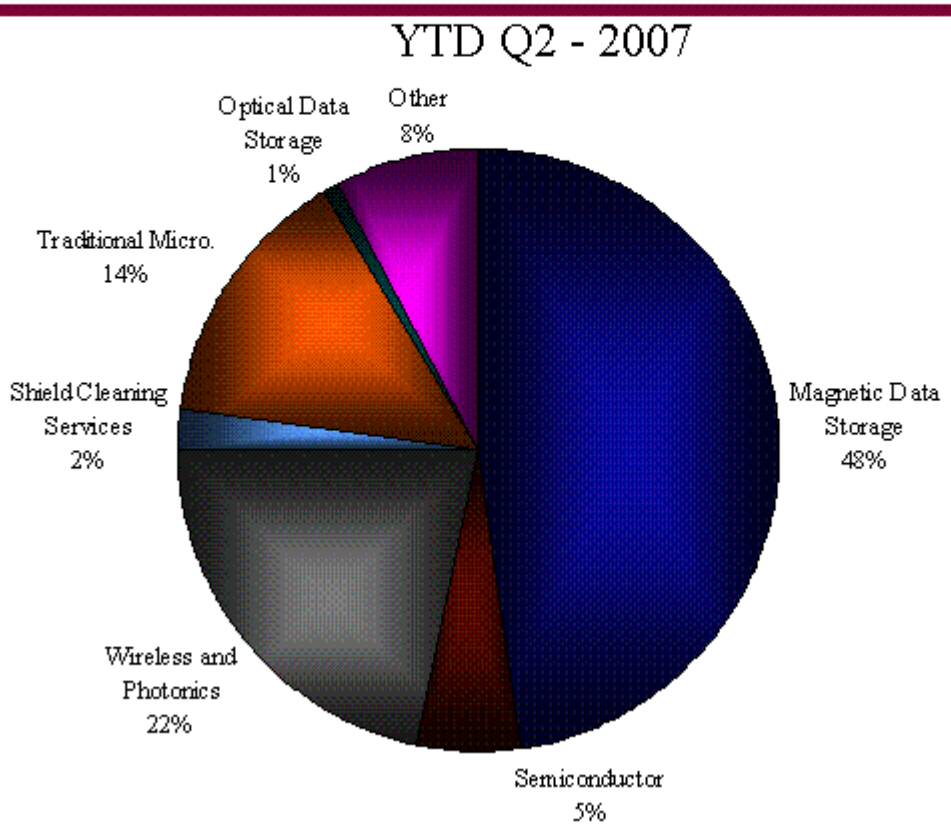
Revenue by Market



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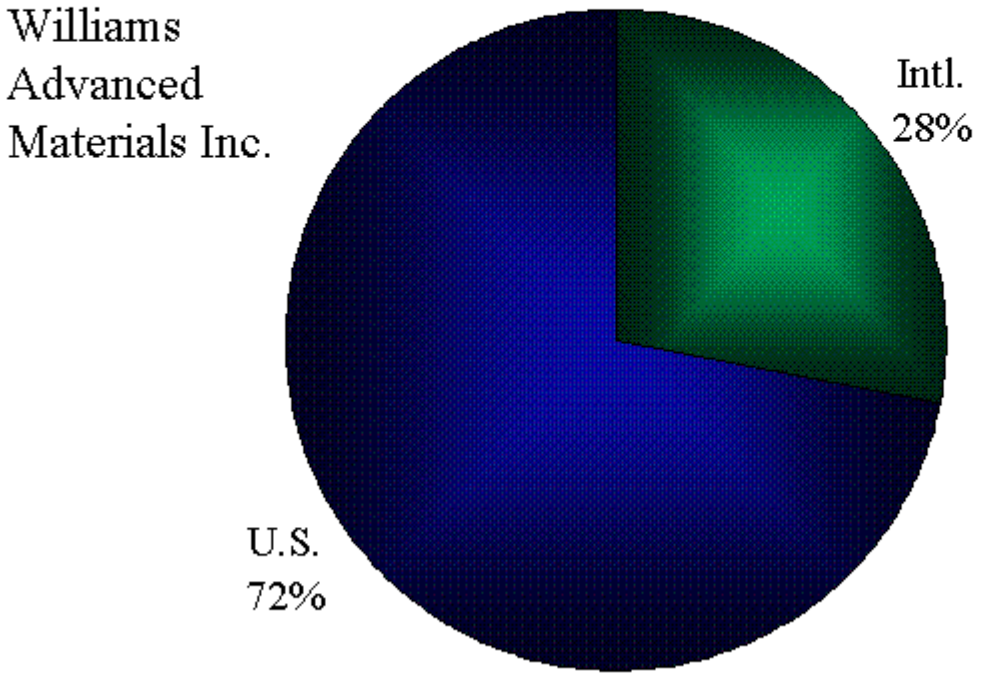
International/Domestic Revenue
Q2 - 2007



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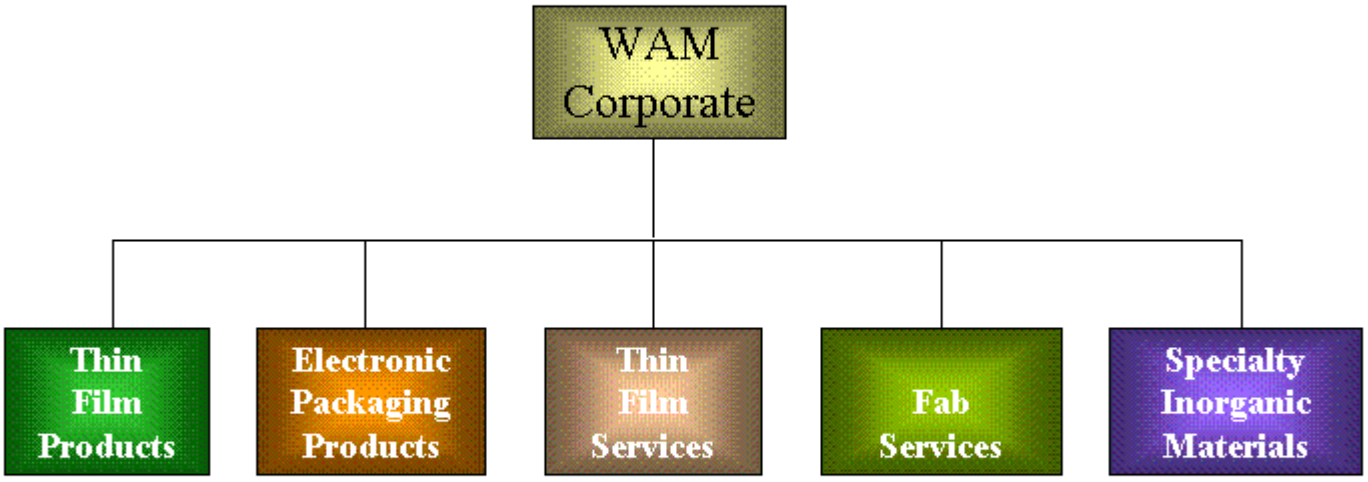
2007 Business Structure



Williams ADVANCED MATERIALS

WAM Headquarters

Buffalo, NY USA - Manufacturing Facility

- 100,000 Sq. Ft. overall, 6,500 Sq. Ft. of cleanroom, state-of-the-art machining/ milling/rolling/stamping/ cladding centers, target bonding, hydrostatic wire extrusion, high purity refining/recycling, metals casting, automated plating, full analytical capabilities, product Research & Development.

Williams
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Specialty Alloys Operations

- Wheatfield, NY USA- *Williams Specialty Alloys*
  - 30,000 Sq. Ft. with volume vacuum casting, rolling, annealing, powder atomizing and machining. 10 acres for expansion.

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Williams Thin Film Products Operations

- Brewster, NY USA –
  - 80,000 Sq. Ft. with vacuum melting, hot-pressing, milling, hot & cold rolling, automated machining, grinding, powder metallurgy lab, particle sizing and target bonding capabilities.

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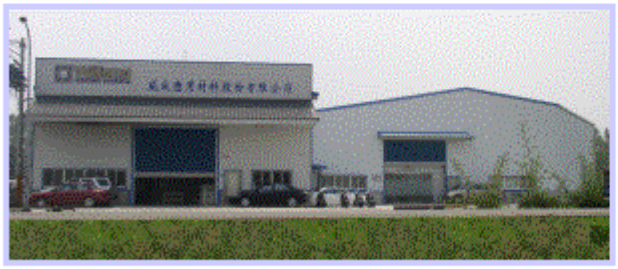
Far East Operations

Singapore - *WAM Far East Pte. Ltd.*

- Target bonding, bonding wire production, Combo-Lids®, assembly

Subic Bay, Philippines

- Combo-Lids®, low-cost lids and preform - assembly, inspection and packaging.



Taoyuan County, Taiwan - *WAM Taiwan*

- Target bonding, evaporation materials & bonding wire.

Williams ADVANCED MATERIALS

Suzhou - China

- **Suzhou, China**
  - 20,000 Sq ft.
  - Target & Evaporation materials manufacturing, Target bonding services, Distribution, Warehousing, Sourcing, MgF manufacturing and packaging
  - Located near Shanghai Airport and close to many technology centers located in Eastern China.
  - Markets Serve: Semiconductor, Compound Semiconductor, UBM, MEMS, Data Storage, Security and Optics

OMC - Limerick

- Limerick, Ireland – OMC Scientific, Ltd.
  - Subsidiary of WAM
  - Provides precision parts cleaning and reconditioning services for film Physical Vapor Deposition (PVD) customers in Europe.
  - Unique technology applied to opportunities in North America and Asia.
  - Efforts focused in the semiconductor, magnetic media and oth based markets.

Williams ADVANCED MATERIALS

OMC- Czech

- Louny, Czech Republic
  - 20,000 Sq ft.
  - Provides precision parts cleaning and reconditioning services for film Physical Vapor Deposition (PVD) customers in central and eastern Europe
  - State of the art cleaning, stripping and packaging operations
  - Markets Serve: Semiconductor, Compound Semiconductor, UBM, MEMS, Data Storage

Thin Film Technology (TFT)

- Buellton, CA
  - Subsidiary of WAM
  - Thin film coating and substrate patterning.
  - Visi-Lid™ supply chain management.
  - Capabilities: Electron Beam Evaporation, DC/RF Magnetron Sputtering, Photolithography (Substrate Patterning), Dicing, Tooling design, In House Machine shop

Williams ADVANCED MATERIALS

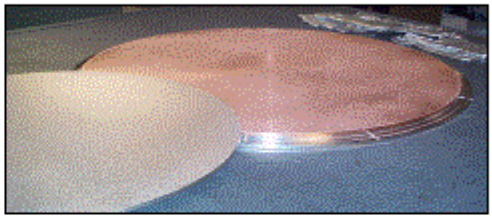
CERAC

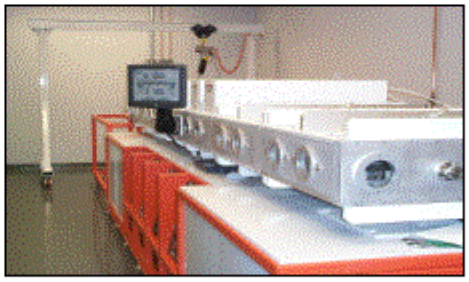
- Milwaukee, WI
  - Subsidiary of WAM
  - Physical Vapor Deposition (PVD) materials for opthalmic, optic and performance applications.
  - Specialty Inorganic Materials
  - Unique technologies in chemical and powder processing

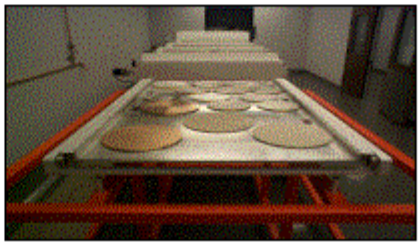
Williams ADVANCED MATERIALS

Target Bonding Centers

- Localized debonding/ bonding of PVD targets to backing plates:
  - Buffalo, NY
  - Brewster, NY
  - Santa Clara, CA
  - Limerick, Ireland
  - Singapore
  - Taiwan
  - China







Williams ADVANCED MATERIALS

Global Service and Support

- Regional Offices **(Sales and Applications Engineering support)**

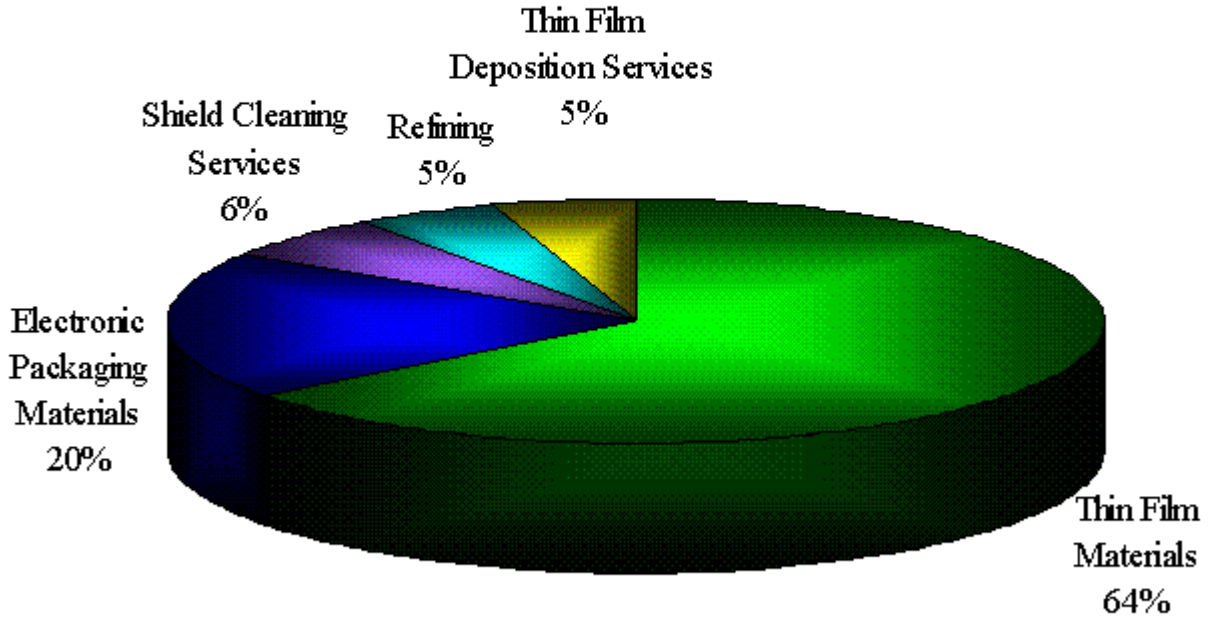
Buffalo, NY	Tokyo, Japan
Brewster, NY	Taoyuan, Taiwan
Dallas, TX	Singapore
Tucson, AZ	Manila, Philippines
Santa Clara, CA	London, England
Buellton, CA	Seoul, Korea
Milwaukee, WI	Limerick, Ireland
Suzhou, China	Louny, Czech Republic

- Worldwide Representatives

Italy	France	Germany
India	China	
Sweden	Israel	

Williams ADVANCED MATERIALS

Q2- 2007
Product Mix



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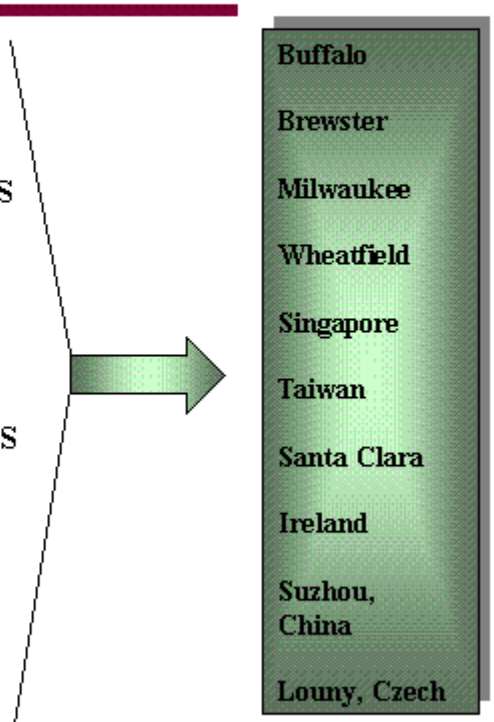
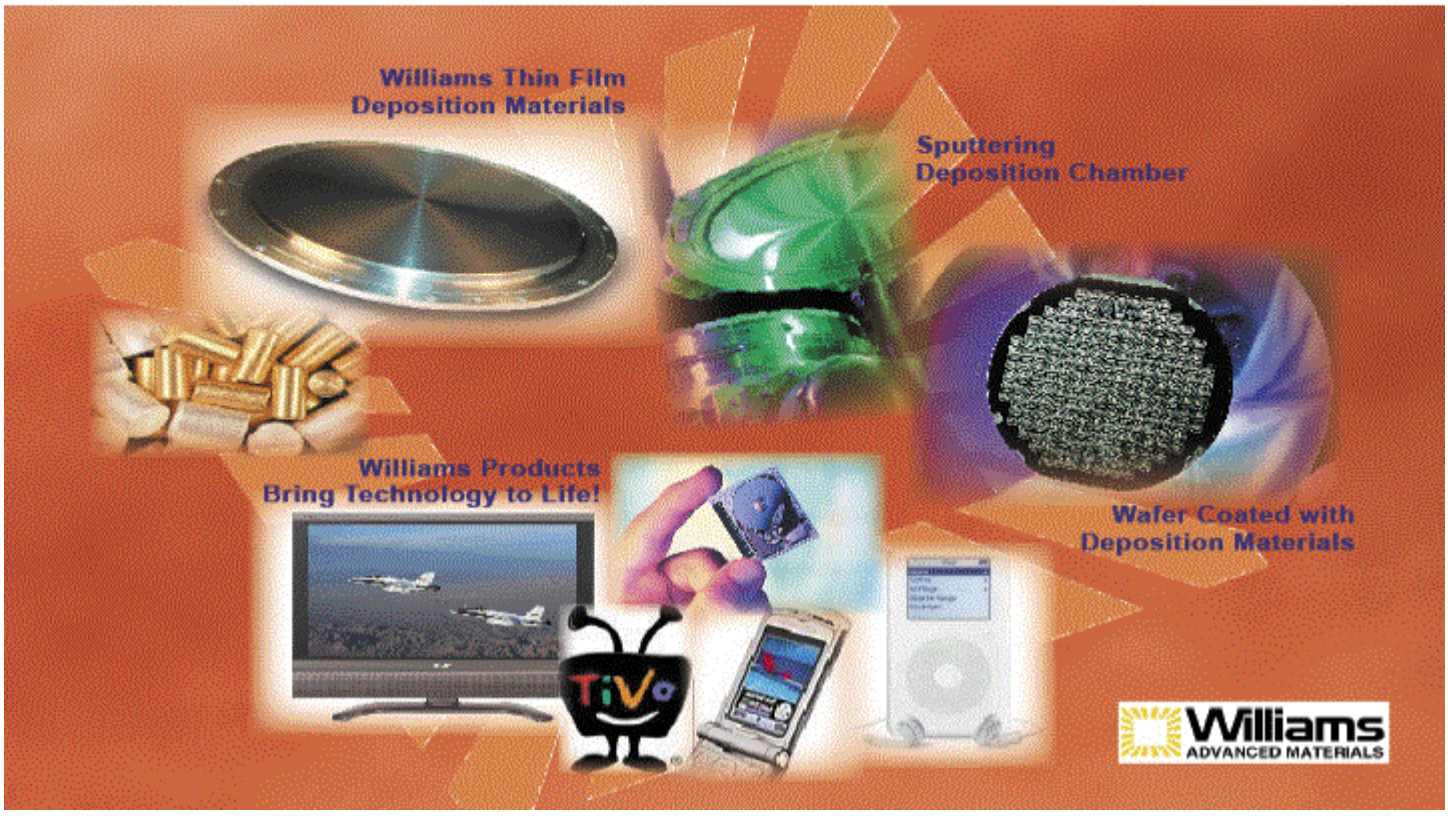
Thin Film Products

- **PVD Materials**
  - Precious Metal Target Materials
  - Non-Precious Metal, Cermets, Ceramics
    - Vacuum Induction Melting
    - Hot Pressing
    - Vacuum Hot Pressing
    - Hot Isostatic Pressing
  - EVAPro™ Grade Evaporation Materials
  - Localized Target Bonding
- **Chamber Services**
  - Shield Cleaning and Conditioning
  - Arc Spraying – Electro-polishing
  - PM Refining and Upgrading
  - Logistics Support



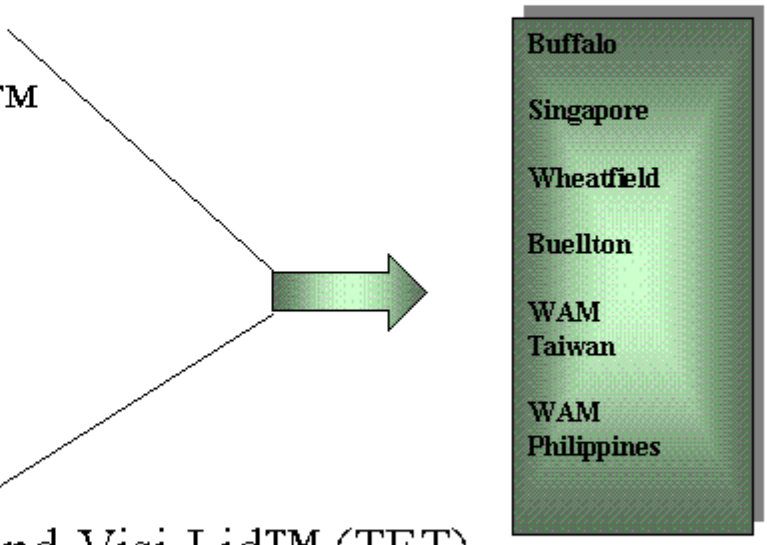
Williams ADVANCED MATERIALS

End Product Examples Utilizing Thin Film Deposition Materials



Packaging Materials

- FLA/Combo-Lid®
- Seam Seal/Microlid™
- Preforms
- Clad Materials
- Braze Materials
- Ni Alloys
- Dental
- Coating, patterning and Visi-Lid™ (TFT)
- Packages (Zentrix)



Williams ADVANCED MATERIALS

New Product and Technology Development

- Visi-Lid™ - A transparent lid for New Photonics applications
- Silver Alloys for HD-DVD and Blue Ray Disc manufacturing
- Expanded refining/chamber services supporting the thin film materials business
- FCCL Materials
- Magnetic Media Materials
- Magnetic Head Materials
- Solar Panel Thin Film Materials
- Nanotechnology Materials

Williams
ADVANCED MATERIALS

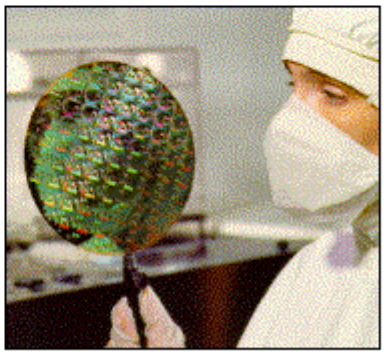
Key Markets – Wireless and Photonics

- Thin Film and Packaging materials for varied wireless and photonic applications including RF Power Amplifiers, HBT's, SAW Devices, Light Emitting Diodes (LEDs), Laser Recorders and Micro Electro Mechanical Systems (MEMS)

Williams ADVANCED MATERIALS

Key Markets – Semiconductor Wafer Fabrication

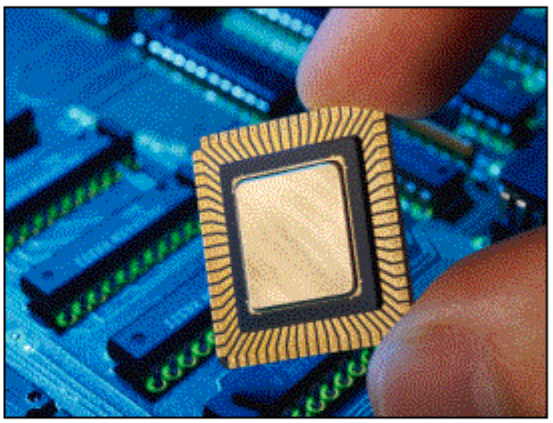
- Thin film materials and chamber services for silicon wafer and UBM (Under Bump Metallization) technologies.
- Numerous commercial and military microelectronic applications.



Williams ADVANCED MATERIALS

Key Markets – Semiconductor Packaging

- High reliability semiconductor packaging materials.
- Applications focused in space, military and satellite market segments.



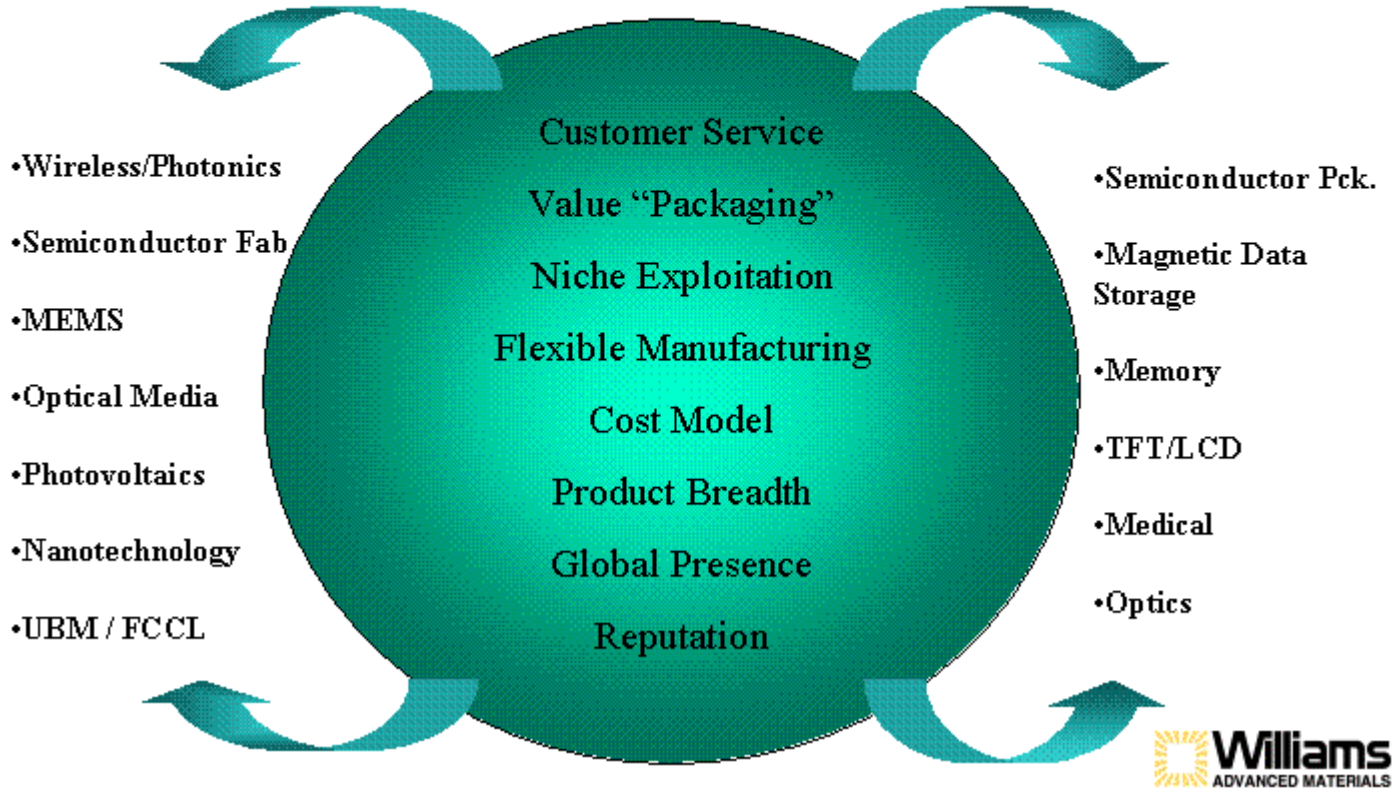
Williams
ADVANCED MATERIALS

Key Markets – Magnetic Head and Media

- Thin film materials for both the read/write head and disc platter.
- Chamber Services complement materials offering.
- Applications growing into many commercial and mobile electronic products.

Williams ADVANCED MATERIALS

Distinctive Competencies



Williams ADVANCED MATERIALS

New Platforms by Market

New Thin Film & Packaging Materials and Designs for:

- Magnetic Media (PMR) and Thin Film Head (TMR/PMR)
- Semiconductor Wafer Fabrication
- Under Bump Metallization (UBM) for Flip Chip
- Flexible Copper Clad Laminate (FCCL)
- Wireless and Photonics
- Photovoltaics (Solar Panels)
- MEMS and Photovoltaic Packaging Materials

Williams ADVANCED MATERIALS

Brush Engineered Materials Inc.
Organized into Four Separate Reportable Segments

- Advanced Material Technologies and Services
- ***Specialty Engineered Alloys***
- Beryllium and Beryllium Composites
- Engineered Material Systems

Brush Wellman Inc. Alloy Vision

Brush Specialty Engineered Alloys provides technical expertise and flexible services to deliver value through innovative, practical engineered material solutions.

Our products and services coupled with our world-wide distribution and logistics network are relied upon and trusted by our customers making us their ideal growth partner.

Brush Wellman Inc. Alloy Mission

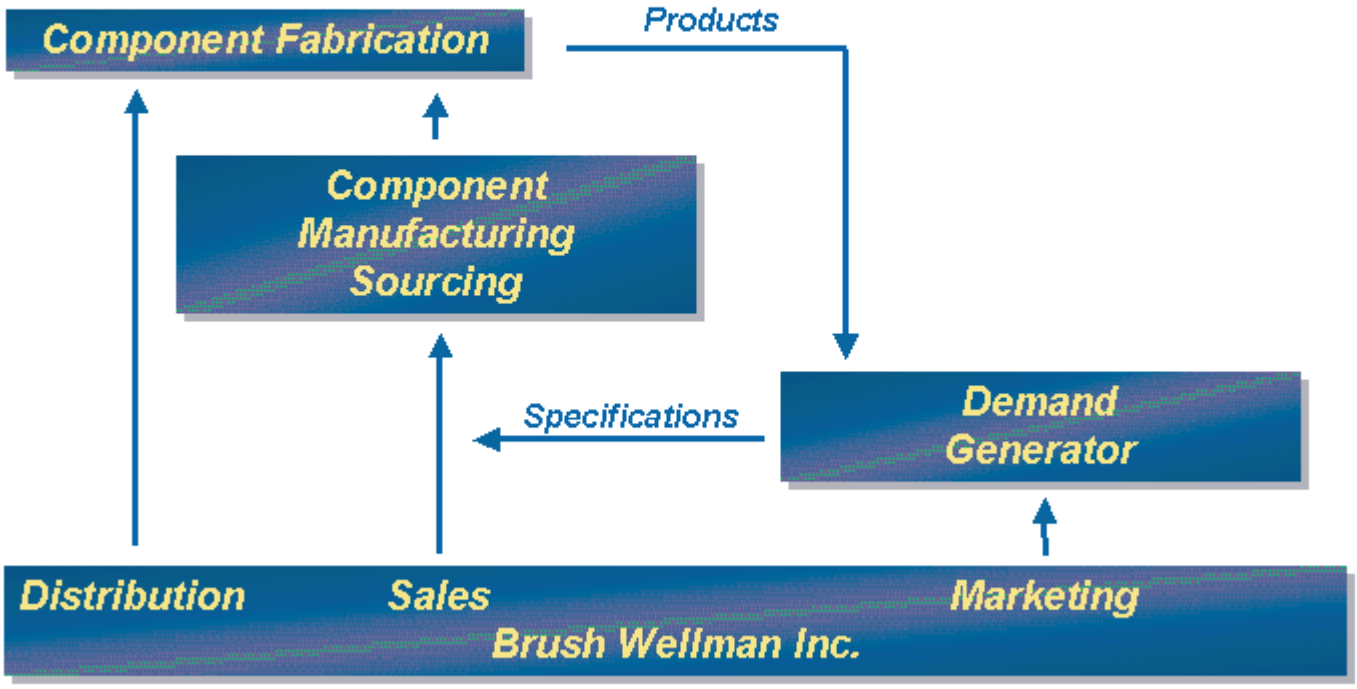
Safely and ***reliably*** provide the ***highest quality***, ***innovative*** products and services, ***fast*** and ***on-time*** to all customers, when they want them at the ***lowest possible cost.***

Alloy Products
Operations Strategy—Lean Sigma

- ***Safety*** practices to provide an injury and illness free workplace
- ***Lean Manufacturing*** to reduce cycle times, further increase capacity, and provide industry leading service to our customers
- ***Six Sigma*** to provide industry leading product quality and to reduce costs
- ***Supply Chain Management*** to provide exactly what is needed, when it's needed, to where it's needed in exactly the right quantity
- ***Total Productive Maintenance*** to provide industry leading equipment reliability

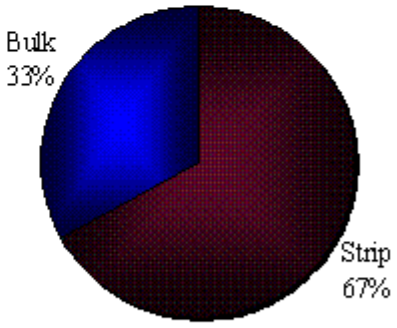
BRUSH WELLMAN ALLOY PRODUCTS

Sales Based on End User Specifications



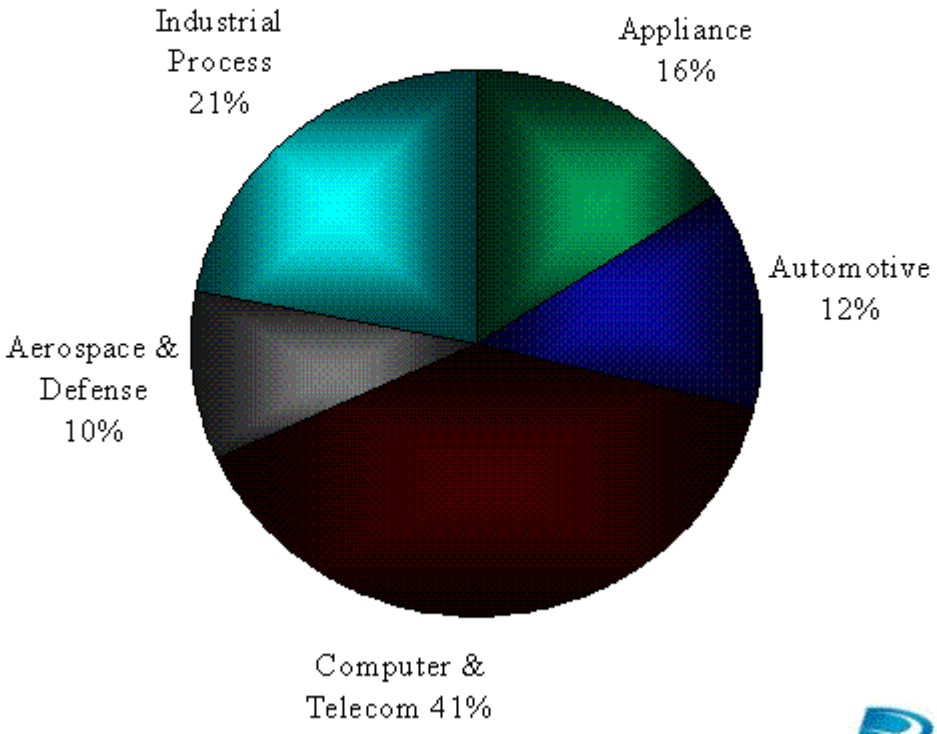
Brush Wellman Inc. Alloy Products

- **The primary business within the Specialty Engineered Alloys Segment, Alloy Products First Half 2007 sales were $145.9 million.**
- **Manufactures and sells copper and nickel based alloy systems metallurgically tailored to meet customers' specific performance requirements**
- **Product families:**
  - Strip products include thin gauge precision strip and thin diameter rod and wire. These products provide a combination of high strength, formability and electrical conductivity for connectors, contacts, switches, relays and shielding used in mobile communications devices, wireless communications equipment, storage area network systems, data networking equipment, servers, personal computers, appliances, and automotive electronics.
  - Bulk products include rod, bar, tube and plate. These products are known for superior strength, corrosion and wear resistance, thermal conductivity and lubricity. Applications include bearings and bushings for aerospace and heavy equipment, resistant welding components, oil & gas drilling components, plastic mold tooling and telecommunications housing equipment.



BRUSH WELLMAN ALLOY PRODUCTS

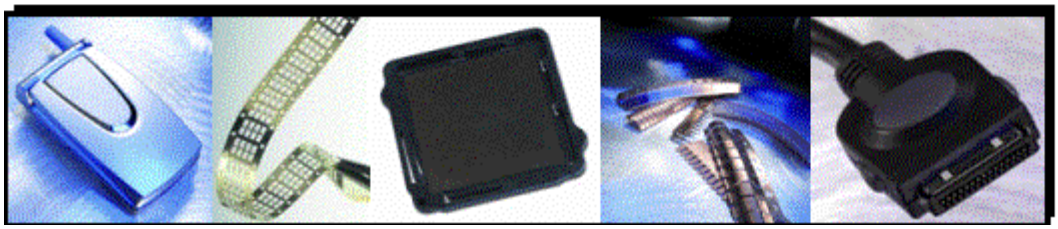
Alloy Products Revenue by Market YTD Q2 2007



Strip Alloy Applications

(strength, conductivity, spring characteristics)

- Automotive electronics
- Appliance switches
- Pressure Responsive Devices
- Fire Extinguisher Sprinkler Heads
- EMI Shielding
- Current Carrying Springs and Relays
- Integrated Circuit Sockets
- Electrical and Electronic Connectors in Mobile Handsets, PDA's, Base Stations, Storage Area Networks, Servers, and Personal Computers



BRUSH WELLMAN ALLOY PRODUCTS

Strip Products - Strategy

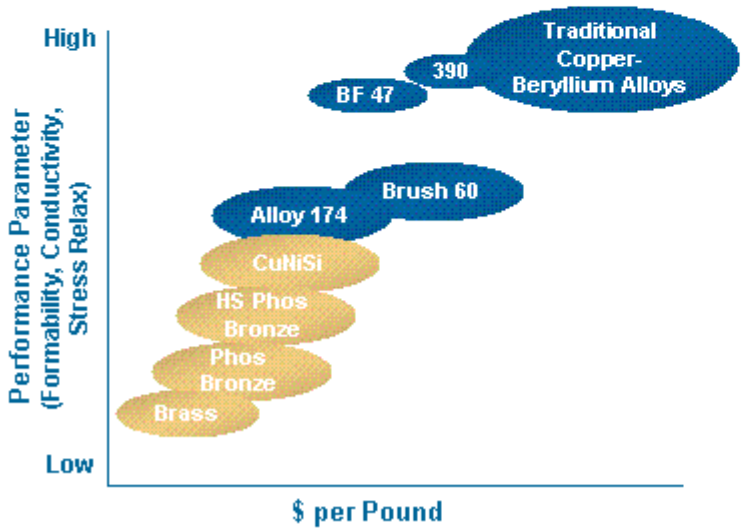
- **Maintain focus on major end-use markets**
  - Computer
  - Telecommunications (mobile & Infrastructure)
  - Automotive
  - Appliance
  - Military
  - Medical
- **Defend leadership in traditional alloy strip, rod & wire**
  - Reduce total cost of manufacture to allow penetration of mid-range alloy applications
  - Enhance product properties to provide additional value to customers
- **Introduce new alloys to meet needs of targeted market opportunities**
- **Geographic Growth**

BRUSH WELLMAN ALLOY PRODUCTS

Strip Products Strong Value Proposition

Copper-beryllium alloys, while premium priced, provide best-in-class performance

Competitive Alloy Comparison



Brush Value Proposition

- Unique, high-performance materials
- Technical design capabilities
- Outstanding service center network
- Global marketing, sales and distribution

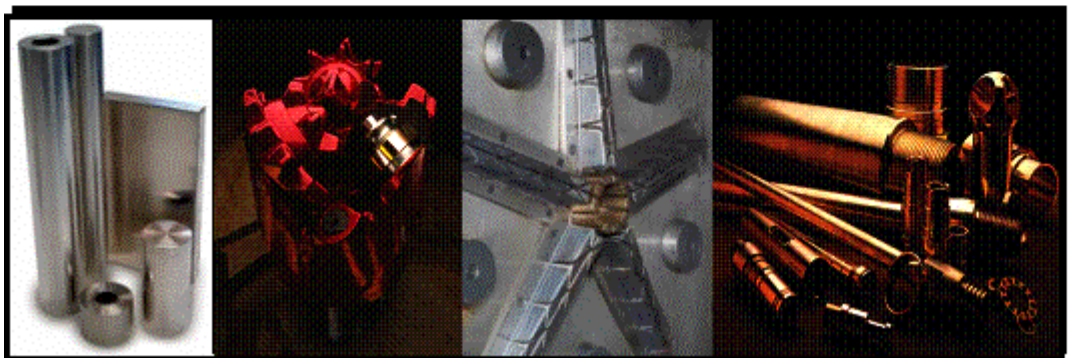
Note: Blue denotes Brush Engineered Materials' alloys; beige represents competitive materials.

BRUSH WELLMAN ALLOY PRODUCTS

Bulk Alloy Applications

(strength, corrosion resistance, non-galling, conductivity)

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



BRUSH WELLMAN ALLOY PRODUCTS

Bulk Products - Strategy

- **Maintain focus on traditional end-use markets**
  - Aerospace
  - Oil & Gas
  - Plastics
  - Power Generation
  - Resistance Welding
  - Undersea
- **Introduce new alloys or product forms to meet needs of targeted market opportunities**
- **Focus on new non-traditional growth markets**
  - Bearings, Heavy Equipment & Mining, Marine, advanced Oil & Gas well components, Offshore & Downhole technology, and Pumps
- **Geographic Growth**
  - Expand commercial operations in Asia Pacific, improve customer awareness and distribution

BRUSH WELLMAN ALLOY PRODUCTS

MoldMAX® Alloys for the Plastics Industry

Brush Wellman engineers use infrared imaging at the customers facility to pinpoint where MoldMAX® will provide the maximum benefit.

Value Proposition

- Provides molders with 20-40% increase in productivity
- Capital avoidance due to increased productivity
- Enables improved quality of molded parts
- ROI < 3 months

Technical advantages

- Hardness of steel with the thermal conductivity of copper
- Fast machining rates
- High polishability

BRUSH WELLMAN ALLOY PRODUCTS

Lorain Casting Facility
Spinodal and EquaCast® Technology-Winning!

High performance copper based engineered materials:

- Strength and hardness is comparable to copper beryllium products
- Thermal conductivity

The value proposition differentiates:

- Corrosion resistance
- Superb tribological properties (low friction, excellent wear resistance) adding value in reliability, uptime, and maintenance savings
- Machinability and design simplicity adding cost benefits to offset increased material costs
- Casting capability including size, shapes, tubes and quality
- No EH&S issues

Developing applications in markets where we are strong:

- Drilling Equipment, Aircraft Parts, Mold Tooling

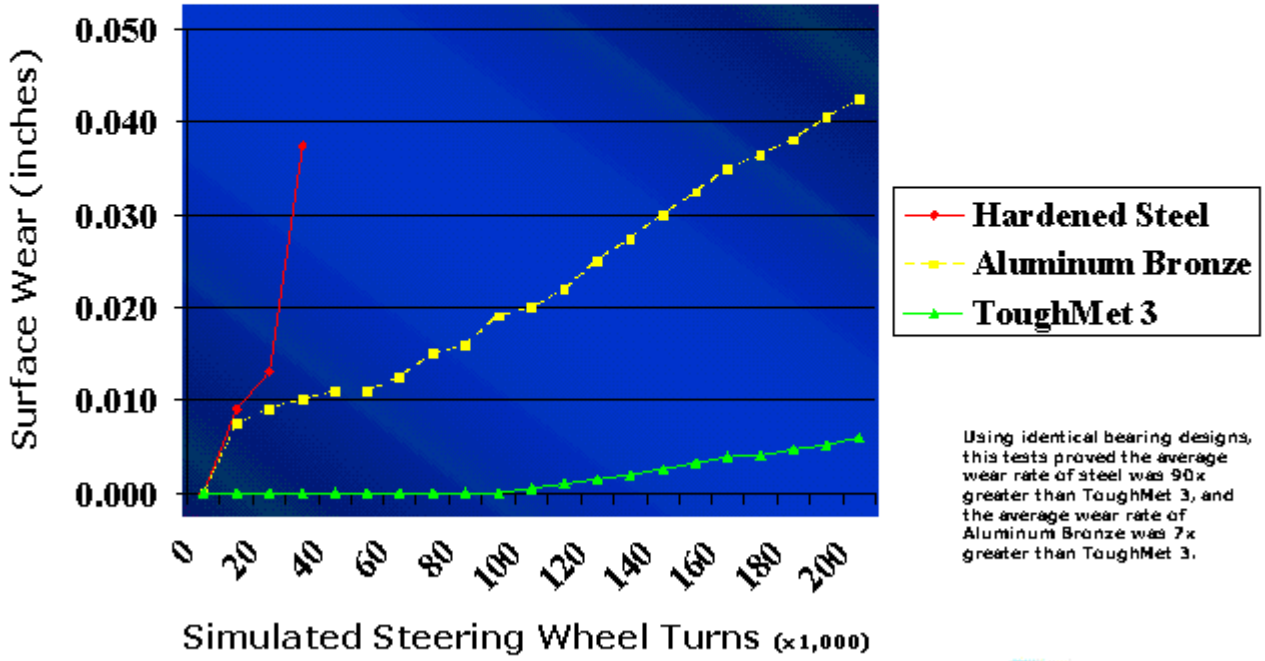
Developing markets/applications where technology is strong:

- Oil Well Completion Equipment, Mining, Heavy Equipment, Drivetrain Components, Hydraulic Systems, Engine Bearings, Semiconductor Fabrication

Lorain Technology: Expanding Brush Wellman's market and application reach

BRUSH WELLMAN ALLOY PRODUCTS

ToughMet® Outlasts Conventional Bearing Materials in 300-ton Mining Truck Steering Test

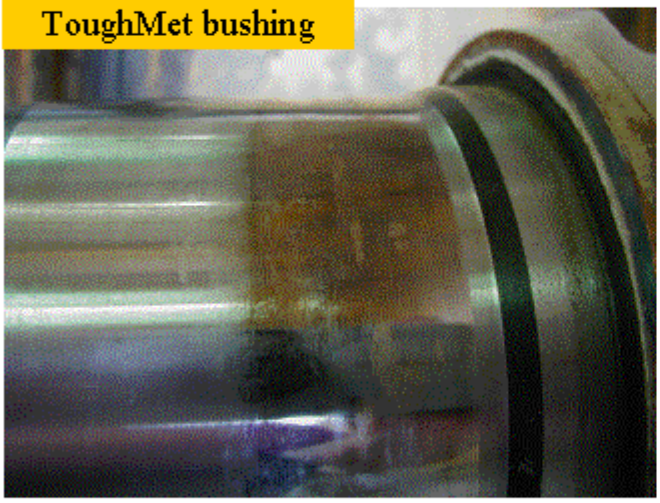


Using identical bearing designs, this tests proved the average wear rate of steel was 90x greater than ToughMet 3, and the average wear rate of Aluminum Bronze was 7x greater than ToughMet 3.

BRUSH WELLMAN ALLOY PRODUCTS

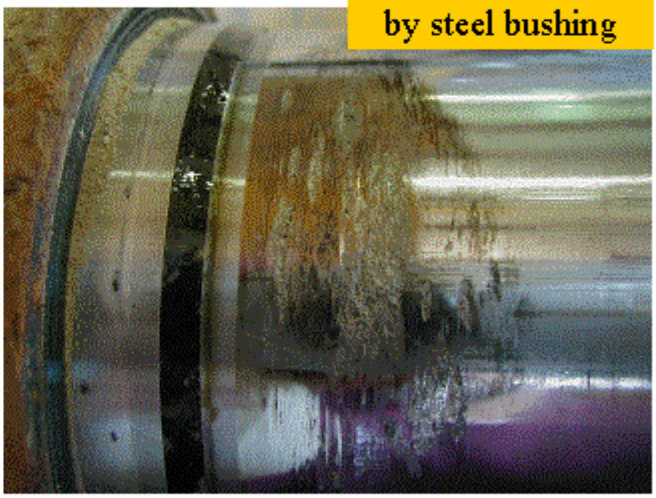
ToughMet Bushings Protect Steel Mating Parts.
Example: Lubrication failure on bulldozer undercarriage

Steel pin protected by ToughMet bushing



Left side pin after 500 running hours against ToughMet 3 CX105 bushing.

Steel pin damaged by steel bushing



Right side pin after 500 running hours against hardened steel (HRC 50) bushing.

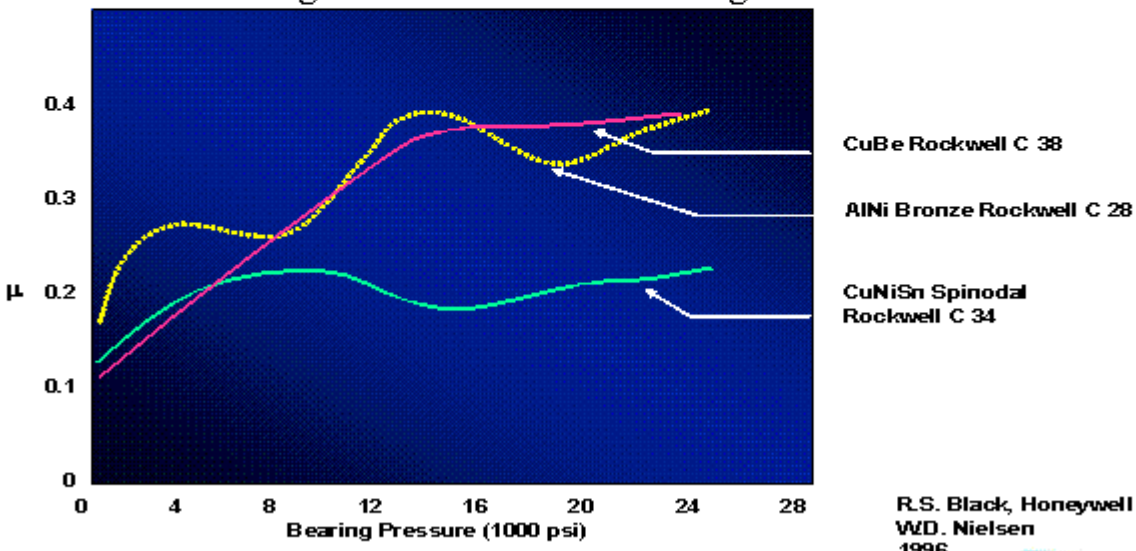
Pin hardness = HRC60.

BRUSH WELLMAN ALLOY PRODUCTS

ToughMet® Industrial Components Results:

ToughMet® Alloy Bushings Provide Superior PowerEfficiency Performance

in a Comparison of Dynamic Coefficient of Friction μ vs Bearing Pressure for Three Bearing Materials

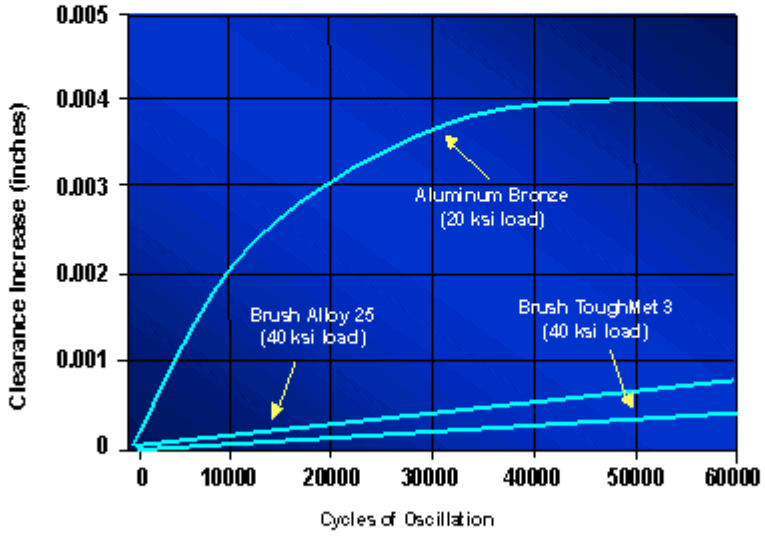


R.S. Black, Honeywell
W.D. Nielsen
1996

BRUSH WELLMAN ALLOY PRODUCTS

Significantly Higher Durability has been Confirmed for ToughMet®

Comparative Sleeve Bearing Wear Tests.



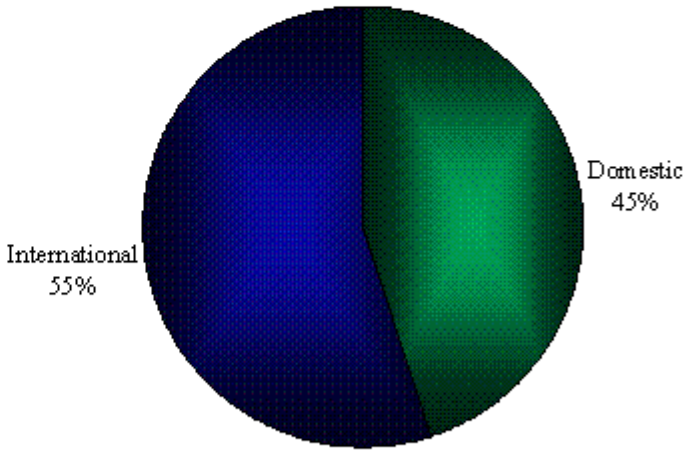
Battelle

BRUSH WELLMAN ALLOY PRODUCTS

Brush International, Inc.

- Brush International Inc. is a wholly owned subsidiary of Brush Engineered Materials
- Service centers in Germany, England, Japan and Singapore
- Representative offices in Korea, China and Taiwan
- Primary focus on the distribution of alloy products while providing local support to other Brush Engineered Materials' subsidiaries operating internationally

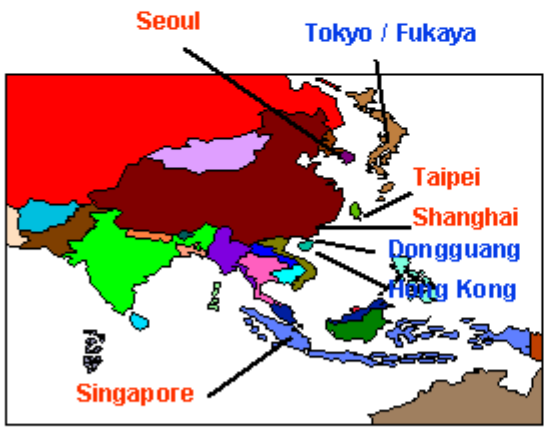
Alloy International/Domestic Revenue
First Half 2007

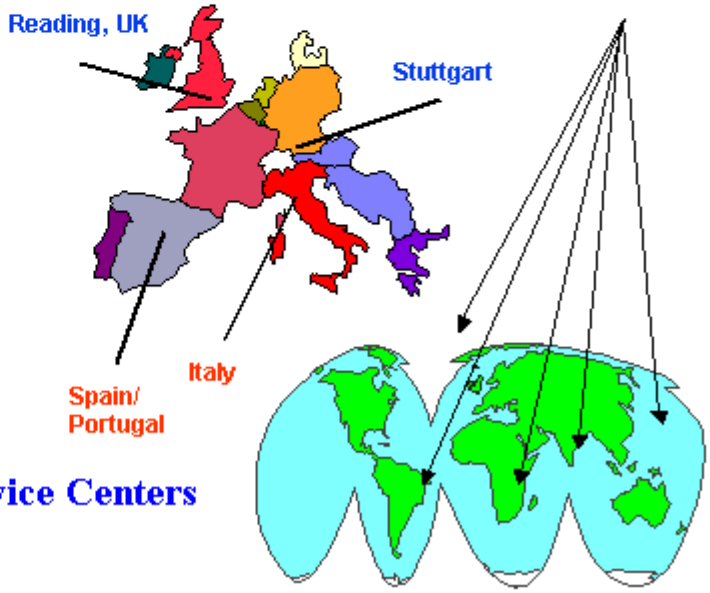


BRUSH WELLMAN ALLOY PRODUCTS

Brush International, Inc.

ASIA					EUROPE				EXPORT
BWS	BWC	BWT	BWJ	BWK	BWL	BWG	BWG	BWG	BWI
S.E. Asia	China	Taiwan	Japan	Korea	UK/ Ireland	Germany	Italy	Spain	Export





BW Technical / Marketing & BW Service Centers

Brush Engineered Materials Inc.
Organized into Four Separate Reportable Segments

- Advanced Material Technologies and Services
- Specialty Engineered Alloys
- ***Beryllium and Beryllium Composites***
- Engineered Material Systems

Brush Wellman Beryllium Products

Products

Beryllium Metal	-	One of the lightest metals known
	-	Family of vacuum hot and hot/cold isostatically pressed powder-derived metals
AlBeMet™	-	Family of lightweight alloy composites
	-	Extruded, rolled sheet and hot isostatically pressed powder-derived metals

BRUSHWELLMAN
ENGINEERED MATERIALS

Brush Wellman Beryllium Products

Products - Cont.

E-Materials
- Family of low expansion, lightweight electronic packaging materials
- Composites of beryllium metal and beryllium oxide

Beryllium Oxide/ Chemicals
- Ceramic-grade beryllium oxide powder
- Specialty beryllium-containing chemicals

BRUSHWELLMAN
ENGINEERED MATERIALS

Brush Wellman Beryllium Products

Facilities

Elmore, Ohio

Fremont, California

BRUSHWELLMAN
ENGINEERED MATERIALS

Key Product Attributes

- Be/AlBeMet™
  - Light Weight (Density)
  - High Stiffness (Elastic Modulus)
  - High Thermal Conductance/Capacity
  - Low Thermal Expansion
- Be
  - Transparent to X-Rays
  - Neutron Reflector

BRUSHWELLMAN
ENGINEERED MATERIALS

Brush Wellman Beryllium Products

Primary Competition… Alternative Materials

- Organic Composites (e.g. Carbon epoxy)
- Silicon carbide
- Metal Matrix Composites (e.g. Al - silicon carbide)
- Pyrolytic graphite
- Aluminum (high strength grades)

BRUSHWELLMAN
ENGINEERED MATERIALS

Major Defense/Aerospace Applications for Brush Wellman Beryllium Products

Optics

Optical substrate and support structure for visual and infrared target acquisition systems (fighter aircraft, helicopters, unmanned aerial vehicles, tanks), surveillance systems and astronomical telescopes.

Satellites

Structures and sensors for defense and commercial telecommunications satellites.

Electronics

Electronic packaging for defense avionics, radar and electronic countermeasures systems for helicopters and fighter aircraft. Applications include circuit boards, covers and packages.

BRUSHWELLMAN
ENGINEERED MATERIALS

Major Commercial Applications for Brush Wellman Beryllium Products

X-ray Windows

Radiographic tube components for ✳ medical diagnostic (x-ray, mammography, CAT-scan), ✳ industrial and ✳ scientific equipment.

Optical Scanners

Mirrors for laser scanners used in reprographic and other high-performance laser applications.

Motion control

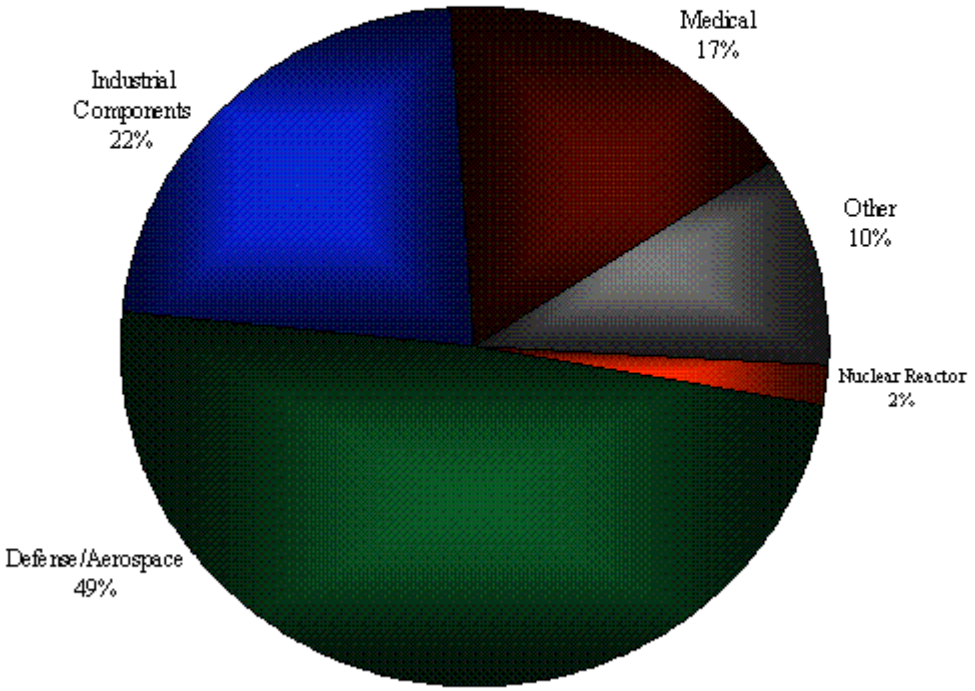
Structural components for high-precision semiconductor processing and industrial robotic equipment

Acoustics

High performance speaker components

BRUSHWELLMAN
ENGINEERED MATERIALS

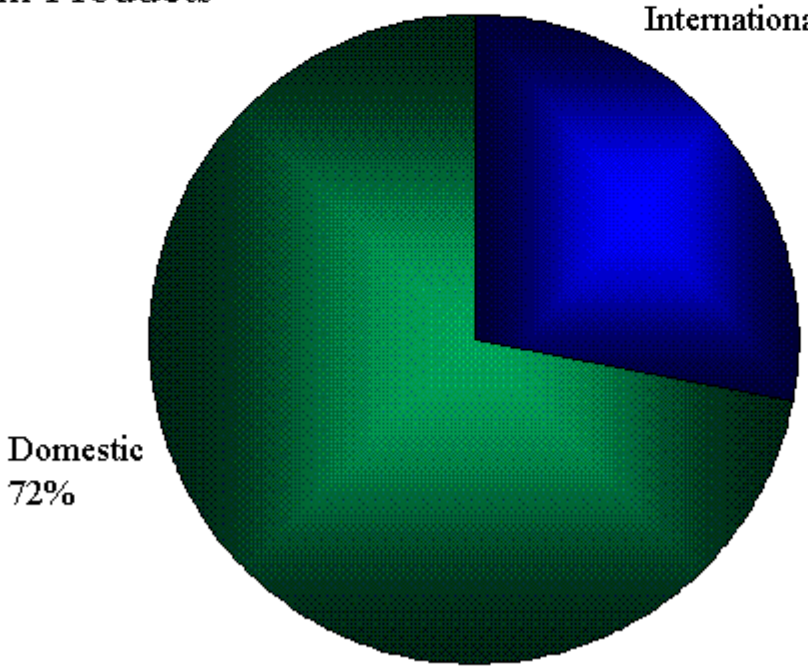
Beryllium Products
YTD Q2 2007 Revenue by Market



BRUSHWELLMAN
ENGINEERED MATERIALS

International/Domestic Revenue
Q2 2007

Beryllium Products



BRUSHWELLMAN
ENGINEERED MATERIALS

Major Applications, New Products and Platforms

Beryllium Products

Product	Market
New AlBeMet Products	Defense
Fabricated Products	Defense
Acoustic	Speakers
High grade Be foil	Medical x-ray

BRUSHWELLMAN
ENGINEERED MATERIALS

Beryllium Products
Brush Ceramic Products

- Located in Tucson, Arizona
- Products
  - Ceramic substrates used in commercial and military packaging applications
  - Ceramic laser bores for gas lasers used in medical and industrial applications
  - Machined ceramic components used in military, oil and gas, semiconductor and microwave applications

BRUSHWELLMAN
ENGINEERED MATERIALS

Brush Engineered Materials Inc.
Organized into Four Separate Reportable Segments

- Advanced Material Technologies and Services
- Specialty Engineered Alloys
- Beryllium and Beryllium Composites
- ***Engineered Material Systems***

Technical Materials Inc.
2007

"Providing engineered metal strip products to leading technology manufacturers around the world."

Market History

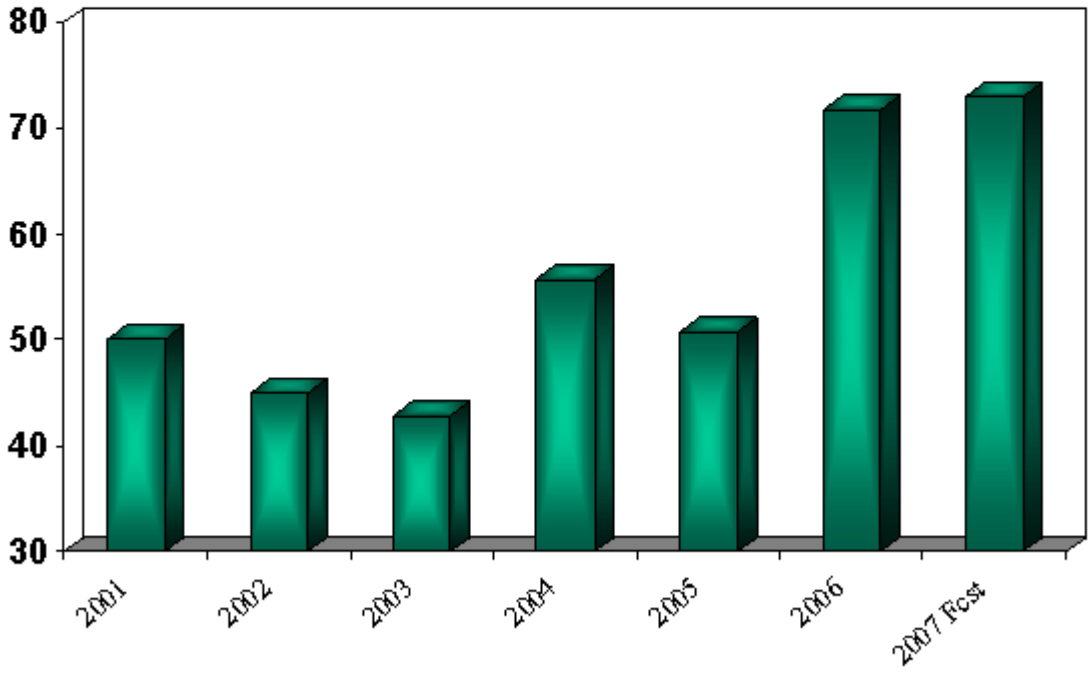
- Founded in 1968, TMI's continuous clad and inlay technology produced high-reliability connector and switch materials for the telecom industry.
- Today TMI's products are used throughout the world by virtually all major technology markets. As a leader in reel-to-reel composite metals engineering, TMI differentiates itself through proprietary process technologies.
- TMI worldwide sales increased 37% in 2006. New product sales accounted for approximately half of this increase.

TMI Process Technologies

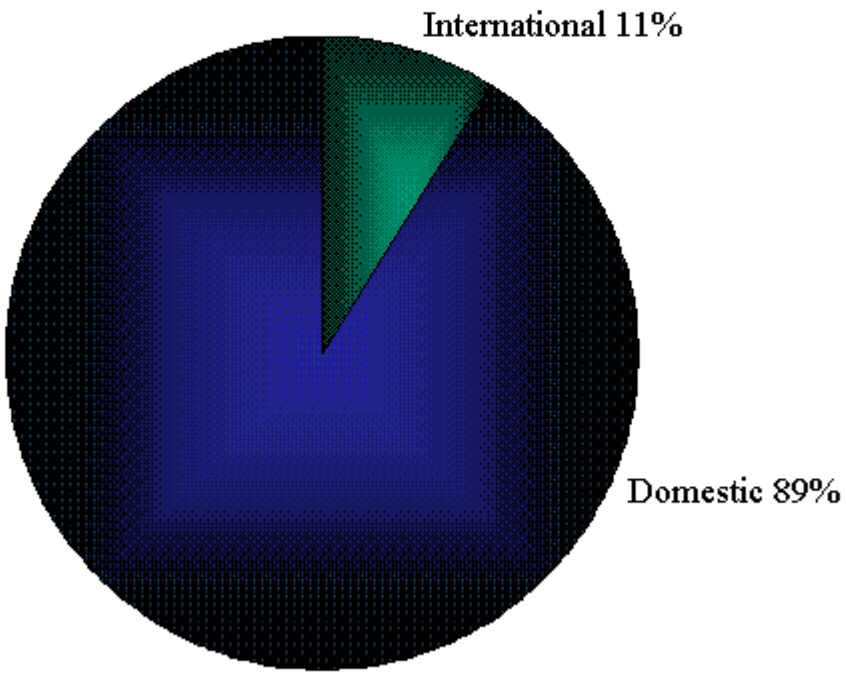
- Cladding
  - Inlay
  - Micro Laminates
- Electroplating
  - Gold, Silver, Base Metals
  - Selective and Overall Coatings
- Profiling
  - Milling
  - Skiving
- Continuous Electron Beam Welding
- Lead-Free Solder Coatings

TMI Sales Growth

$ in millions



International/Domestic Revenue 2006



Our Vision

- To be a leader in creating innovative engineered material solutions and services that make our customers competitive in global markets.

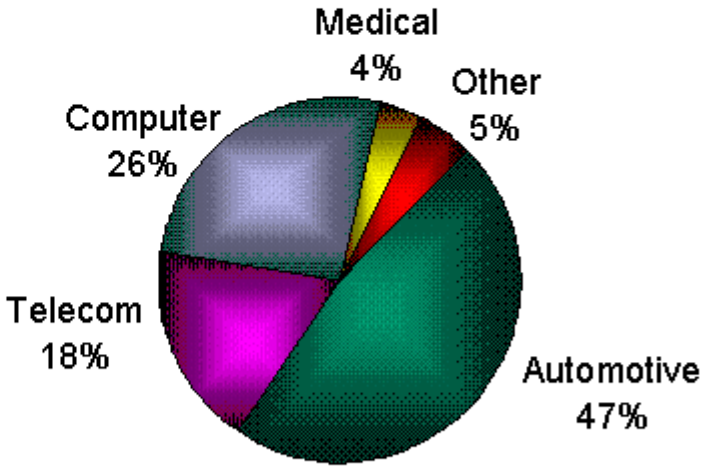
Technology Leader

- Quality
  - ISO 9001-2000, Certified by Bureau Veritas
  - ISO 14001, Certified by TÜV
  - Unique Tolerance Capabilities
  - Extensive Digital and Vision-Controlled Processing
- Engineering
  - Metallurgical Design
  - Technical Customer Support

Our Major Markets

YTD 2Q 2007

- Automotive
- Consumer Electronics
- Computer
- Semiconductor
- Energy
- Medical



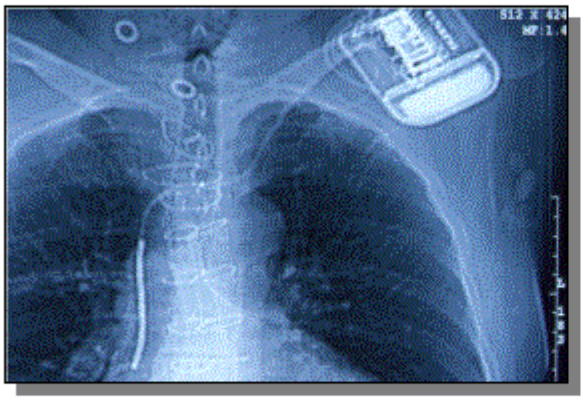
Strategic Growth Markets

- Computer Hard Drives
- Medical Devices
- Energy Systems

Application: Computer

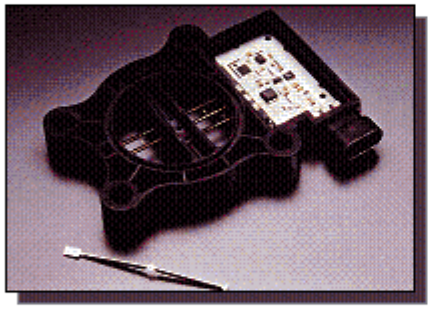
- *Hard Drive Suspension Materials*
  - Stainless/Aluminum Composites
  - High Stiffness-to-Weight Performance
  - Supports Higher Data Density Media

Application: Medical



- *Implant Materials*
  - Electron Beam Welded and Clad Interconnects
  - Niobium, Tantalum, Titanium, and Stainless Steel Systems

Application: Automotive



- *High-Reliability Connector and Leadframe Materials*
  - Safety Devices
  - Engine Performance Sensors
  - Hybrid Components

Application: Consumer Electronics

- Leadframes for Digital Camera Sensors
- Cell Phone Passive Components

Application: Energy

- High-Performance Battery Materials
- Solar Cell Interconnects
- High-Temperature Fuel Cell Clad Materials

2007 Growth Strategy

- Continued Expansion of Electroplating through Process Technology Advantages
- Focus on Clad and Electron Beam Weld Product Development in High-Growth Niche Markets
- Continue to Expand TMI's Presence in the Far East

Beryllium Health and Safety

Brush has continued to make progress on issues related to beryllium health and safety

- Improved worker protection programs in place
- Rates of sensitization down among new workers
- Strong focus on regulations related to beryllium exposure

Litigation

	Total Cases Pending	Total Plaintiffs (including spouses)
12/31/05	13	54
12/31/06	13	54
03/30/07	12	52
06/29/07	10	32

Litigation

- In Q-2 2007, the plaintiff filed a request for dismissal in one case; and in one purported class action, following the Fifth Circuit's entry affirming the District Court's granting of the Company's motion to dismiss, the plaintiffs filed a motion for rehearing, which was denied, and the case has been finally decided. No new cases were filed during the quarter.
  - Our caseload and number of plaintiffs will vary from quarter to quarter depending on new cases, additional plaintiffs, settlements, dismissals, amendments to complaints, etc.
- The Company believes it has substantial defenses in pending cases.