umicore
Electroplating

AURUNA® 502

ROSE GOLD ELECTROLYTE

Neutral, Cadmium-Free Electrolyte for Red Layers

AURUNA® 502 is a neutral, cadmium-free gold copper electrolyte working without free cyanide. The red surfaces are bright, very hard and abrasion-resistant.

AURUNA® 502 is mainly used for decorative coatings, but it is suitable for technical applications such as slip rings as well. As gold-saving, low-carat layers, the surface exhibits very good corrosion and tarnish resistance.

The gold copper electrolyte can be used for rack and barrel plating, it can deposit layers of up to max. 10 µm in thickness.
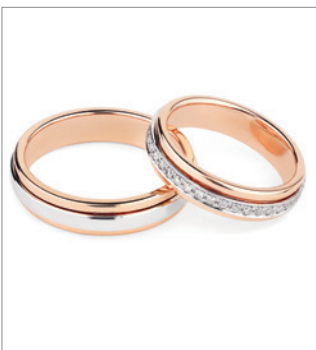
Advantages

· Gold-saving coatings (approx. 18 ct)
· Cadmium-free
· Red gold-copper layers
· Resistant to tarnishing and corrosion
· Maximum layer thickness approx. 10 µm
· High hardness (380 - 400 HV), abrasion-resistant
· Suitable for rack and barrel

Applications

· Accessories
· Jewellery
· Watches
· Bathroom fittings
· Lighting
· Spectacle frames
· Writing implements
· Slip rings

AURUNA® 502

ROSE GOLD ELECTROLYTE

TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	Neutral
Metal content	4 (3.5 - 4.5) g/l Au 3 (2.5 - 3.5) g/l Cu
pH value	7.5 (7.2 - 8.0)
Operating temperature	57 (55 - 60) °C
Current density range	0.5 (0.3 - 0.8) A/dm²
Plating speed	Approx. 0.15 µm/min at 0.5 A/dm²
Anode material	Pt-Ti (type PLATINODE® Pt/Ti)

Coating characteristics	
Coating	Gold-copper
Alloy composition (according to ASTM B 488-01)	75 wt.% Au 25 wt.% Cu
Colour of deposit	Red
Brightness	Bright
Hardness of deposit HV 0.015 (Vickers) approx. values	380 - 400 HV
Max. coating thickness	Approx. 10 µm
Density of the coating	Approx. 15 g/cm³

YOUR CONTACT

Do you have a specific question or would you like a no-obligation quote calculation?
Our specialist will be happy to help you with any technical questions you might have.

Markus Legeler
Manager Sales International

Mail: markus.legeler@eu.umicore.com
Phone: +49 (0) 7171 607 - 204

umicore
Electroplating

www.ep.umicore.com