



MATERION

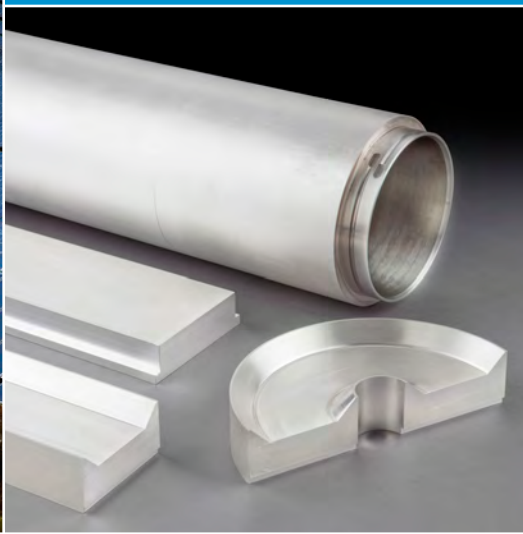


**ADVANCED
CHEMICALS**



SOLUTIONS DELIVERED

More than a materials supplier, we employ a diverse group of chemists, metallurgists and material technologists who will work with you to identify the exact material characterizations and configurations for your application and manufacturing environment. Visit www.materion.com/advancedchemicals to learn more.



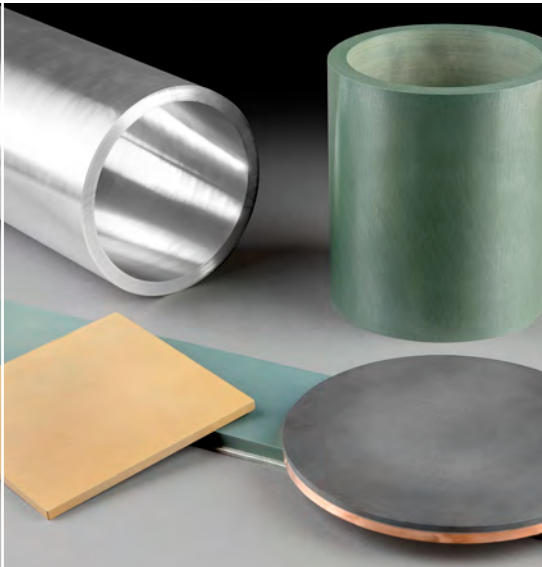
MATERION

MATERION ADVANCED CHEMICALS is the new name for CERAC, incorporated and Academy Corporation, the businesses of Williams Advanced Materials Inc. that provide materials solutions for thin film solar, large area glass, LED lighting, and specialty battery and semiconductor applications and other emerging technologies requiring customized materials.

- Williams Advanced Materials Inc.
- Academy Corporation
- CERAC, incorporated



Materion Advanced Chemicals is the valued partner of technology-driven customers requiring high-performance materials. Our inorganic chemicals and coating materials enhance a wide variety of products, including architectural and automotive glass and specialty thin film coatings. Collaboration with other Materion business groups gives us the power to leverage a unique combination of technical expertise, chemical capabilities and extensive fabrication skills to our customers' advantage. We continuously strive to be our Customers' First Choice™ as a partner in growth and profitability.



Advanced Chemicals

PRIMARY MARKETS SERVED

- Large Area Coatings
- Optical & Semiconductor Coatings
- Alternative Energy
- Medical
- Specialty Inorganic Chemical Applications

- Research & Development
- LED Lighting
- Specialty Battery

KEY PRODUCTS & SERVICES

- Thin Film Deposition Materials
- Large Format Sputtering Targets
- Phosphor Materials
- Precious & Non-precious Metals
- High Purity Chemicals

PRODUCTS, EXPERIENCE AND SOLUTIONS

Materion Advanced Chemicals has been manufacturing specialty inorganic materials and physical vapor deposition materials since 1964. We offer the most comprehensive technical experience, range of products and unique materials solutions available today.

A PROVEN PROVIDER

Materion Advanced Chemicals encompasses the capabilities of Williams Advanced Materials' CERAC and Academy subsidiaries with the support of its Thin Film Technology business and other resources now integrated under the Materion brand. We are a proven provider of specialty materials and innovative solutions with decades of experience in inorganic chemical synthesis and material transformation. We draw on this experience to provide physical vapor deposition (PVD) materials used in thin film coating applications across a number of markets. We have been supplying CIGS-type development materials to the solar energy industry for 20 years.

YOUR PARTNER IN INNOVATION

As part of the worldwide Materion organization, we offer a breadth of manufacturing capabilities, in-house technical expertise and value-added services unrivaled in the industry. At the same time, we are a flexible niche producer. Our experienced chemists and metallurgists collaborate with customers to solve problems and help determine material requirements specific to their applications.

SCALABLE MANUFACTURING, WHERE YOU NEED IT

Our supply chain includes scalable manufacturing where you need it, with facilities strategically located in the United States, China, Singapore, Taiwan, Ireland, Germany and the Czech Republic, staffed by a highly experienced workforce. We have the capability to customize your material to meet specific requirements and the capacity to supply a demand as extensive as serving the entire global cellular handset market. Our PVD materials are in glass for buildings, homes and cars across six continents.

QUALITY, CONSISTENCY, ASSURANCE

Our unique vertically integrated structure enables us to control every step of the manufacturing process from raw material production through chemical processing to finished product. Customers can be assured they are receiving consistent, superior, high-quality products. Our vertical integration extends to precious metal refining and recycling services. We also have in-house analytical capabilities and the ability to test thin film materials and processes. Our facilities are ISO 9001:2008 certified.

RESPONSIBLE STEWARDSHIP

At Materion Advanced Chemicals, it is our policy to design, manufacture and distribute products and to manage, recycle and dispose of materials in a safe, environmentally responsible manner. The health and welfare of people and the environment are our highest priority, and we are proud of our world-class safety and environmental efforts.

POINT OF CONTACT

Access all of our products and services through one contact – from raw materials, end-product manufacturing, bonding, testing, recycling and refining.

15 STRATEGICALLY LOCATED manufacturing facilities around the globe, including sputtering target bonding facilities in North America, Europe and Asia.

3K DIFFERENT SPECIALTY INORGANIC MATERIALS available as small quantity R&D items in our catalog and large production quantities as required.

50 YEARS OF EXPERIENCE in specialty inorganic materials and physical vapor deposition materials.

100+ YEARS OF EXPERIENCE in precious metals refining, recovery and management.

- Materials for Research & Development
- Precious Metal Refining & Recycling
- New Product Development Partnering

SELECT CORE TECHNOLOGIES

- Customizable, Flexible Niche Producer
- Casting & Electron Beam Melting
- Heat Treatment
- Extrusion & Mechanical Reduction
- Alloying
- Various Pressing Techniques

- Controlled Atmosphere Materials Handling
- Custom Particle Size Manufacturing
- Wet & Solid State Chemical Synthesis
- Reactive Gas Processing



MATERION

ADVANCED CHEMICALS LOCATIONS

United States

Albuquerque, New Mexico
Brewster, New York
Milwaukee, Wisconsin

Europe

Limerick, Ireland
Louny, Czech Republic

Asia

Incheon, Korea
Singapore
Suzhou, China
Taipei, Taiwan

ABOUT MATERION

Materion is the new name for Brush Engineered Materials Inc., its Williams Advanced Materials Inc. subsidiary and all of the company's businesses worldwide. Materion is among the world's premier providers of advanced materials solutions and services. Now under the one Materion brand, we are better aligned to deliver a broader scope of products, services and expertise needed to drive our customers' growth and profitability and become their first choice in a partner. Materion Corporation common stock trades on the New York Stock Exchange under the symbol MTRN.

MATERION BUSINESSES

Advanced Chemicals	Electrofusion
Barr Precision Optics & Thin Film Coatings	Large Area Coatings
Brush Beryllium & Composites	Microelectronics & Services
Brush Performance Alloys	Natural Resources
Ceramics	Technical Materials

ADVANCED CHEMICALS

407 N. 13th Street
Milwaukee, WI 53233

5520 Midway Park Place NE
Albuquerque, NM 87109

North America: +1 414.289.9800

Europe: +44 1 488.686056

Asia +65.6559.4450

www.materion.com/advancedchemicals