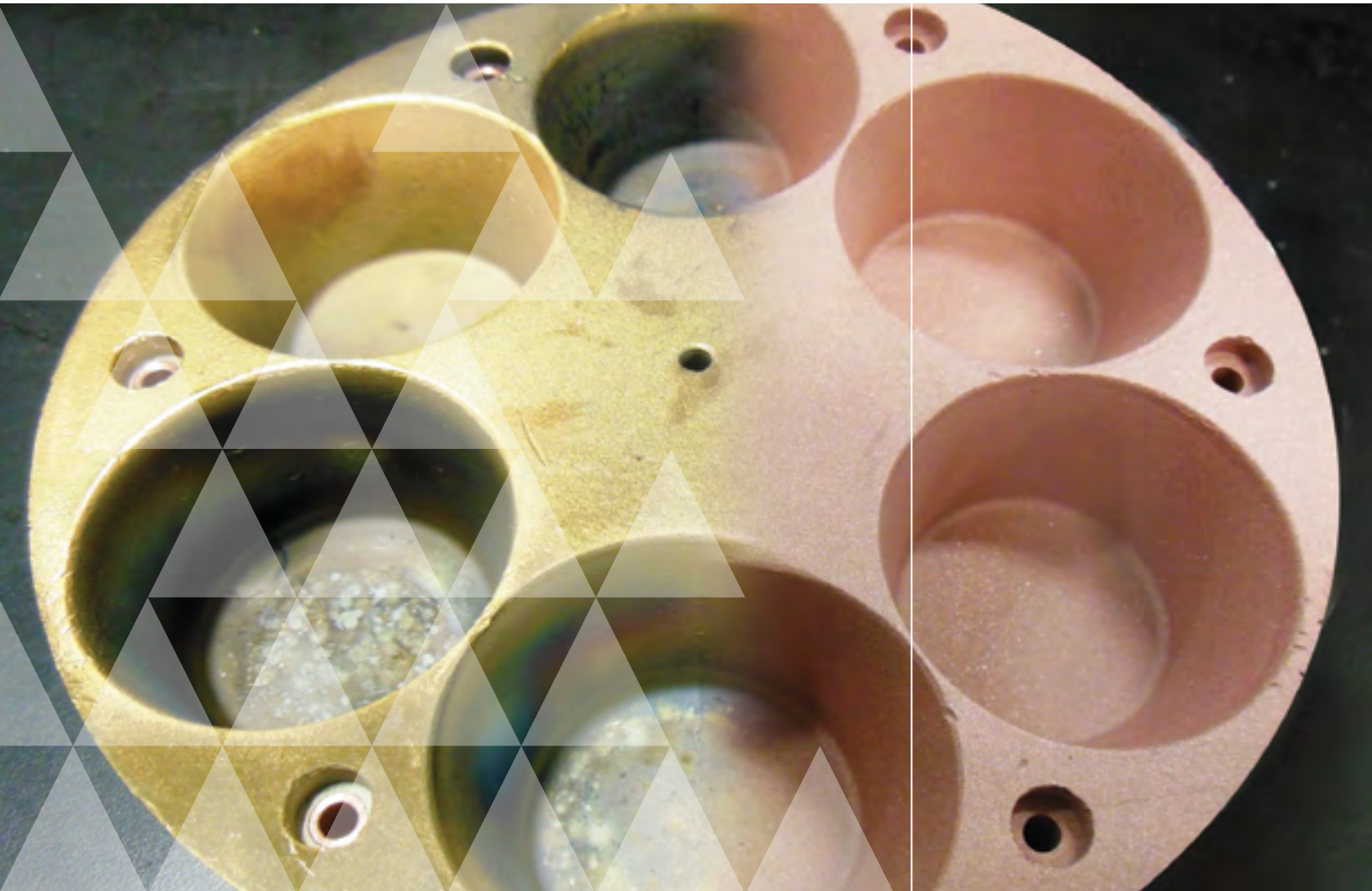




**MATERION**



**ADVANCED  
MATERIALS GROUP**

Copper Parts  
Cleaning

# Copper Parts Cleaning

## The Challenge

Copper is a common material ideal for use in evaporation tool parts, such as turrets and other vacuum chamber parts, which require high thermal conductivity. Traditional cleaning methods such as bead blasting can cause damage to copper parts and reduce their usable life. Current cleaning options include directly replacing expensive customized copper parts or labor intensive in-house removal of deposition.

## The Solution

Materion's unique cleaning process resolves these issues by chemically removing deposition materials and any surface contamination without the use of aggressive mechanical processes. This technology results in minimal damage to parts, extends component useful life and reduces overall turnaround time.

- Cleans with greatly reduced or no damage to copper parts
- Lowers total cost of ownership
  - Extends useful life of parts
  - Higher metal returns
- Production-ready final cleaning
- Support Mass Balance
  - Shield Cleaning Services
  - Metal Management Services
- Easy-to-use
  - Ability to combine with shields in a single shipment
- Chemical used can be customized per deposition and/or substrate material

### KEY TECHNOLOGIES & CAPABILITIES

- Non-aggressive chemical cleaning
- Parts commonly used during evaporation processes such as:
  - turrets, hearths, top plates, V plates & other copper parts
- Removal of precious and non-precious metals:
  - Au, Ti, Ni, Cu, Pt or other challenging depositions
- CMM inspection ensures parts comply with customer specifications
  - Certification of dimensions available
- Customized surface treatments and texturization available

### BENEFITS

One stop solution for precious metals management offers these advantages:

- Over 100 years experience in precious metal refining, recycling and recovery
- Full line of precious metal products including PVD materials, microelectronic packaging and solder & braze alloys
- High metal returns and fast settlements
- Strategically located global locations
- ISO accreditations



### RESEARCH & DEVELOPMENT

- Dedicated team of experts
- Chemists, metallurgists and applications engineers
- Broad range of analytical & mechanical technologies



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**MATERION ADVANCED MATERIALS GROUP** is a global supplier of premier specialty materials and services. Our offerings include precious and non-precious thin film deposition materials, inorganic chemicals, microelectronic packaging products. In addition, we have related services to meet customers' requirements for precision parts cleaning, precious and valuable metal reclamation and R&D. We support diverse industries including medical, LED, semiconductor, data storage, precision optics, large area glass and aerospace.