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AURUNA® 5400

Hard Gold Electrolyte



For Depositing Uniformly Bright Coatings

AURUNA® 5400 the weakly acidic electrolyte deposits yellow, uniform bright hard gold coatings. The newly balanced brightener system of the electrolyte enables the operation in a very wide current density working range and allows a variable gold content at the same time. Due to the usage of special chemical components, the AURUNA® 5400 is equally suitable for rack and barrel application.

The deposited coatings are characterized by low porosity and an increased abrasion resistance, compared to coatings deposited in AURUNA® 539. Furthermore contacts coated with AURUNA® 5400 exhibit a low and long-time stable contact resistance and an excellent solderability. As well coatings up to 10 µm can be crack-free deposited in the electrolyte.



Advantages

- Very wide operating current density range
- For technical and decorative applications
- High corrosion and abrasion resistance
- Low, stable contact resistance
- Classification according to ASTM B 488-01: Type I - II, grade C -D

Applications

- Contact pins, contact springs, contact plugs
- Contact materials
- Slip rings

Technical Specifications

Electrolyte characteristics		Coating characteristics	
Electrolyte type	Weakly acidic	Coating	Gold-Cobalt
Metal content	8 (0.5 - 12) g/l Au	Alloy composition (according to ASTM B 488-01)	99.7 wt.% Au 0.3 wt.% Co
pH value	4.2 (3.8 - 4.6)	Colour of deposit	Yellow
Operating temperature	50 (48 - 52) °C	Brightness	Bright
Current density range	2.5 (1 - 5) A/dm ²	Hardness of deposit HV 0.015 (Vickers) approx. values	150 - 220 HV
Plating speed	0.1 - 1.0 µm/min	Max. coating thickness	Crack-free up to 10 µm
Anode material	MMO (type PLATINODE® 167 or 177)	Classification acc. to ASTM B-488-01 (depending on opera- ting conditions)	Type I-II, Code C-D (equivalent to IC-IID according to MIL-G-45204C)
		Solderability	ZCT < 0.2 s
		Density of the coating	17.5 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.



Markus Legeler
Manager Sales International

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

