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
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.
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.

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