

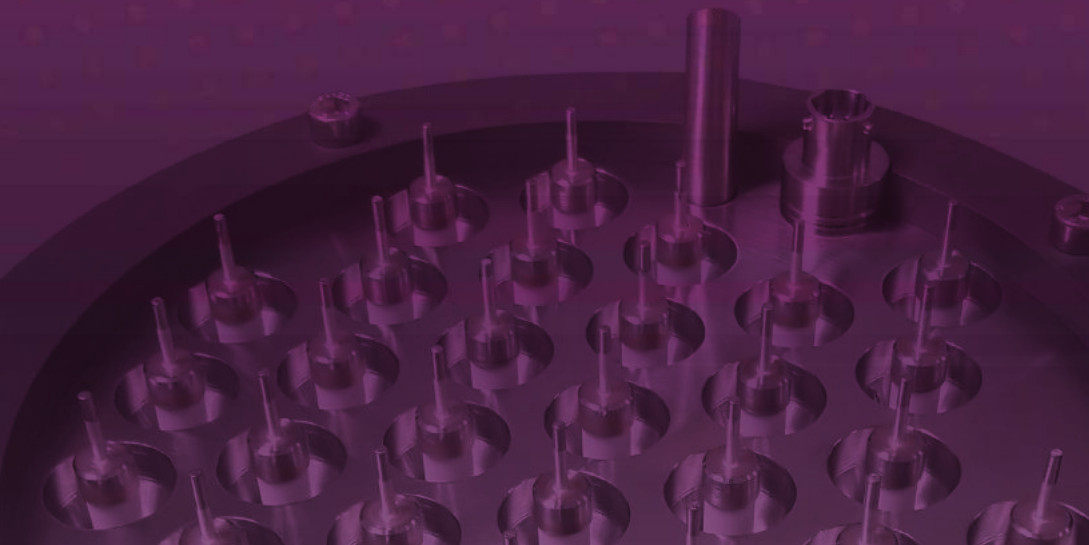


SOLCERA

Advanced Materials



CERAMICS AND BRAZED
ASSEMBLIES IN PARTICLE
ACCELERATORS AND LARGE
SCIENTIFIC INSTRUMENTS





SOLCERA

- 50 years expertise in brazed ceramics and glass-to-metal seals, formerly known as Vermetal and Saint-Gobain
- Co-development with customers, on demand and proactively optimize customers' designs
- Committed to quality and continuous improvement



The benefits of choosing ceramic

- Mechanical, thermal and electrical properties compatible with designs of particle accelerator components
- Hard-wearing, highly resistant in harsh and corrosive environments
- Reliable long term performance
- Non-magnetic

The benefits of choosing brazing

- Compatible with UHV, cryogenic, high temperature and high pressure environments
- Low outgassing rates under ultra-high vacuum conditions
- Achieves the best combination of ceramic and metal components
- Reliable long term performance



Radiation resistant pink ceramic

These ceramics are formulated from alumina and have excellent dosimetric and luminescent properties. They are used as fluorescent screens to monitor beam size and position.

TYPICAL APPLICATIONS



- 50 Ohm feedthroughs and buttons
- Beam Position Monitors
- Fluorescent ceramic AF995R screens for beam measurement
- Insulating spacers
- Low and high voltage feedthroughs
- RF couplers
- Vacuum and kicker chambers
- Viewports for optical equipment

SOLCERA OFFERS CERAMIC-TO-METAL, GLASS-TO-METAL AND METAL-TO-METAL HERMETIC ASSEMBLIES

Ceramic insulators	Alumina from 96 to 99%, Zirconia, Sapphire, Si3N4, Spinel, CaF ₂ , MgF ₂
Glass insulators	Borosilicate, Electronic, Quartz
Metal components	FeNi, FeNiCo, Copper, Stainless steel, Molybdenum, Nickel, Platinum, Titanium, Tungsten, Tantalum, Inconel, Monel, Chromel, AlumeI
Assembly technologies	Low and high temperature brazing Flame sealing, HF induction, Sealing furnace Welding: TIG, EB electron beam, Laser
Additional treatments	Plating (gold...), Glazing

Non-exhaustive list

Long-term partner within the scientific community supplying particle accelerators over 20 years



supplier



Membre de



83, rue Marcelin Berthelot - 77550 MOISSY-CRAMAYEL - France

Tel.: + 33 (0)1 64 13 61 10 - Fax: + 33 (0)1 60 60 42 55

info@solcera.com

