



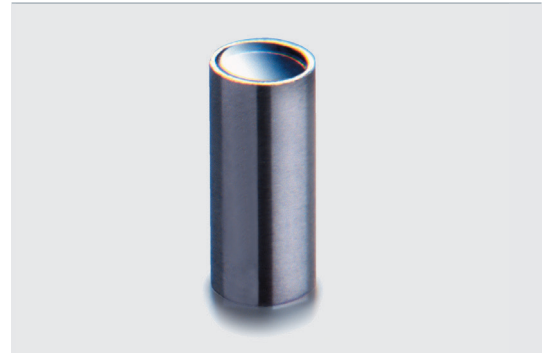
MATERION

// BALZERS OPTICS

Gelot™

Solderable Coating

Gelot™ is a solderable gold-based multilayer coating that can be applied to sapphire, quartz glass and crystals as well as to ceramics and similar materials.



Benefits

- Solderable
- Gas-tight
- Conductive
- Durable
- Chemical-resistant

Technical Data

Adhesion	> 10 N/mm ²
Shearing strength	> 4 N/mm ²
Sheet Resistance	< 1 Ω /sq.
MIL-M-13508 C	
para. 4.4.6 / 4.4.7	

Applications

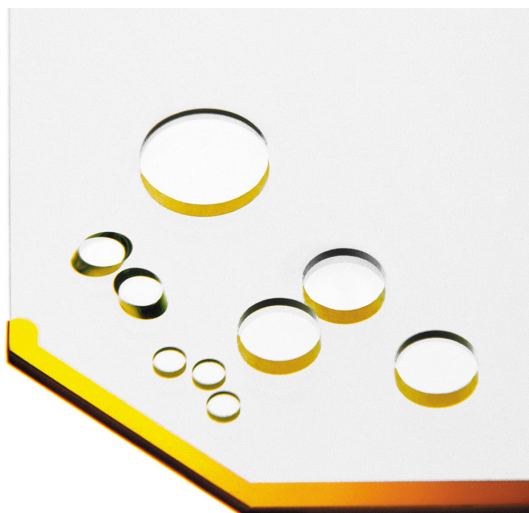
- Cover glasses for medical endoscopes
- Connections for transparent heating windows
- Touch panel connectors
- Cover glasses for instrument windows

Solderability

Induction soldering, infrared soldering, hot air soldering, soldering irons, etc. are all methods that can be used with Gelot™. There is a variety of solders and fluxes available (e.g. alloys of Sn, Pb, Au and Ag), which meet the requirements of medical and industrial applications.

Solders containing aluminum, zinc or cadmium must be avoided because they form oxidation layers which have a negative effect on the adhesion and corrosion resistance of the Gelot™ coating.

Gelot™ can be applied to curved or flat surfaces as well as to cylindrical shaped surfaces.



Substrates

The surface of substrates to be coated with Gelot™ can be shiny, polished or ground with a rough depth of < 10 μ m. Both flat surfaces and the edges of a disc can be coated. During the coating process the substrates are subject to temperature below 100°C. This means that it is also possible to apply Gelot™ to temperature sensitive substrates that have already been surface treated.