

umicore

AURUNA® 503 Rose gold electrolyte



Neutral, cadmium-free electrolyte for red layers

AURUNA® 503 is a neutral, cadmium-free gold-copper electrolyte for the deposition of bright red surfaces. It works without free cyanide.

AURUNA® 503 is especially suited to decorative but also technical applications, such as sliprings. Special features of this electrolyte are its long lifetime and fast deposition speed. For low-carat gold-saving layers, it also offers good resistance to corrosion and abrasion.

The gold-copper electrolyte can be used for rack and barrel plating and can achieve layers up to 5 μm in thickness.



Advantages

- Gold-saving coating (approx. 18ct)
- Long lifetime
- Fast deposition speed
- Cadmium-free
- Red gold-copper coatings
- Resistant to tarnishing and corrosion
- Maximum layer thickness approx. 5 µm
- Very hard (380 400 HV), abrasion-resistant
- Suitable for rack and barrel

Applications

- Accessories
- Jewelry
- Watches
- Bathroom fittings
- Lighting
- Spectacle frames
- Writing utensils
- Sliprings

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TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	neutral
Metal content	6 (5 - 7) g/l Au 2.5 (2.0 - 3.0) g/l Cu
pH value	7.5 (7.3 - 7.8)
Operating temperature	65 (60 - 70) °C
Current density range	0.8 (0.6 - 1.2) A/dm²
Deposition rate	approx. 0.25 µm/min at 0.8 A/dm²
Anode material	Pt-Ti (type PLATINODE® Pt/Ti)



Coating characteristics	
Coating	Gold Copper
Purity	75 wt.% Au 25 wt.% Cu
Colour of deposit	rose gold
Brightness	bright
Hardness of deposit HV 0.015 (Vickers) approx. values	380 - 400 HV
Max. coating thickness	approx. 5 µm
Density of the coating	approx. 15 g/cm ³

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.



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