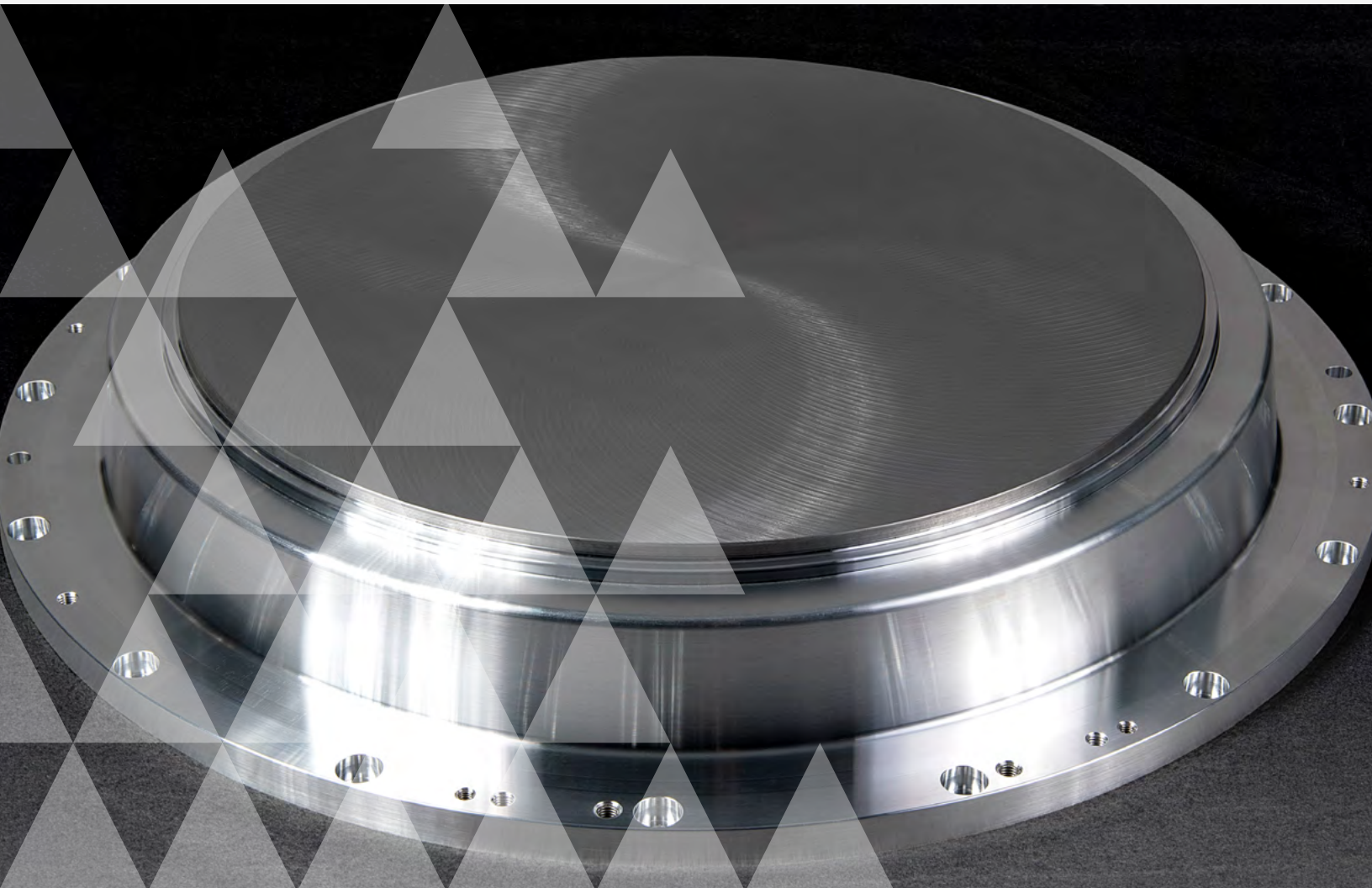




MATERION



ADVANCED MATERIALS

PC-RAM
Materials

PC-RAM Materials

The Challenge

The global advanced memory market has continued to expand at a rapid pace creating a need for next-generation material solutions. Industry is depending on new alloys being developed for Phase-Change Random Access Memory (PC-RAM) that are individualized to meet the demand for highly defined composition, size, purity and consistency.

Materion has the expertise to manufacture critical materials to support advanced memory and data storage applications that meet these requirements and allow its customers to excel in this rapidly evolving market.

The Solution

It can be formidable working with the variety of essential materials most often found in today's PC-RAM devices. Materion's fifty years of experience with heavy metals & chalcogenides, such as Germanium-Selenium-Telluride (GST) compositions, plus our production capabilities for a wide range of high purity thin film materials, easily overcome that challenge. We customize each order to match the customers' needs for unique alloys, scaled for R&D or production size. With our highly controlled processing technologies, we can manufacture diverse compositions with extreme attention to detail. The resultant products are held with high regard in the industry for their precise composition control and high level of purity.

Available Highly Specialized Alloys & Compounds Containing

- Germanium
- Selenium
- Tellurium
- Arsenic
- Antimony
- Silicon

Available Forms

- Targets for a variety of OEM platforms and custom configurations
- Scalable sizes for 300mm wafer production

ENABLING THE PC-RAM INDUSTRY WITH HIGH PURITY THIN FILM MATERIALS...

BENEFITS

- In addition to our unique materials & processes, we offer these advantages:
- Technical expertise in developing alloys
 - Vertically integrated raw material & target manufacturing processes
 - Custom composition capability
 - Availability of local service
 - Tight process controls for consistent quality & high purity
 - Clean room packaging that meets semiconductor standards
 - Manufactured in the USA
 - Compatible with all standard OEMs
 - Utmost confidentiality adherence

SPECIALIZED EXPERTISE

- Application scientists available for collaborative development
- Experienced with heavy metals – Poisonous & Deleterious Substances Control License
- Knowledgeable in materials for OTS applications
- Full analytical capabilities (composition & purity)
- Processes in place for low oxygen alloys

RELATED SERVICES

- Backing plates
- Target bonding
- On-site application support



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MATERION CORPORATION

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MATERION ADVANCED MATERIALS is a global supplier of premier specialty materials and services for the LED, semiconductor, advanced memory, optical coatings, and large area glass markets. Our offerings include precious and non-precious thin film deposition materials, inorganic chemicals, microelectronic packaging products, precision parts cleaning, and precious and valuable metal reclamation. Because of our industry experts and extensive manufacturing capabilities, we are able to meet our customers' specific material requirements and assist with their innovative R&D projects.