
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) **March 29, 2012**

Materion Corporation

(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.)

6070 Parkland Blvd., Mayfield Heights, Ohio
(Address of principal executive offices)

44124
(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 March 29, 2012, Materion Corporation updated its website with additional investor presentation materials that will be utilized by management. A copy of the additional materials 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	Additional Investor Presentation Materials

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.

Materion Corporation

March 29, 2012

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

Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
99.1	Additional Investor Presentation Materials



MATERION



Materion Corporation
Additional Investor Presentation Materials
March 2012

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 and/or maintain 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, the timing and ability to achieve further efficiencies and synergies resulting from our name change and product line alignment under the Materion name and brand, 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.



MATERION



Advanced Material Technologies Segment
(Advanced Materials Group)

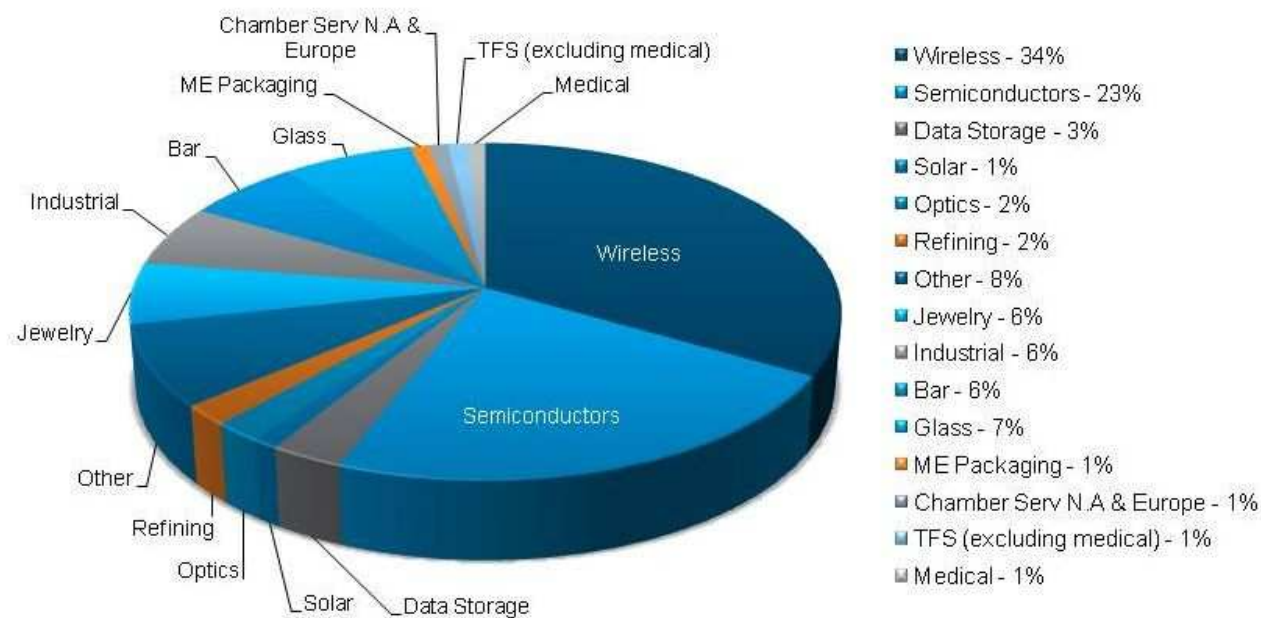
Long term sustainable growth

- Profitable Markets
- Profitable Products
- Geographic Scope
- Best total cost solution
- Vertical Integration

Growth



End Markets Sales 2011



* % of Total Sales

Geographic Diversity

- Manufacturing Redundancy
- Closer to Customers



Albuquerque NM
Milwaukee WI
Buffalo NY
Wheatfield NY
Brewster NY

Newburyport MA
Ireland
Germany
Czech Republic
Singapore

Philippines
Taipei
China
South Korea

Products



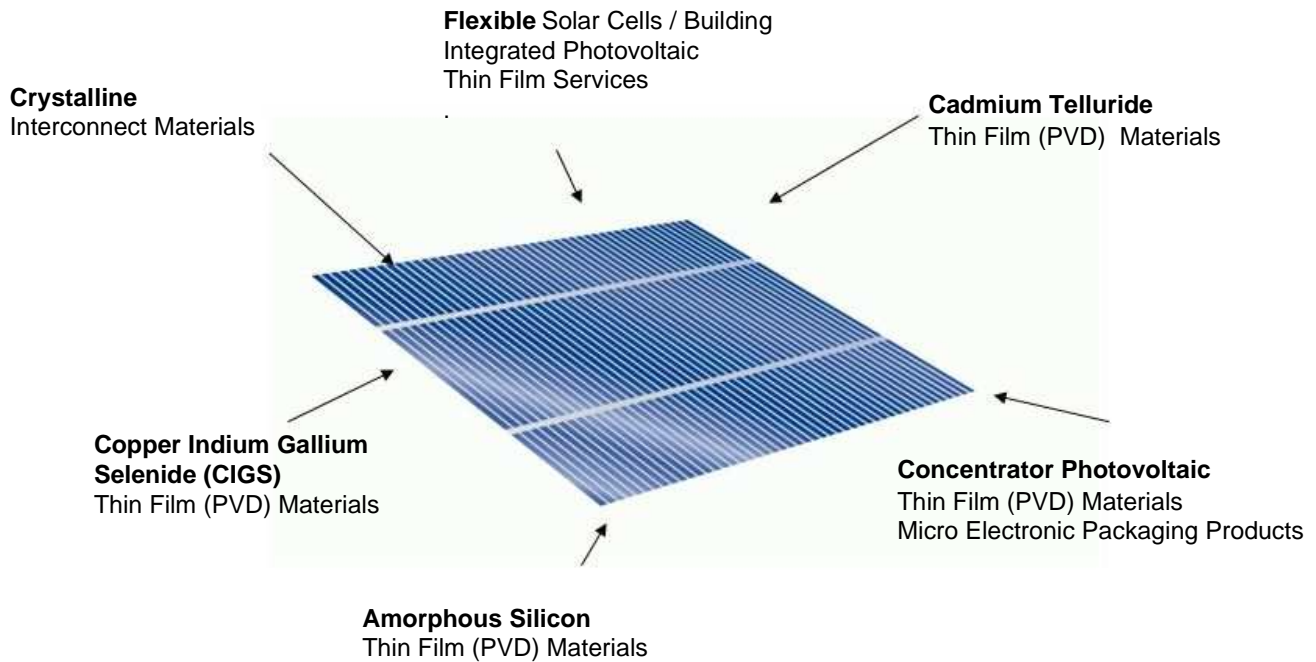
Processes



Applications Smart Phones



Applications Solar Energy



Advanced material solutions & services for high reliability applications

- Unique vertical integration
- Best total cost solution

Products:

- Thin Film Deposition Materials
- Electronic Packaging Products
- High purity & specialty Materials

Services:

- Precision parts cleaning
- Precious metals refining & recycling

Top Performers



Wireless Application(s)



LED

Growth



Refining



Precision Parts Cleaning

High Performance Material solution

- Inorganic chemical synthesis and material transformation
- Customizable solutions for best total cost

Specialty Inorganic Chemicals

- Magnesium Fluoride
- Thorium Floride
- Phosphor

PVD Materials

- Silver (Ag) Targets
- Zinc Arsenide

Top Performers



Optical Materials



Specialty Inorganic Chemicals

Growth



Large Area Coating



Solar

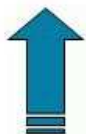


Advanced Material Technologies Segment
(Large Area Coatings & BARR Precision Optics Groups)

Materion Large Area Coatings Group Overview



Key Markets



Products

- Metal films
- Clear conductive oxide films
- Water vapor barrier films
- Converted materials
- Conductive traces
- Conductive top sheets
- Barrier components
- Flex circuits
- Medical
- Solar TFPV
- Displays
- Flexible electronics
- Specialty applications



Core Technology



- sputtered metals
- sputtered oxides
- barrier films

- S litting
- rewinding



MLAC Vision, Goals and Objectives



- Targeted Growth - Core Medical Bio-sensor Businesses
- Sustain Quality, Improve Yields and Increase Profitability
- WIN with Technology / R&D / Innovation
- Diversified Global Growth through Strategic NBO's
- Initiate Proactive R & D and Increase Capacity for NBO's
- Continue to Augment MLAC High Performance Team
- Grow through Strategic Augmentation Opportunities
- Leverage Materion Synergies Globally to Achieve Customers' 1st Choice Status



- **Medical**

- **Flexible Engineered Films**

- **Flexible Display**

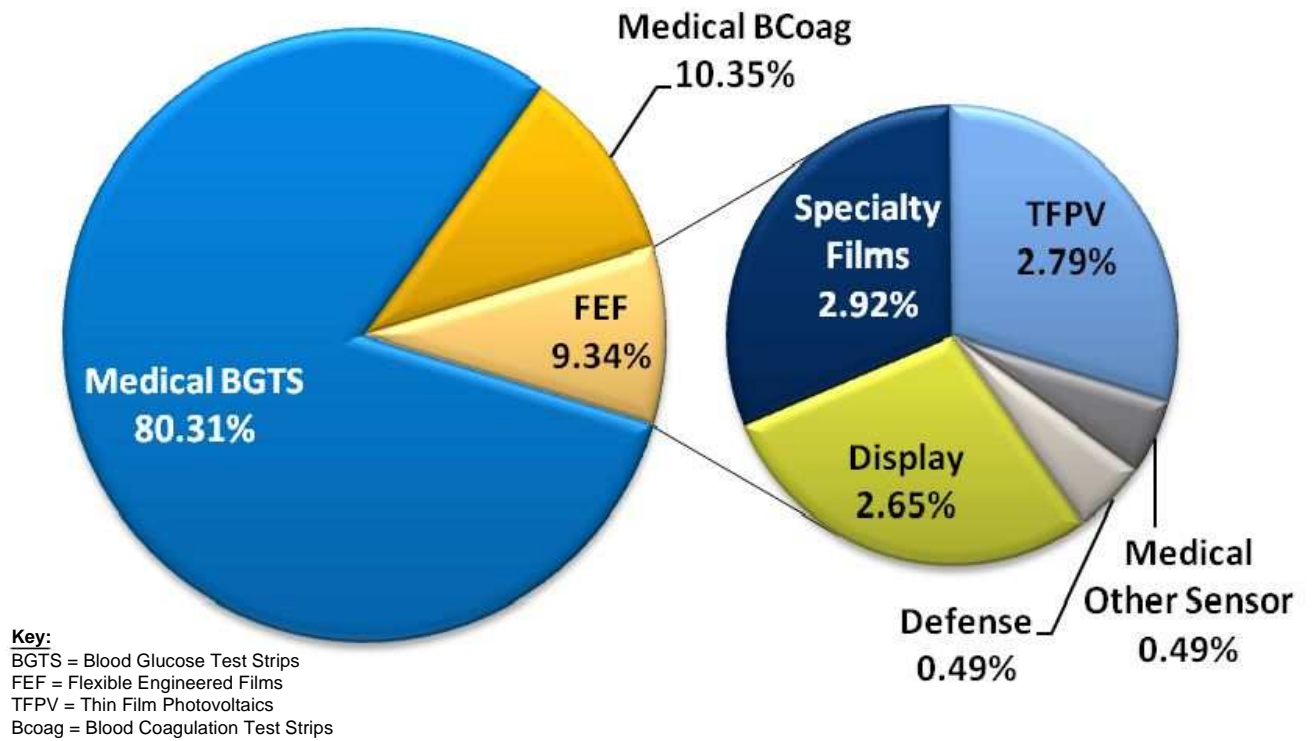
- **Thin Film Photovoltaics**

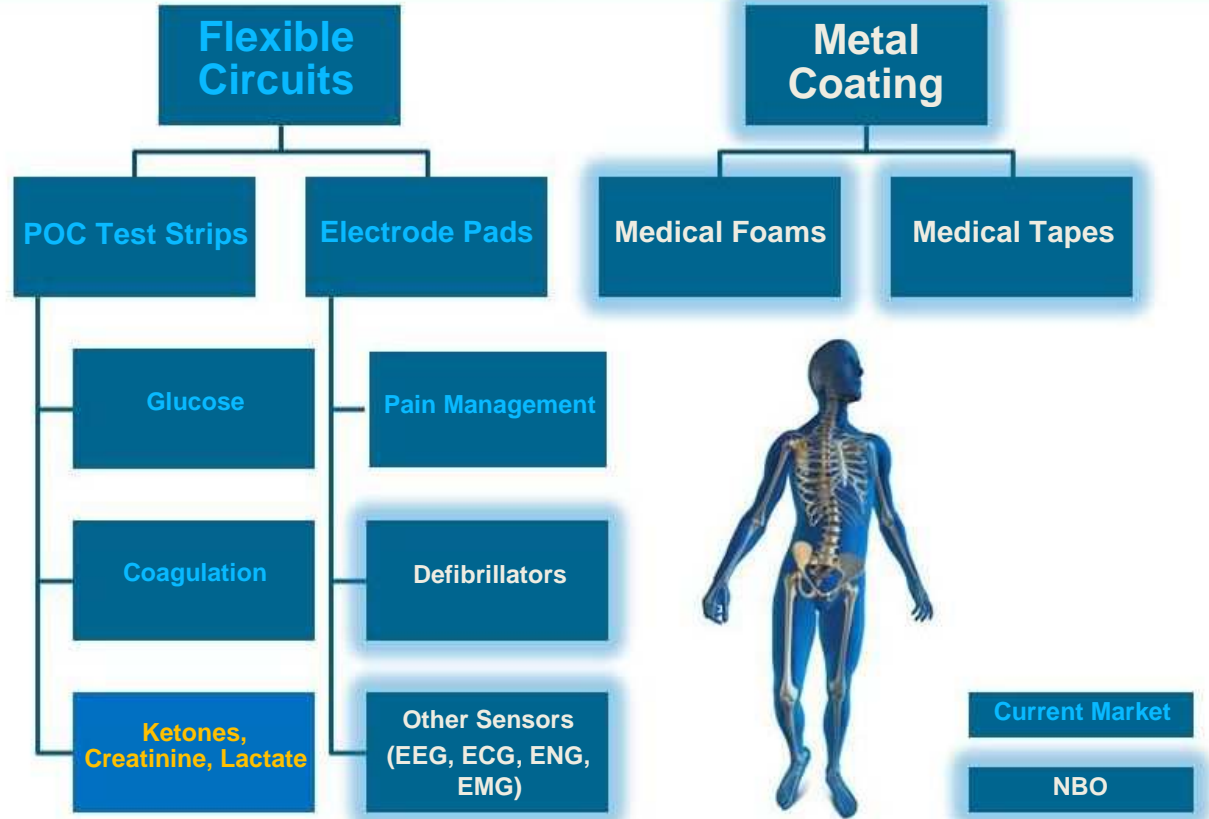
- **Defense Applications**



**Diversified
Growth**

MLAC 2011 Distribution of Business

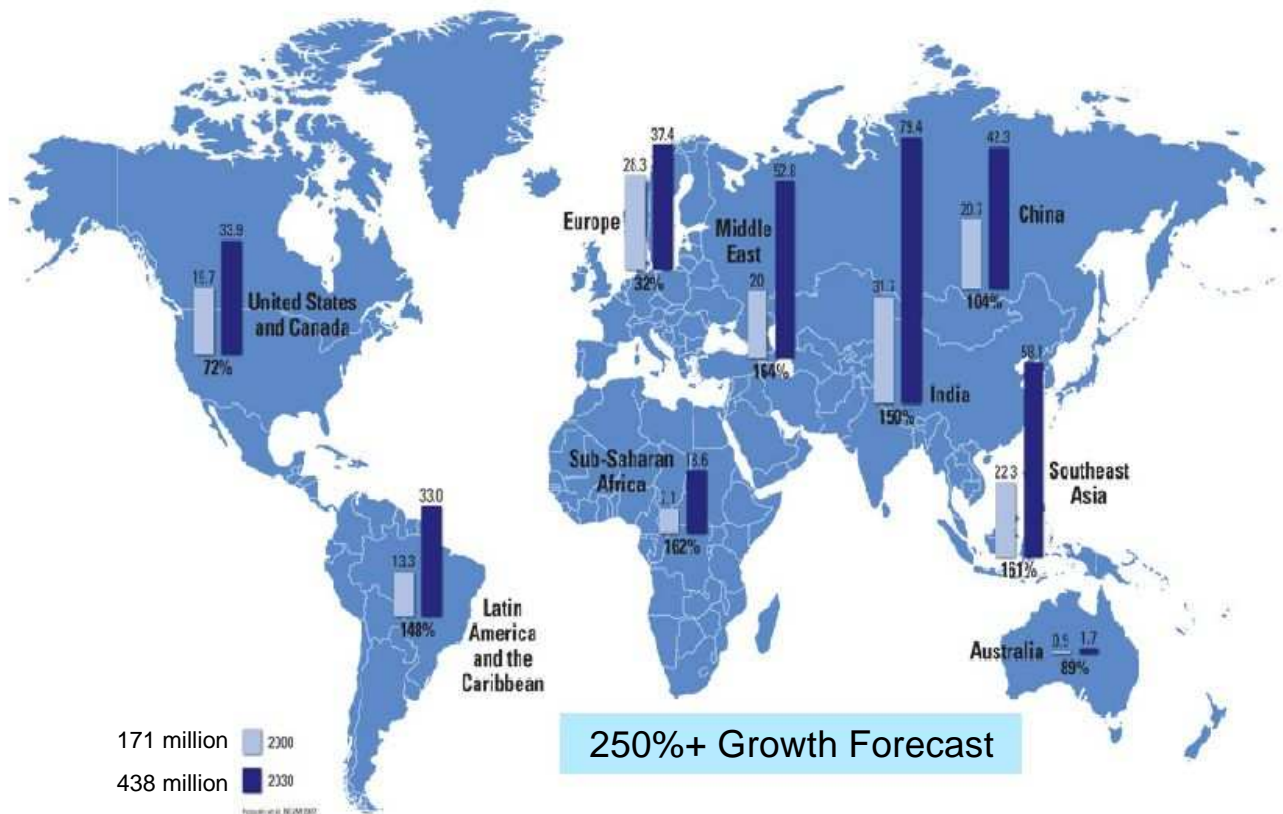




- **Medical Device Electrodes**
- **Other POC Test Strips**
- **Blood Coagulation Test Strips**
- **Blood Glucose Test Strips**



Projected Growth of Diagnosed Diabetes

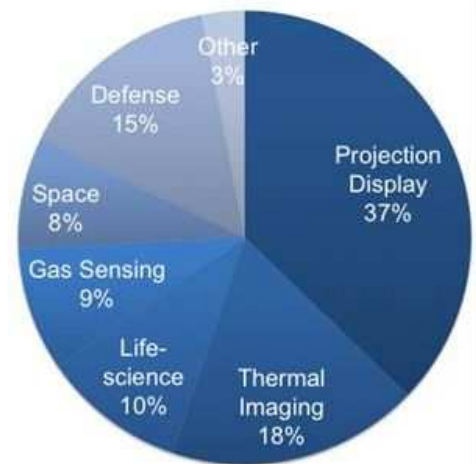


- **PVD vs. Conductive Ink**
- Accuracy , Consistency, Functionality
- Blood Sample Size
- No Code
- Increasing population with diabetes
- No treatment, cure or testing alternatives that will obsolete BGTS or significantly reduce volume before 2015



- ◆ **Market Diversity**
Projection Display, Gas sensing, Thermal Imaging, Life Science and Medical Device, Space & Astronomy, Defense
- ◆ **5 Manufacturing Sites**
Westford MA (2), Tyngsboro MA, Buellton CA, Shanghai CN
- ◆ **700 employees**
- ◆ **More than 100 coating chambers**
- ◆ **Strong customer relationships**

Markets



Precision Optics Group Overview



Defense Applications



Commercial Application



Display Projections



Space, Science & Astronomy



Thermal Imaging

Products

- Linear Variable Filters
- High Value Coatings
- Non-optical Coatings
- Hybrid Circuits
- Light tunnels



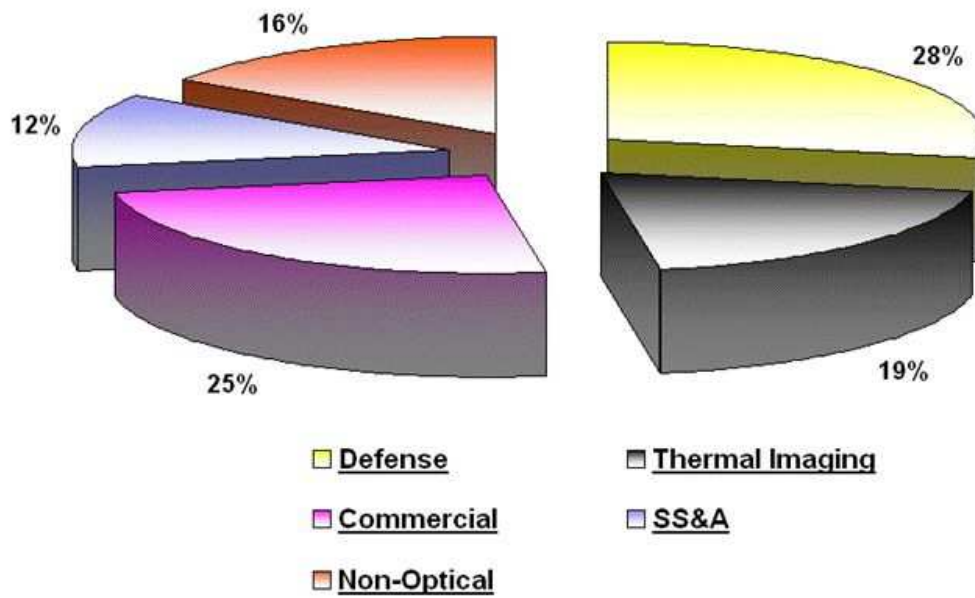
- Flex Sensors
- Visi-Lids®
- Filter Sets
- Rugates
- Wafer Level
- Color wheels

Core Technology

- Magnetron Sputter
- Ion Beam Sputter
- Thermal Evaporation
- Ion Assisted Deposition
- Precision Patterning
- Singulation/Scribe
- Sub Assembly/Potting
- Solder assembly
- Optical Design
- Opti-Mechanical
- Lens Assembly
- Silk screening



Market Breakdown





Performance Alloys Segment

World Leader in Copper Beryllium

- North America's only Bertrandite Ore Mine
- Only Fully Integrated Copper Beryllium Business
(mine – manufacture – sales – distribution - technical support)
- 900 Employees at 8 Locations
- Growing Non-Beryllium Product Family of High Performance Alloys
(Toughmet, Leaded CuNi wire, Moldmax V)
- Third Party Distribution is above 40% and Growing
- Sales are 50% outside North America and Growing

Operation	Location	Products
Mine Chemical Mill	Delta, UT	Bertrandite Ore Be Hydroxide
Primary Operations Strip Mill Bulk Mill	Elmore, OH	Cast Billets Strip Coils Rod, Bar, Tube and Plate
Finishing Operations	Reading, PA	Finished Strip and R&W
Non-Be Casting	Lorain, OH	Cast Billets and Shapes
Distribution	Chicago, IL Detroit, MI Stuttgart, Germany Fukaya, Japan	Finished Strip Finished Bulk Finished Strip Finished Strip

Americas

- Admiral Metals
- Bohler Uddeholm
- Busby Metals
- EJ Brooks
- Farmers
- Mead Metals
- Schmoltz & Bickenback
- Southern Copper & Supply
- Thyssen Krupp
- Trident

Europe

- Bohler Uddeholm
- Busby Metals
- Laminaries Matthey
- Stainless
- Thyssen Krupp

Asia

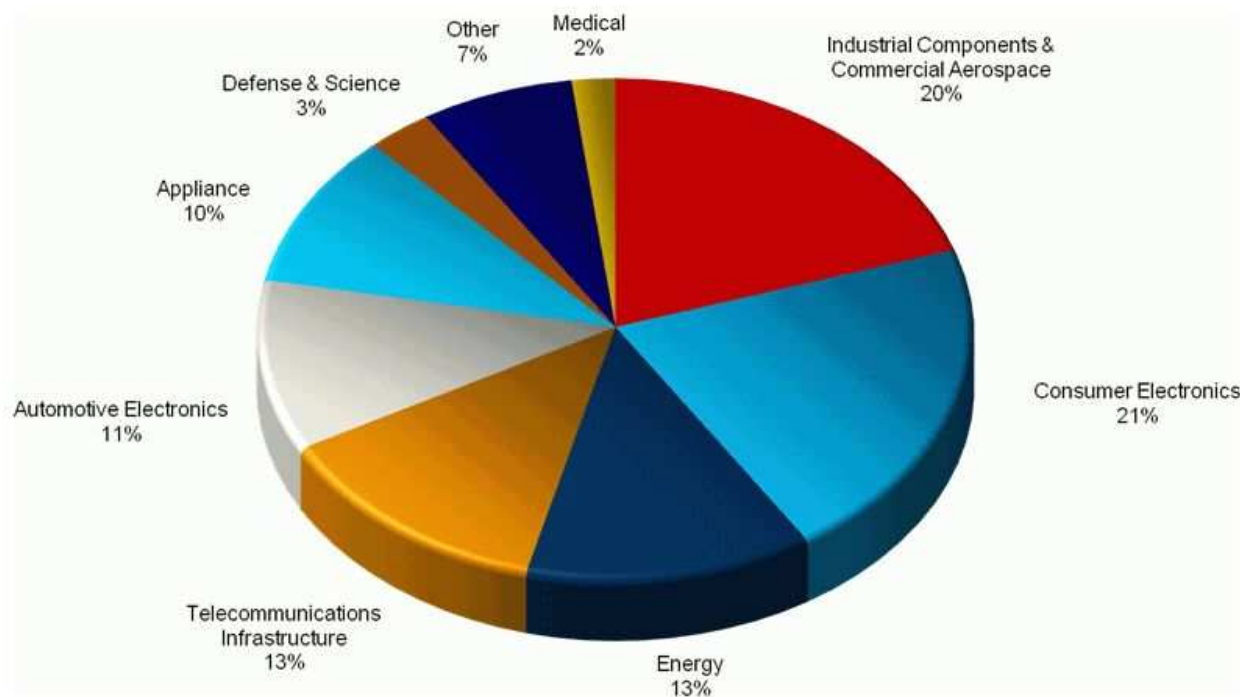
- ASSAB Pacific
- ATP
- James Coppel Lee
- Oristar
- Tai Mao
- Yamato Miyoshi
- Yee Chong

Why use Cu Be and our other Alloys?



- High Strength and Hardness
- High Thermal Conductivity
- High Thermal Stability
- High Electrical Conductivity
- Stress Relaxation Resistant
- Miniaturization
- Anti-Microbial
- Non-Biofouling
- Non-Magnetic
- Anti-Galling
- Corrosion Resistant
- Good Machinability
- Good Castability
- Good Formability
- Good Tribology
- Age Hardening
- Non-Sparking

2011



Major Product Forms

- Strip
- Rod
- Wire
- Plate
- Bar
- Tube
- Billet
- Casting Alloys
- Machined Parts



Market Overview

- Processor heat sink and power contact.
- Large CAGR in tablet / Ultrabook market.
- 5 Mega Pixel Camera usage growing.

Product & Services Offered

- 25 RT, 290, 17460
- T3 for VCM



Key Customers

- Transcendent (Kindle)
- Ultra Book (Acer, ASUS & Sony)
- Apple
- HP
- Dell
- Panasonic

Key Actions for Growth

- Continue to provide design support to 1st tier suppliers (i.e. Winston, Transcendent)
- Provide competitive pricing and training to our distributors
- Continue to understand market dynamics and trends.
- Establish better relationships with OEMs
- Teardown studies

Market Overview

- Directional drilling and production equipment.
- Hydraulic fracturing, deep offshore projects
- Chinese producers are offering low prices
- **New Product - - ToughMet 3 TS 120**



Key Customers

- Slumberger, Halliburton, GE Energy, Cameron, Expro, National Oilwell Varco, Aker Solutions
- Drill & lift bearings, drilling tools, ROVs, XMAS trees, BOP's, sampling tools

Key Actions for Growth

- Launch ToughMet 3 TS120 & TS9X
- Specs, Sour & Mechanical Testing.
- Design and Material Selection assistance.
- Robust Supply Chain.
- Move downstream with Value Added machined parts where applicable.

Market Overview

- Industrial Connectors (Transportation, Coax)
- We are only domestic manufacturer.
- Competitive pricing – need cost effective manufacturing to make acceptable margin.
- **New Process – Multihole Wire Drawing**



Key Customers

- Deutsch
- TriStar,
- New Asia opportunities.

Key Actions for Growth

- Reliable supply at “reasonable” premium prices.
- Expand our customer base. International opportunities.

Market Overview

- T3, CuBe, and Bronze RBTP for bearings.
- B-787, 747-800, A-380, A-350 XWB, C-Series, C919, narrow and wide body retrofits. Use of T3 on new production of 737, 767, 777, A320
- **New Growth opportunities at Embraer and CATIC**



Key Customers

- Airbus, Boeing, Bombardier, Cessna, Lockheed, Goodrich, Honeywell, Messier-Dowty, Heroux, SKF, FTI, Kamatics, Lufthansa Technik, PSI Bearings, RBC-Heim, Minnebea, Sumitomo, Revima, Parker, Spirit Aero

Key Actions for Growth

- Increase Rod HW and Machined Blanks market share in NAM and Europe
- Blended Cu-Be Specifications
- Inventory in China

Market Overview

- Plain bearings in mining, construction, mfg.
- Growing in robust/recovering markets
- ToughMet brand equity, case histories
- Great opportunity to sell Value Added products.



Key Customers (demand generators)

- Joy Global, Caterpillar (w/Bucyrus), Cummins, Hitachi/Deere

Key Competitors

- Integrated bronze bearing makers
- Other materials: steel, polymers, composites

Key Actions for Growth

- Develop additional machining capacity.
- Promote our capabilities.

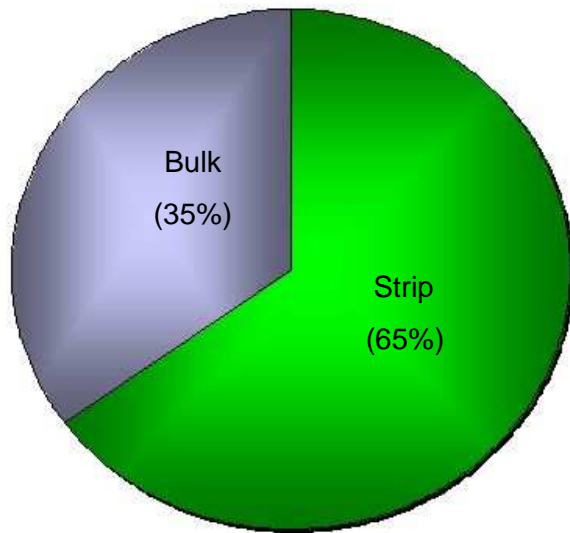


MATERION



Elmore Presentation Materials

- Performance Alloys Overview
- Operations Overview
- Beryllium & Composites Overview
- Operating Strategy
- Quality Philosophy
- Lean Six Sigma



➤ Strip Markets

- Telecom Infrastructure
- Consumer Electronics
- Automotive Electronics
- Appliance

➤ Bulk Markets

- Plastic molds
- Undersea cable amplifiers
- Aerospace landing gear bearings
- Oil and gas drilling equipment
- Heavy Equipment
- Bearings & Bushings

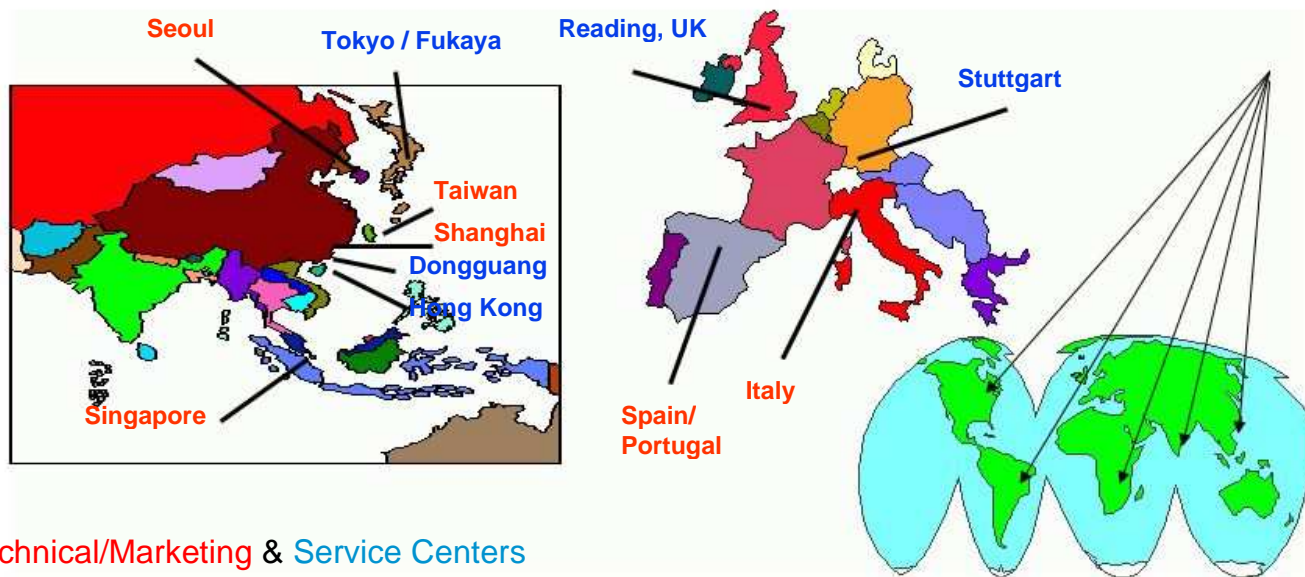
➤ Manufacturing:

- Delta, UT; Elmore, OH; Lorain, OH; Reading, PA

➤ Distribution and Sales Offices:

- Detroit, Chicago, Los Angeles, Houston, Alberta, Toronto/Quebec, Mexico, Brazil
- International: UK, Germany, Switzerland, Australia, France, Japan, Singapore, HK, Taiwan, China, Korea, India

**50% of Alloy Sales outside
U.S.**



Material selection is based on combinations
of mechanical and physical properties

Strength

Conductivity, resistivity

Formability, ductility, crimpability

Stability

Stiffness

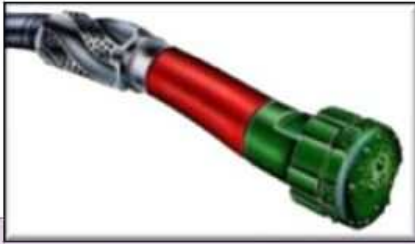
Magnetic permeability

Corrosion resistance

High Temperature Properties

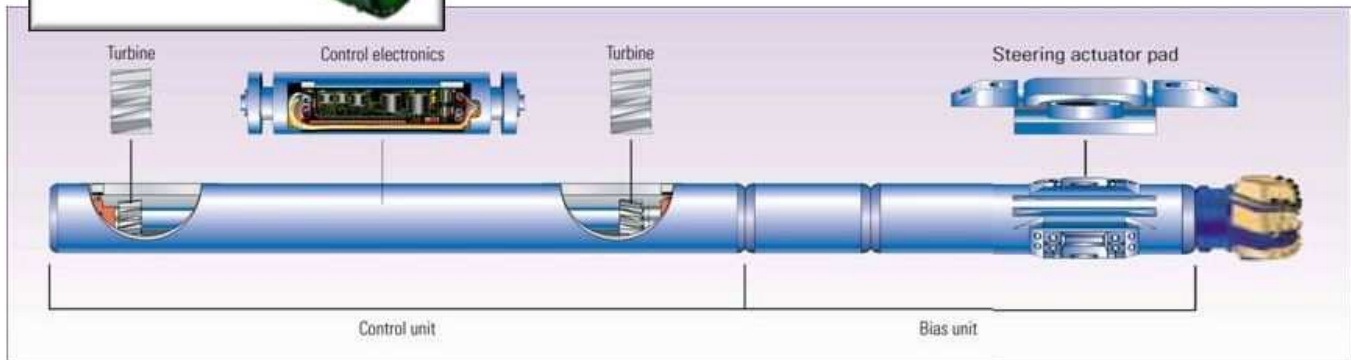
Damage tolerance

Rotary Steerable Drilling Tool



ToughMet® alloy enabled the realization of this device. Use of ToughMet® in Oilfield continues growing. Half of the growth is in this type of tool.

ToughMet®: High Strength, Corrosion Resistant,
Low Friction, Non-Galling, Non-Magnetic,
Easy to Machine, Readily Available.



- Most popular offshore drilling tool for all the major oilfield engineering companies.
- Drill directional cylindrical hole as opposed to elliptical hole by aiming the bit.
- Reduce both drilling time and cementing completion cost by 30%.
- Significantly reduce risk of borehole subsidence during drilling.
- Saves several million dollars of investment for each well.
- Electronics housing & moving parts of bias unit are built 100% of ToughMet®.

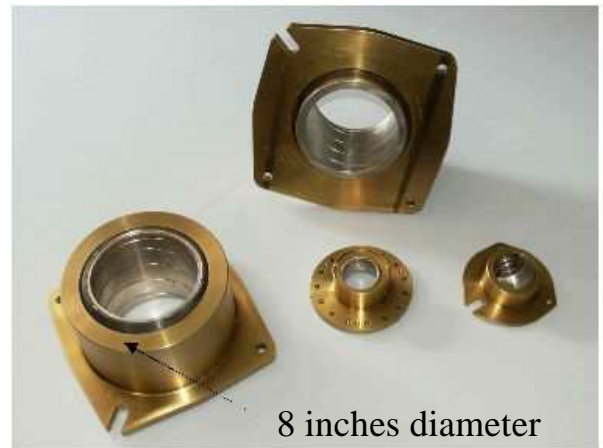


Benefits of MoldMAX® Insert

- 20% faster cycle (122s → 98s)
- Increased annual production by 500,000 bases
- Better dimensional control of hub
- Global has converted 16 tools in Canada
- Looking at more tools in China
- Also using MoldMAX® molds for seats and backs



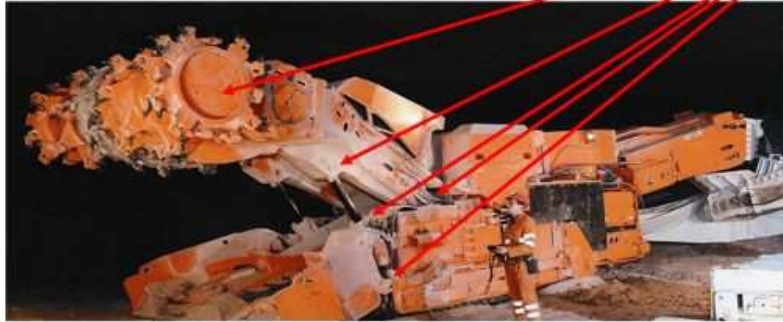
- Cooperated to develop new high-strength, low weight sphericals for aircraft by combining titanium and ToughMet® components.
- ToughMet® sales to Aerospace is growing rapidly. The primary application is to attach landing gear to wing and fuselage.
- Twin-aisle Aircraft weight is reduced by approx.
- ToughMet® alloy is the only metal found to provide the strength required without damaging the surface- treated high-strength titanium alloy housing.



ToughMet Bushing Application

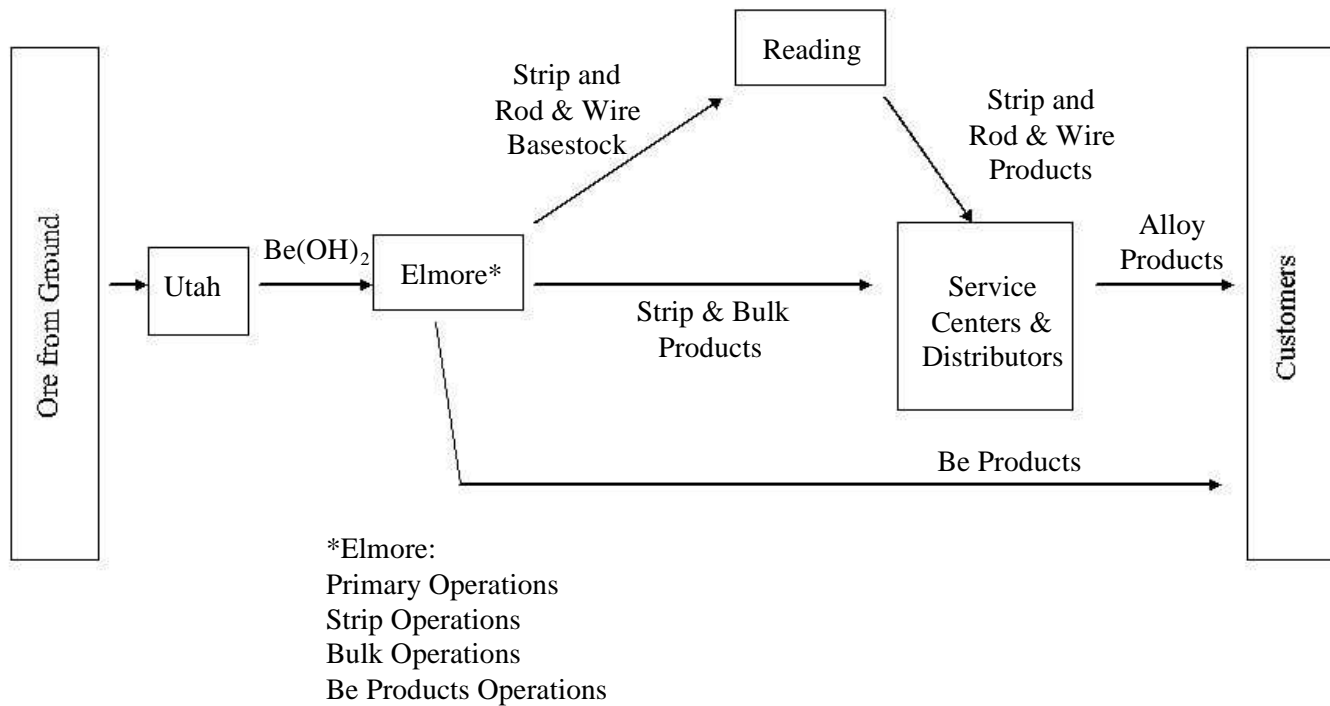


Bushing Applications



Operations Overview

Supply Chain



Key Processes and Flows



Location	Operation	Products
Delta, UT	Mine Chemical Mill	Ore Hydroxide
Elmore, OH	Primary Operations Strip Mill Bulk Mill Beryllium Products	Cast Billets Strip Coils Rod, Bar, Tube, and Plate Machined Beryllium Metal
Reading, PA	Finishing Mill	Finished Strip Rod and Wire
Lorain, OH	Non-beryllium Casting	Cast Forms

Delta Facility - Statistics



- 73 employees - 43 hourly
- 3,080 acres-Mill
- 7,400 acres-Mine
- 92,197 square feet of building space-Mill
- 7,000 square feet of building space-Mine
- 5th largest private sector employer in Millard Co.
- Facility established in 1968-69 production began in Sept. 1969 (mine land purchases began earlier in the 60's)

Delta Mine Operations

Topaz Mine



Unloading Ore at Mill



Delta Mill Operations

Wet Grind



CCD



Leach



Solvent Extraction



Delta Mill Operations

Beryl Ore



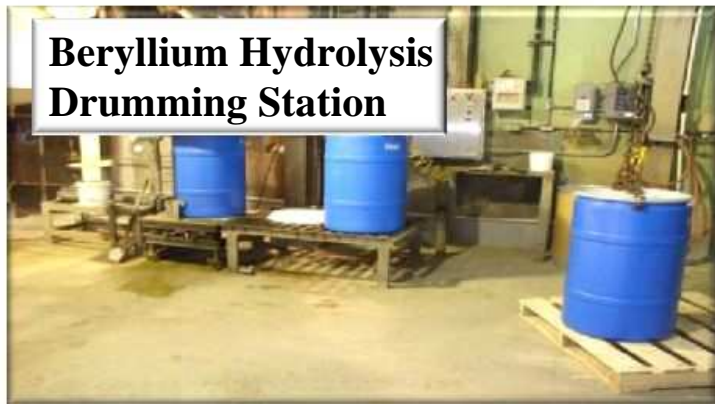
Beryl Plant



Beryl Furnace



**Beryllium Hydrolysis
Drumming Station**



Elmore Facility

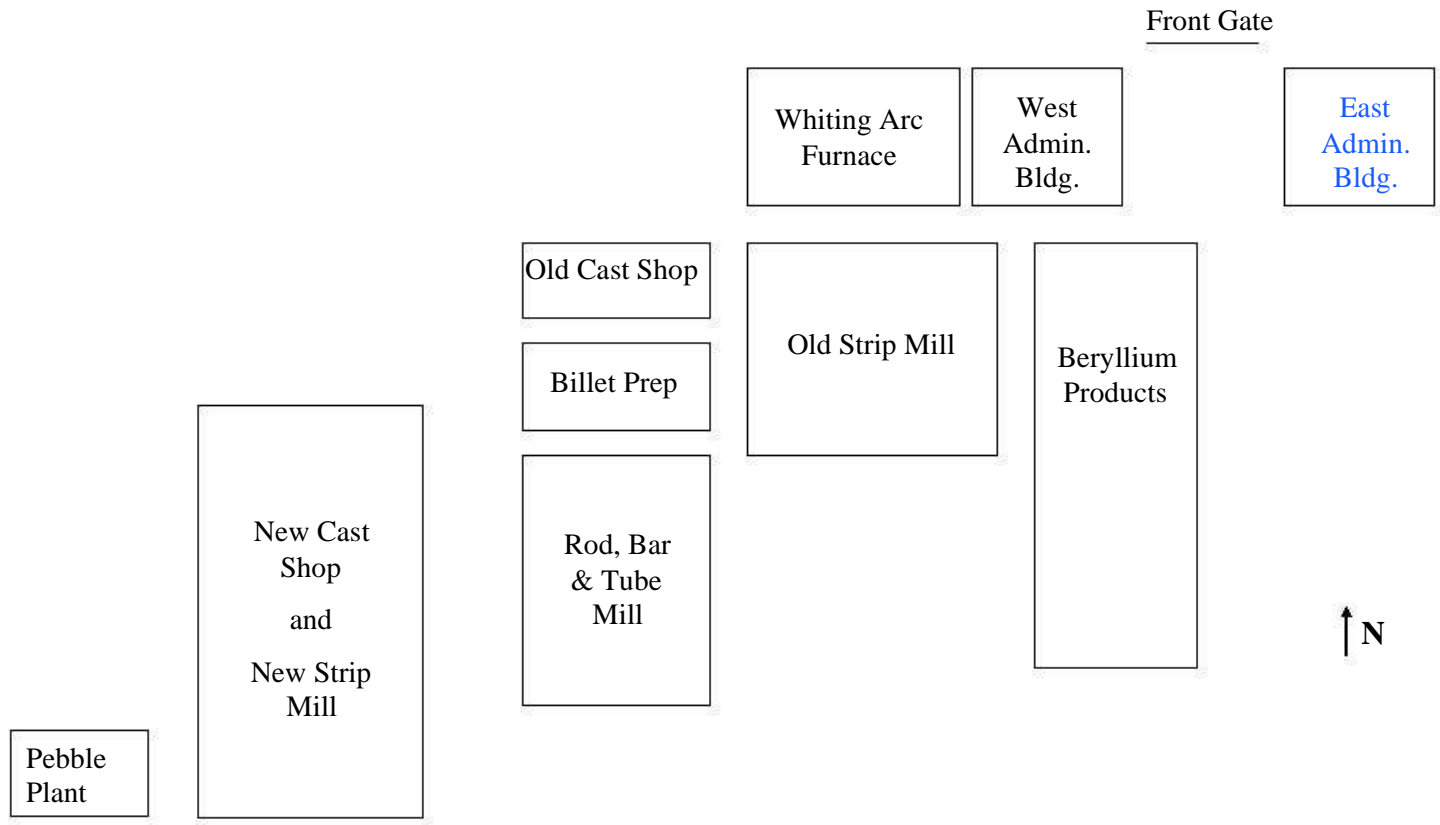


Elmore Facility – Statistics



- 640 employees
- 439 acres
- 1,000,000 square feet of building space
- Second largest private sector employer in Ottawa County

Plant Layout



Primary Operations



- Responsible for hot metal casting of materials utilizing four direct chill cast Induction furnaces; one Whiting arc furnace, two 30-ton Induction furnaces
- Casting is comprised of Master Alloy, normally classified as 4% BCMA, foundry products of various billet and ingot configurations, and primary product, normally in large rectangular strip (8"x18"x360") and various size (up to 23" diameter) round billet forms.
- Re-melting of scrap (RMS) is performed on customer return and internally generated scrap as required, and makes up about 10% of the casting activity.
- Billets and ingots are cast for downstream processing and/or customer sale as produced from these 6 furnaces. Cast billets are normally cropped at the end for quality purposes before being used by the customers for further processing.

Primary Operations

Direct Chill Casting



Strip Operations



- **Business** : Production of high performance CuBe and NiBe strip product in coil form. Width is up to 24" wide and thickness from 0.0079" to 0.186". Seventy percent of shipments are to Brush Wellman's Reading, PA facility where additional processing is performed and the remaining thirty percent is to various Brush Wellman service centers.
- **Markets** : Primary end use of Strip Product is for electrical connectors used in the Automotive, Appliance, Computer and Telecommunications industries. Many niche applications exist for critical safety applications like automotive air bags and overhead sprinkler systems.
- **Process** : Strip Operations involve batch processing for Heating, Hot Rolling, Milling, Cold Rolling, Edge Trimming, Heat Treating, Oxide Removal, Cleaning and Brush Finishing the surface. Over \$100 million was invested in new equipment for Strip Operations in the late 90's.

Strip Operations

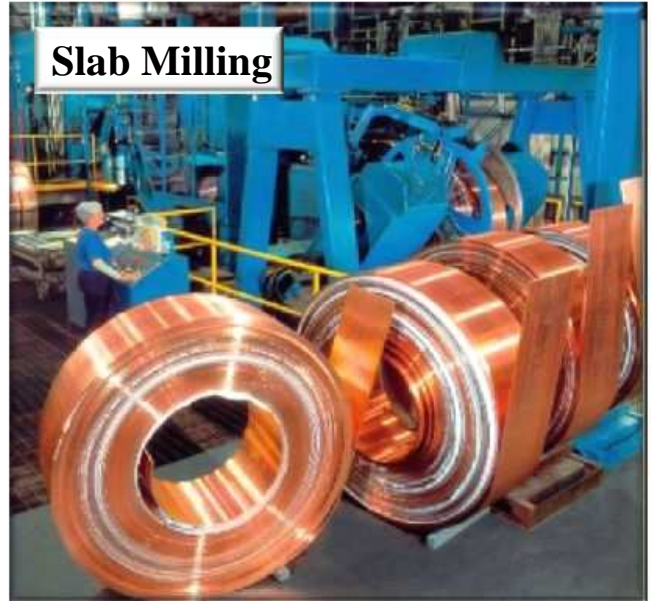
Hot Rolling



Cold Rolling

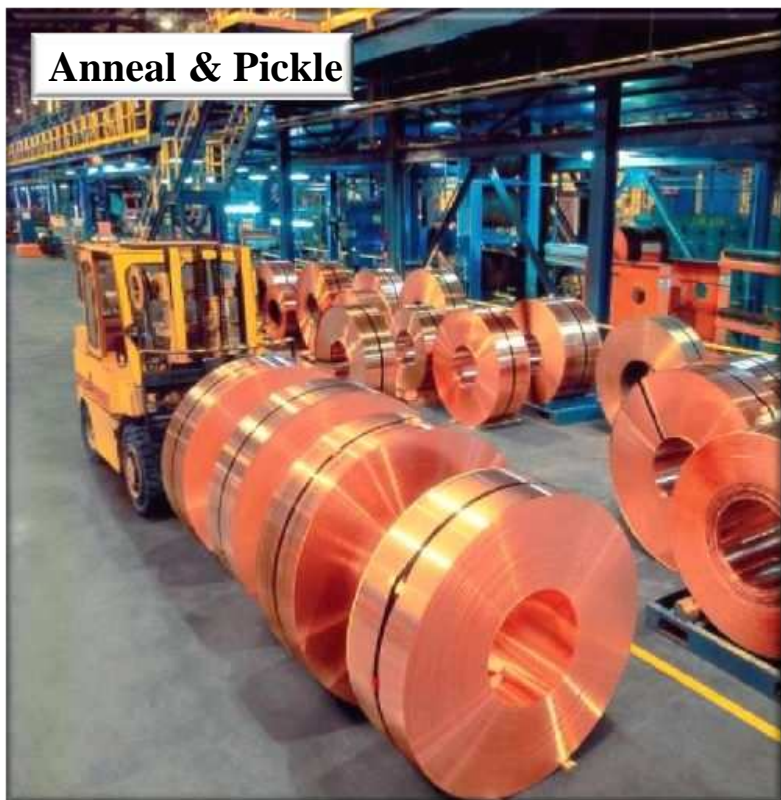


Slab Milling



Strip Operations

Anneal & Pickle



Age



Finish Pickle



- **Business** :Produces engineered alloys in cast and wrought shapes including round rod, rectangular bar, tube, plate, machined parts and wire.
- **Markets** :Aerospace, Automotive, Bearing, Oil, Gas and Mining, Plastic Tooling, Resistance Welding, Telecommunications, and Undersea.
- **Process** :
 - Hot working operations (extruding and hot rolling); Open die and rotary forging; Solution and precipitation heat treat; Final cold working and finish sizing
 - Subsequent processes are performed in Elmore, Lorain, Reading, the Warren SC and several external vendors.

Bulk Products Manufacturing



- **Business** :Production of Be and Be containing materials. Including AlBeMet and BeO powder.
- **Markets** :Defense, Aerospace.
 - Satellites, optical systems, nuclear, avionics, inertial guidance.
- **Process** :Primarily the production, consolidation, and machining of powder metal derived products. We are a highly specialized metals manufacturer providing custom designed products. As such, the business is essentially operated as a job shop supplying numerous products in generally low quantities.

What do we make?

Be Metal

AlBeMet

X-ray/UHV windows

E-materials

Beryllium oxide & chemicals

NEW : SupremEX – Metal Matrix Composite

Why Beryllium?

Our materials **enable** engineers to design and build lighter, faster, accurate, and more reliable systems.

- Lighter than Aluminum
- Stiff
- Transparent to X-rays
- Dampens vibration
- Good thermal properties

Aircraft Electronic Applications



- Fighter Aircraft F-16, F-22, JSF
- Helicopter Apache, Kiowa Warrior
- UAV
- Applications
 - Countermeasures
 - Computers, Power Modules
 - Radar Subsystems
 - Microwave Substrates



**AIBeMet
Electronic
Hardware**





Beryllium makes great visible light and IR optics.



Advanced FLIR and targeting systems.



Airborne FLIR Applications

➤ Fighter Aircraft (all)

➤ Helicopter (all)

➤ UAV

- Globalhawk

➤ Applications

- SNIPER/ATP
- Arrowhead
- LOROP
- IFTS
- LANTIRN
- EOTS (JSF)

FLIR = Forward Looking Infrared

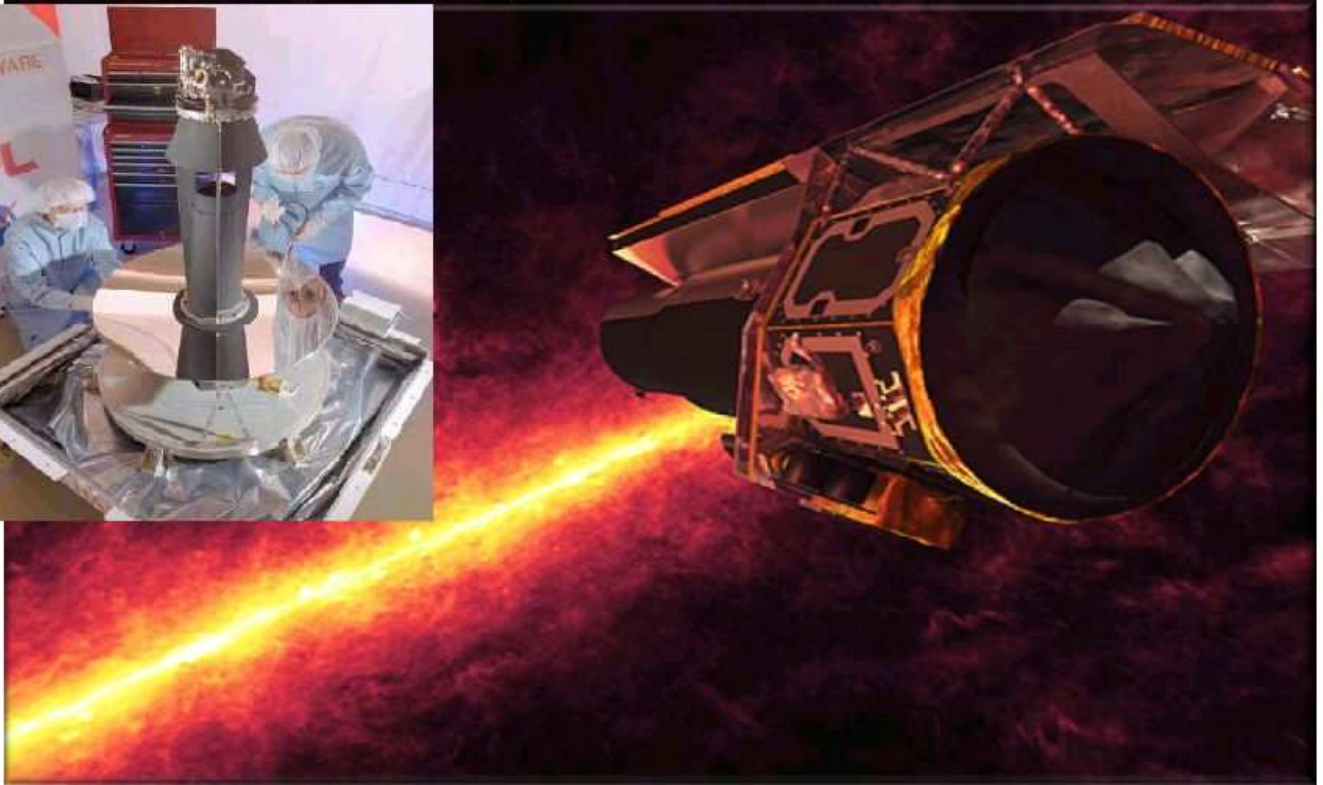
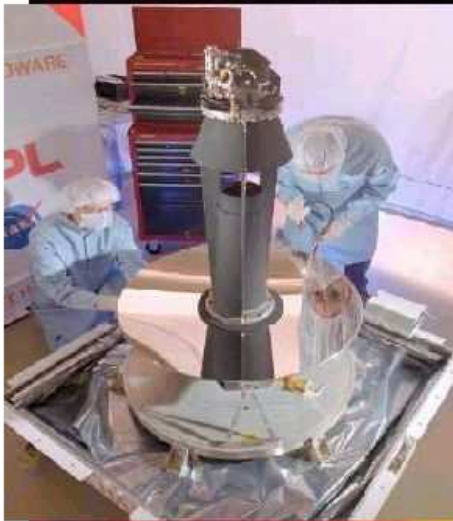


DMSP



- Surveillance
 - Classified
- Strategic Missile Defense
 - Classified, SBIRS High and Low
- Communications
 - Classified
- Scientific Applications
 - JWST
 - NPOESS
 - GOES





➤ Strategic Missile Maintenance

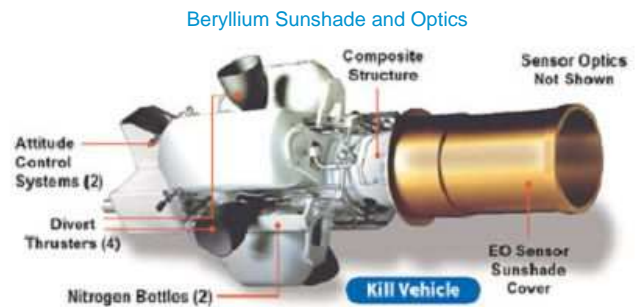
- Trident Upgrade – Current
- Minuteman, Peacekeeper, Others

➤ Strategic Missile Defense

- GBI/EKV
- LEAP
- Applications
- Guidance Components
- Optics
- Electronic Substrates

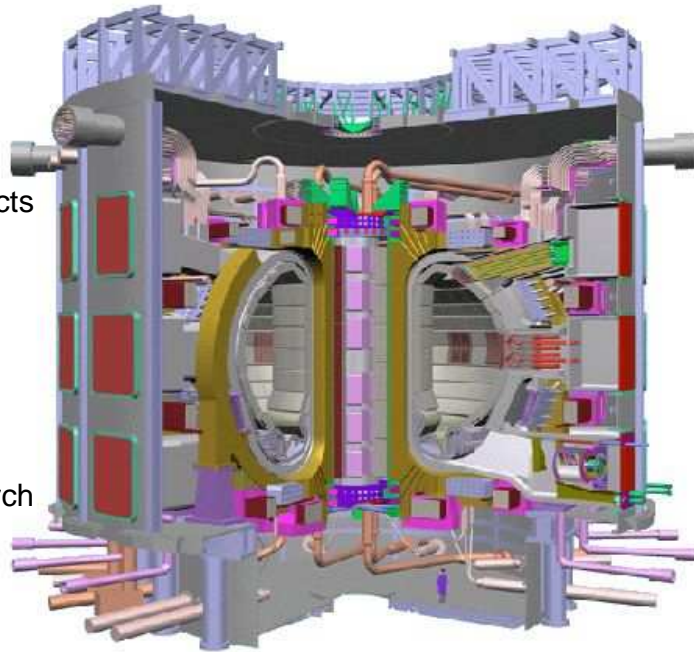


Trident



➤ Nuclear Reactors

- Fusion Test Reactors:
 - o Materion Brush Beryllium Products & Composites is baseline on all international reactor designs.
- JET – Current Program
 - o Sales 2006-7: \$7.9 M. UK
- ITER – “The next generation”
 - o Developmental sales and research now.
 - o Construction 2010's France



➤ Weapons Systems

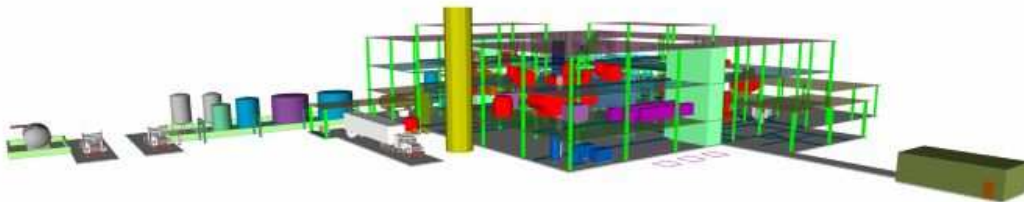
Pebble Plant



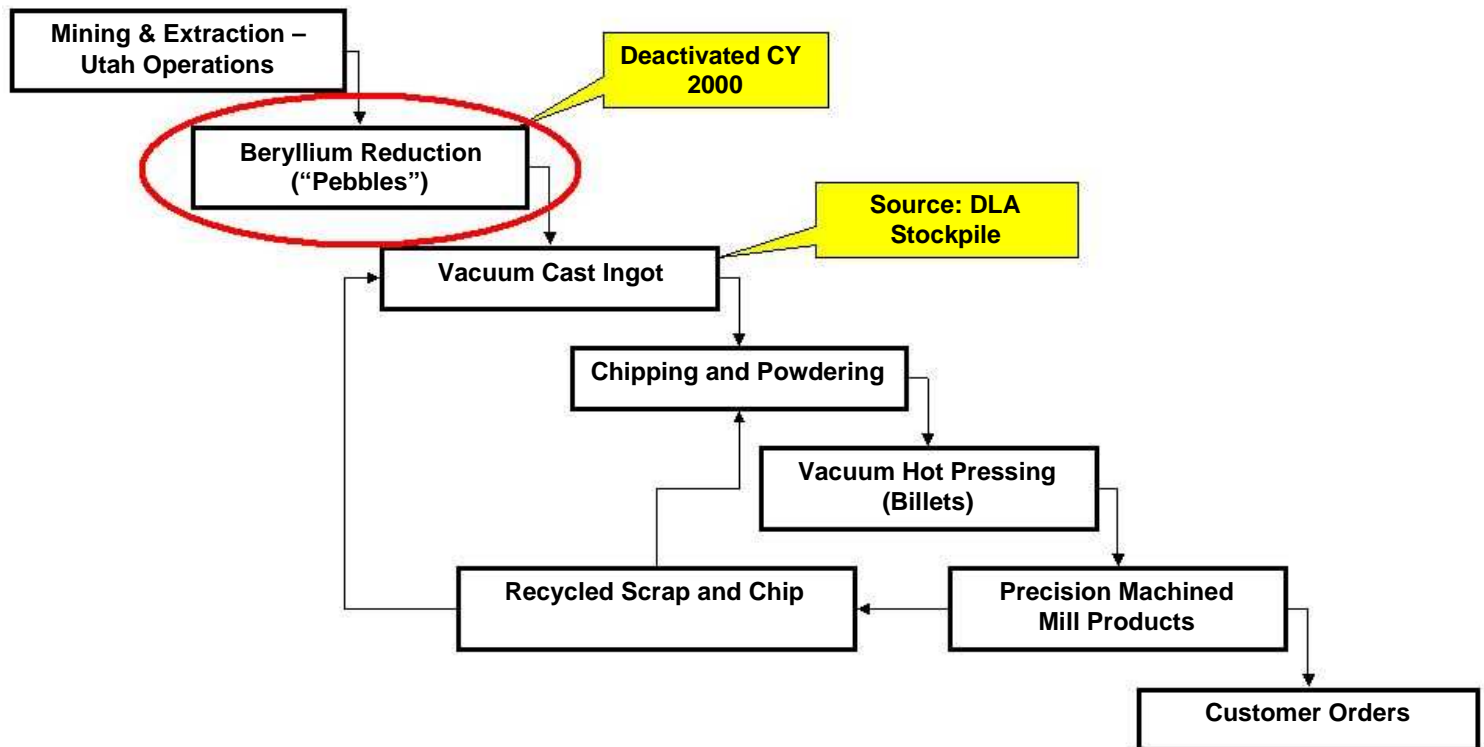
Pebble Plant Expansion

*Pebble Plant estimate for construction: approximately
\$90 million*

Department of Defense (Managed @ WPAFB)



Materion – Integrated Beryllium Products Producer



Reading Facility



- 134 employees (104 hourly)
- 123,000 square feet of building space
- 42 Acres
- In operation since 1958

Reading Operations

Rolling



Mill Hardening



Wire Drawing



Rod Straightening



Quality Philosophy:

Materion is dedicated to excellence in customer satisfaction by providing superior products and services. We improve the superiority of our products and services by continually reducing waste and variability in our processes.

- Quality Systems – Materion Plants and Service Centers are certified to the International Quality Standard ISO 9001-2000.
- Industry Certifications – When specific industries require additional quality certifications Materion facilities attain the necessary registrations. Examples include AS9100 (Aerospace)
- Testing Lab Certification – Chemical and Mechanical Test Labs have been accredited to ISO 17025 (Testing Competence) to assure reliable test results for our products and processes.
- Customer Service – Materion is focused on providing all customers with technical assistance that is designed to improve the performance of our materials in demanding applications.



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Thank You