Ag Pd

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Metal Deposition Solutions

ARGUNA®-ALLOY 1

SILVER-PALLADIUM-ELECTROLYTE

ARGUNA®-Alloy 1 for demanding requirements

This silver-palladium alloy is designed for use at high temperatures. Combining with the maintenance of a lower coefficient of friction and a high degree of hardness, the alloy is ideally suited for applications in the field of electrical contact surfaces and connectors.

This coating system demonstrates its strengths particularly when, for example in the electromobility sector, increased demands are placed on silver coatings. In comparison to established hard gold coatings, the silver-palladium alloy also offers significant potential for saving precious metals.

The silver-palladium alloy electrolyte, which can be integrated into a conventional electroplating process, is free of cyanide complexes and guarantees maximum performance and a long service life.

Advantages

- Hard and wear-resistant coatings
- Very good electrical properties
- Semi-bright coatings
- For continuous lines with flow or spraying technology

Applications

- Electrical contact surfaces
- Connectors

ARGUNA®-ALLOY 1

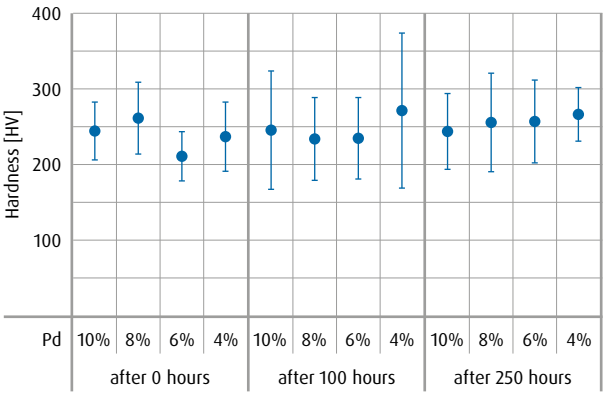
SILVER-PALLADIUM-ELECTROLYTE

TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	Strongly acidic
Metal content	Ag: 20 g/l (10 - 22 g/l) Pd: 12 g/l (10 - 14 g/l)
pH value	< 1
Operating temperature	65 (50 - 65) °C
Current density range	Depending on installation type and electrolyte movement
Plating speed	2 µm/min at 3 A/dm² 4 µm/min at 6 A/dm² 6,5 µm/min at 10 A/dm²

Coating characteristics	
Coating	Silver-palladium
Colour of deposit	Grey
Brightness	Semi-bright
Hardness of deposit HV 0.025 (Vickers) approx. values	220 - 260 HV
Density	10,4 g/cm³

Layer hardness depending on palladium content
in the initial state and after heat treatment at 200° C



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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