

omicore

AURUNA® 8400 gold nickel electrolyte



High speed electrolyte for hard gold plating

AURUNA® 8400 is used for the deposition of hard gold coatings in special high-speed equipment. The electrolyte is weakly acidic, citrate-free and has a wide working range with simple bath maintenance.

The deposited coatings are high-brightness, low-porosity, solderable, hard and abrasion-resistant, and exhibit consistently low contact resistance. They are therefore ideally suited for electrical components such as contacts, plugs and connectors on printed circuit boards.

AURUNA® 8400 was developed for high-speed gold plating in selective plating lines and continuous reel-to-reel systems. It shows stable long-term behavior even with strong electrolyte movement (flow, spray) and high current densities. AURUNA® 8400 can also be used as a pregold electrolyte.

The optional use of AURUNA® Inhibitor 2 offers the possibility of reduced gold consumption of up to 15%. The inhibitor results in sharp edge delineations - thus reducing the run-out zone width. Of course, the coating properties remain unaffected. The inhibitor can be removed without residue after coating by activated carbon cleaning.



Advantages

- Very high plating speeds
- Lower gold content possible
- Exceptionally wide working range
- Stable long-term behavior
- Easy electrolyte maintenance
- Excellent coating properties

Applications

- Connectors
- Electrical contacts
- Connector strips on printed circuit boards

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TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	weakly acidic
Metal content	12 (2 - 18) g/l Au
pH value	4.2 - 4.4
Operating temperature	45 - 60 °C
Current density range	plant-dependent
Plating speed	plant-dependent up to 12 µm/min
Anode material	Pt/Ti (PLATINODE® Pt/Ti) or MMO 177

Coating characteristics	
Coating	Gold nickel
Purity	approx. 99.7 wt.% Au approx. 0.3 wt.% Ni
Colour of deposit	yellow
Brightness	bright to highly bright
Hardness of deposit HV 0.015 (Vickers) approx. values	approx. 130 - 190 HV
Max. coating thickness	10 µm
Density	approx. 17 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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