

AURUNA® 8100 Gold Cobalt Electrolyte

High-speed electrolyte for hard gold coatings

AURUNA® 8100 is used for depositing hard gold coatings in special high-speed equipment. The weakly acidic high-speed electrolyte has a wide operating range with easy bath maintenance and extremely high plating speed.

AURUNA® 8100 was specifically developed for the automatic high-speed gold-plating in equipment for selective plating and continuously working reel-to-reel lines. Due to vigorous electrolyte agitation (flow, spray), it allows the working at high current densities with stable long-time behaviour. It can be also operated as a gold strike electrolyte.

The deposits are solderable, low in pores, ultra-bright, hard and abrasion-resistant. They have a constantly low contact resistance. Therefore the electrolyte is excellently suitable for the gold-plating of electronic components such as connectors, contacts and edge connectors on printed circuit boards.

The optional use of the AURUNA® Inhibitor 2 offers the possibility of a reduced gold consumption of up to 15%. The inhibitor allows sharp borderlines - this reduces the size of the run-off area. Of course, the layer properties remain unaffected. The inhibitor can be removed without any residue after the plating by cleaning with activated carbon.

Electrolyte characteristics

Electrolyte type	Weakly acidic
Metal content	12 (2 - 30) g/l Au
pH value	4.2 - 4.6
Operating temperature	55 (45 - 65) °C
Current density range	2 - 80 A/dm ² , 80 A/dm ² in JetLab
Plating speed	0.3 - 11 µm/min
Anode material	Pt-Ti (type PLATINODE® Pt/Ti)



Coating characteristics

Coating	Gold-cobalt
Alloy composition	Approx. 99.7 wt. % Au 0.1 - 0.4 wt. % Co
Colour of deposit	Deep yellow
Brightness	Ultra-bright
Hardness	120 - 200 HV
Max. coating thickness	10 μm
Density of the coating	Approx. 17 g/cm ³

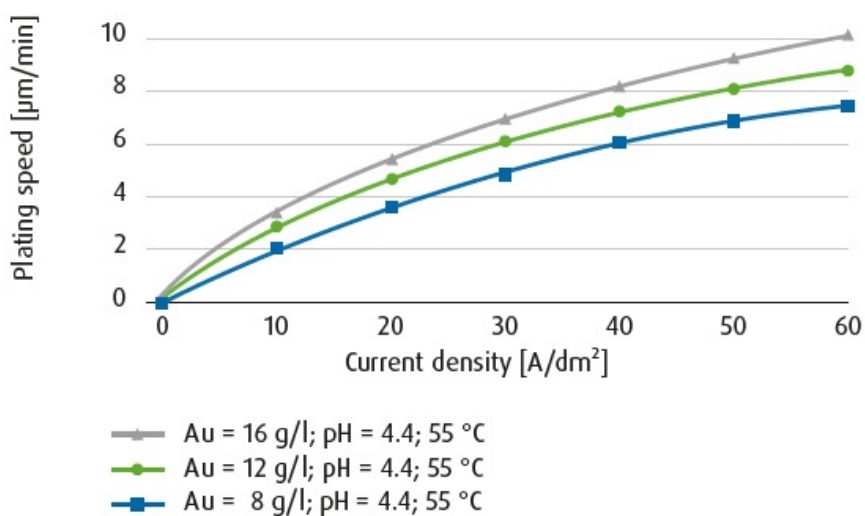
Advantages

- Weakly acidic high-speed electrolyte
- Wide operating range
- Extremely high plating speed
- Low-pore, solderable, hard and abrasion-resistant coatings
- For electrical contacts
- Classification according to ASTM B-488-01 Type I-II, Code C-D
- The coatings are RoHS compliant
- For use in high-speed equipment
- Gold savings of up to 15% by inhibitor usage

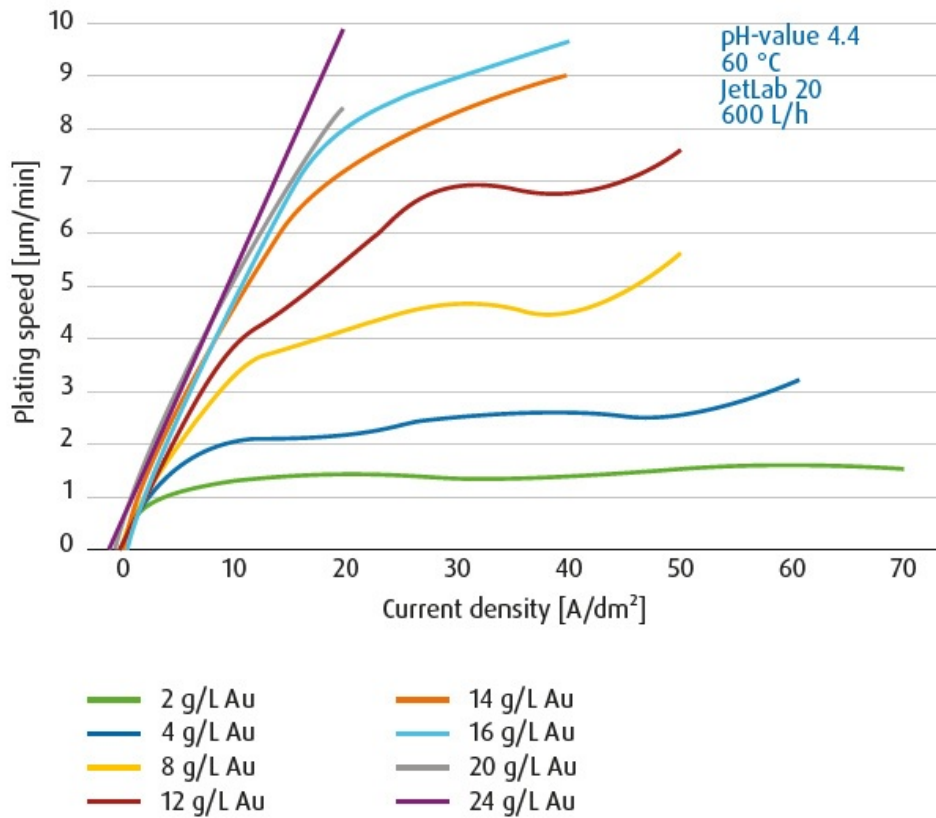
Applications

- Connectors
- Electrical contacts
- Edge connectors on printed circuit boards

Deposition on Brush Module (Flow 60 l)



Deposition at Different Gold Concentration (2 - 24 g/L Au)



Your contact person



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