



SOLCERA

Advanced Materials



CERAMICS AND BRAZED ASSEMBLIES IN AEROSPACE



SOLCERA

Ceramic materials and brazed assemblies for aerospace applications include oxides (alumina, zirconia, spinel) and non-oxides, such as silicon nitride.

These materials are particularly lightweight, dimensionally stable over a wide temperature range and are designed for vibration and corrosion resistance.

Why choosing Solcera?

- 50 years expertise in brazed ceramics and glass-to-metal seals, formerly known as Vermetal and Saint-Gobain
- Qualified for over 4 decades with major aerospace players (Tier 1 and 2, ex. SYRACUSE 4A)
- Co-development with customers, on demand and proactive optimization of customers' designs
- Committed to quality and continuous improvement
- Made in France, independent SME with international scope
- Fully integrated manufacturing process
- ITAR-free



BENEFITS

 High temperature	 Lightweight	 Vibration resistance	 Ceramic armor in space
 Electrical isolation Dielectric strength	 Thermal shock resistance	 Corrosion resistance	 Rain erosion damage threshold
 Ultra high vacuum leak-tight assemblies	 Thermal conductivity	 Miniaturization	

SOLCERA OFFERS CERAMICS AND HERMETIC ASSEMBLIES

Ceramic insulators	Alumina from 96 to 99%, Sapphire, Zirconia, B ₄ C, CaF ₂ , MgF ₂ , Spinel, Si ₃ N ₄
Glass insulators	Electronic glass, quartz
Metal components	Alumel, Chromel, Copper, FeNi, FeNiCo, Inconel, Molybdenum, Monel, Nickel, Platinum, Stainless Steel, Tantalum, Titanium, Tungsten
Assembly technologies	Low and high temperature brazing, furnace sealing Welding : TIG, EB electron beam, laser
Additional treatments	Plating (gold, chrome, nickel), glazing, thermal shock

Non-exhaustive list

TYPICAL APPLICATIONS



Brazen domes



Ceramic components for switches and relays



Space optronics



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