



MATERION



**ADVANCED
MATERIALS**

Advanced Materials

Materion Advanced Materials Group has the expertise to assess our customers' specific needs and resolve their materials challenges. Now expanded with the addition of Heraeus Target Materials business, we offer unsurpassed R&D professionals (Ph.D scientists, chemists, metallurgists and engineers) to help in developing new materials matched to your unique requirements. Our broad range of products and capabilities allows us to provide cradle-to-grave assistance for applications across multiple markets.

We deliver cost-effective one source solutions for the entire life cycle of your product. Whatever your need – from precious and non-precious thin film deposition materials, inorganic chemicals, microelectronic packaging products, precision parts cleaning, or precious metal refining & reclaim – we do it all! We support industries ranging from semiconductor, advanced memory, large area glass coatings, STT-RAM, LED, medical, solar energy and wireless with products and services that help you succeed.

We offer the right people, the right materials and the right capabilities.

CORE TECHNOLOGIES

- Purity & Cleanliness Controls
- Multiple Quality Inspections
- Composition & Purity Analysis
- Microstructure & Material Property Analysis
- Various Pressing & Melting Technologies
- Target Bonding & Backing Plates
- Controlled Atmosphere Material Handling
- Wet & Solid State Chemical Synthesis
- Reactive Gas Processing
- Custom Tool & Die Design



MATERION

We offer a comprehensive range of high performance materials. Among them are precious and non-precious specialty metals, inorganic chemicals, specialty coatings, specialty engineered beryllium & copper-based alloys, beryllium & beryllium composites, ceramics and engineered clad and plated metal systems.

We are one of the world's premier advanced materials products and services companies. Our markets include consumer electronics, medical, defense and science, energy, automotive electronics, telecom infrastructure, commercial, aerospace, and industrial components.

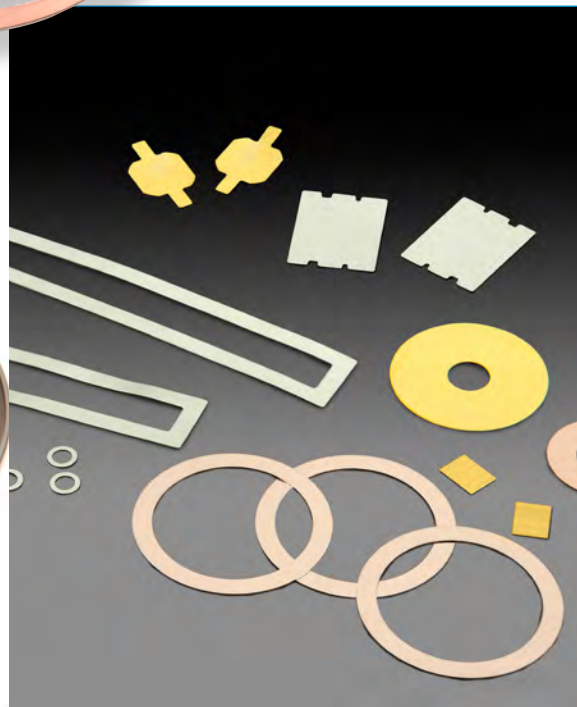
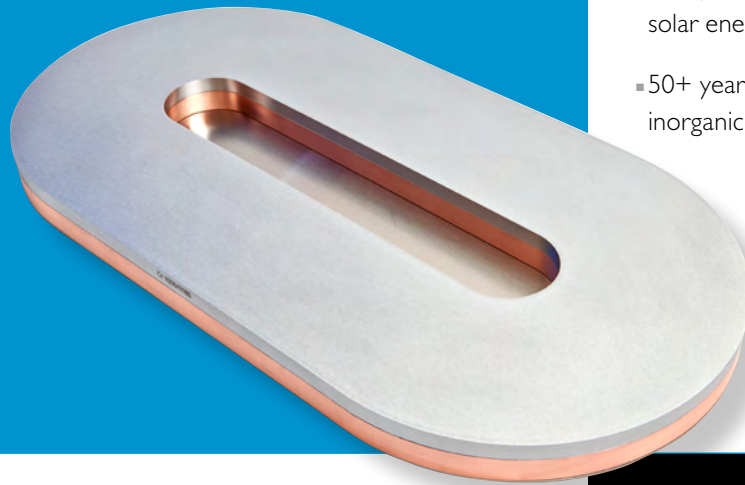
Materion Corporation is a publicly traded company (NYSE:MTRN) headquartered in Mayfield Heights, Ohio.

MATERION BUSINESSES

- Advanced Materials Group
- Aerospace Metal Composites
- Beryllium & Composites
- Ceramics
- Electrofusion
- Large Area Coatings
- Performance Alloys
- Precision Optics
- Technical Materials

DID YOU KNOW THIS ABOUT MATERION?

- No. 1 Supplier of PVD materials for optical applications in North America
- 100+ years in precious metals refining, recovery & management
- 17 strategically located global manufacturing facilities
- World's leading supplier of sputtering targets for the glass coating industry
- 300+ metal alloys processed in combinations for high performance
- 3,000+ specialty inorganic materials spanning the periodic table
- One of few companies able to refine gold to the 99.999% purity level
- 20+ years of experience servicing the solar energy market
- 50+ years of experience in specialty inorganic materials



BROADEST RANGE OF PVD PRODUCTS

With our expertise in thin film deposition, we provide PVD products that resolve concerns for uniformity, reproducibility, purity and homogeneity. Our sputtering targets and evaporation materials deliver consistent quality with high purity and low particulates. This achieves optimal performance and increased yields for our customers.

	Sputtering Targets	Evaporation Materials
Materials	Precious & Non-Precious Metal Standard & Exotic Alloys Ceramic & Inorganic Chemicals	Precious & Non-Precious Metal Specialty Inorganic Chemicals
Purity	High Purity Materials for Reduced Spitting	EVAPro® Grade Materials up to 99.999% Purity
Forms	Large Area Targets Rotatable Targets Planar Targets	Slugs, Pellets, Grain, Rods & Wire Starter Sources
Customization	Customized Alloys & Characteristics Customized Target Designs	Customized Compounds Customized Forms & Sizes Customized Grain Size

INORGANIC CHEMICALS

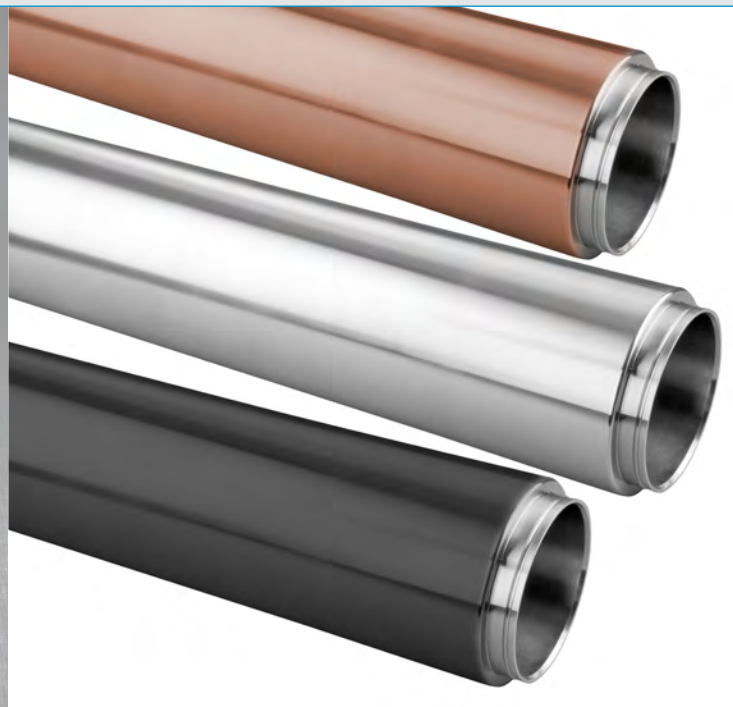
3,000+ specialty inorganic materials spanning the periodic table

- Custom-made to your exact specs
- Arsenides, Borides, Carbides, Fluorides, Hydrides, Nitrides, Oxides, Phosphides, Phosphor Precursors, Sulfides and more!
- Forms include: Powders, Pieces, Pellets, Billets/Ingots, Rods, Chunks, Planar Targets

MICROELECTRONICS PACKAGING

Full range of products & materials to protect sensitive electronics.

- Hermetic & Non-Hermetic Lids
- Ultra Clean Braze Alloys
- Solder Alloys/Lead-Free Solders
- Customized Shapes & Forms: Ribbon, Wire, Preforms and Powders
- Ceramic Packaging and Lids



Materion ... Materials to Advance the World's Technologies



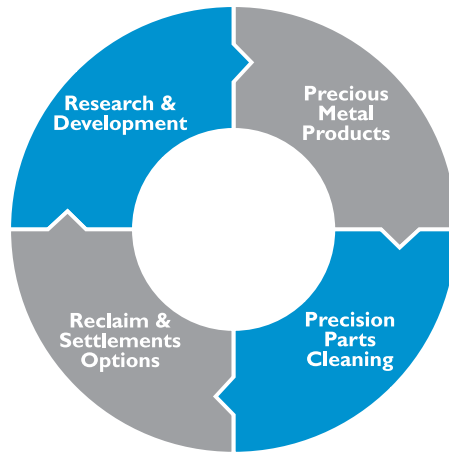
MATERION

NEW PRODUCT DEVELOPMENT

- Partner with R&D Department of Industry Experts
- Analysis of Processes & Materials Characteristics for Optimal Product Development
- Customized Alloys and Features
- Bench-to-Full Scale Production
- Manufacturing for Small or High Volume Run

FULL CYCLE METALS MANAGEMENT

Our unique cradle-to-grave metals management service ultimately reduces cost and minimizes risk factors for our customers. From creation of a broad range of precious metal products and customized alloy development, through precision parts cleaning and refining & recycling, we offer integrated service throughout the lifetime of the metal.



SERVICES

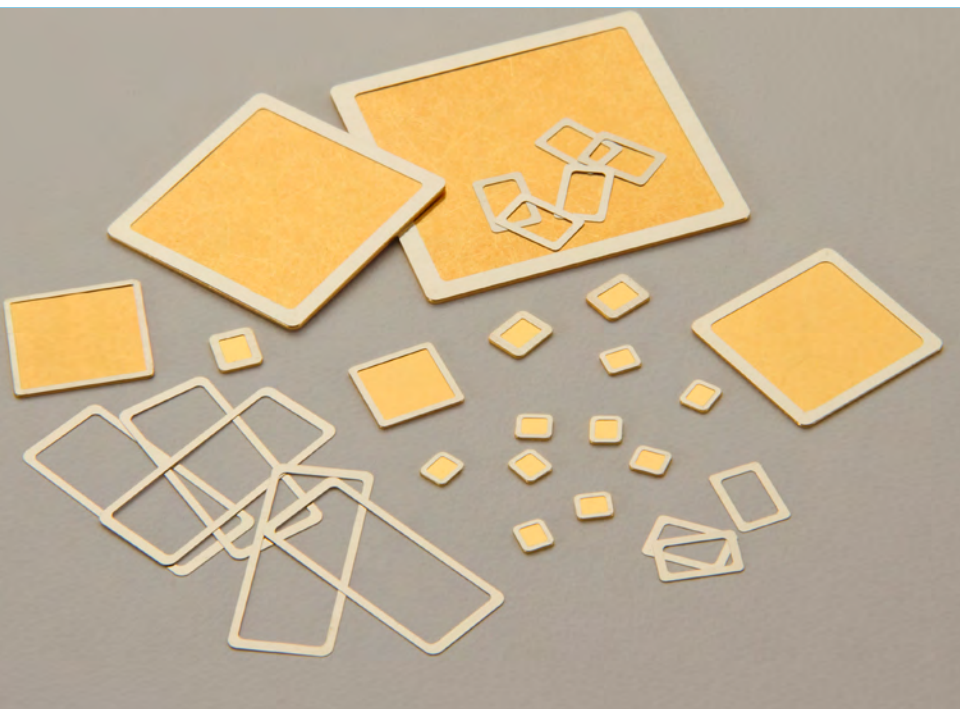
- Chamber Shield Cleaning – Traditional & New Chemical Removal of Depositions
- Reclaim & Refining – Comprehensive reclaim of precious metal from production & refine of recovered metal
- Metals Management – Full cycle from precious metal product through parts cleaning to metal reclaim
- Sputtering Target Bonding – Superior bond for optimal performance

CERTIFICATIONS

Materion is qualified as Conflict-Free. All our disposal procedures comply or exceed State and Federal Regulations. We carry these certifications:



ISO 17025
ACCREDITED
LABORATORY



MARKETS

- Advanced Memory
- Alternative Energy
- Consumer Products
- Data Storage
- Defense & Aerospace
- Industrial Products
- Large Area Glass
- LED Lighting
- Materials Solar Applications
- Medical
- Optical Coating Materials
- Photonics
- Semiconductor
- Specialty Battery
- STT-RAM
- Telecommunications
- Wireless

MATERION ADVANCED MATERIALS GLOBAL LOCATIONS

- ▲ Sales and Service Locations
- ▲ Manufacturing Locations



US

- ▲ Albuquerque, NM
- ▲ Brewster, NY
- ▲ Buffalo, NY
- ▲ Milwaukee, WI
- ▲ Mesa del Sol, NM
- ▲ Phoenix, AZ
- ▲ Santa Clara, CA
- ▲ Wheatfield, NY

EUROPE

- ▲ Limerick, Ireland
- ▲ The Netherlands
- ▲ Berkshire, England
- ▲ Alzenau, Germany

ASIA

- ▲ Singapore
- ▲ Suzhou, China
- ▲ Taiwan
- ▲ Seoul, Korea
- ▲ Shanghai
- ▲ Subic Bay, Philippines



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