

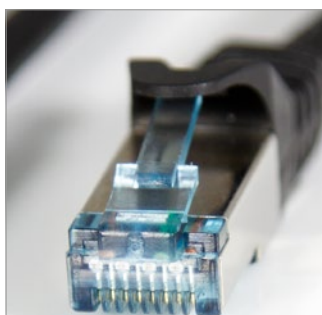


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PALLUNA[®] 4700

PALLADIUM NICKEL ELECTROLYTE



For hard and wear resistant coatings

PALLUNA[®] 4700 is a chloride-free, ammonia-reduced high-speed electrolyte for the deposition of a semi-bright to bright palladium-nickel alloy in reel-to-reel lines (selective dipping, jet plating, brush plating) and tabplaters.

Depending on the operating conditions, the electrolyte deposits alloy layers with approx. 80% of Pd. The alloy composition is largely independent of the current density.

The hard and wear-resistant layers are ductile, with low internal stresses and exhibit good corrosion resistance.



Advantages

- Chloride-free
- pH and ammonia reduced
- High deposition rate
- Ductile coatings
- Constant alloy composition
- Make-up with lower palladium content possible

Applications

- Industrial connectors (data and signal transmission)
- IT connectors (e.g. USB-C)

PALLUNA® 4700

PALLADIUM NICKEL ELECTROLYTE

TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	Chloride-free ammoniacal
Metal content	20 g/l Pd 15 g/l Ni
pH value	7.7
Operating temperature	40 °C
Current density range	up to 50 A/dm ² in JetLab
Plating speed	up to 12 µm/min in JetLab
Anode material	Platinized titanium (e.g. PLATINODE®)

Coating characteristics	
Coating	Palladium nickel
Purity	80 wt.% Pd 20 wt.% Ni
Brightness	Semi-bright to bright
Hardness of deposit HV 0.015 (Vickers) approx. values	approx. 550 HV kp/mm ² (5mN load)
Density	ca. 10.8 g/cm ³

Electrolyte characteristics: Make-up reduced metal content	
Metal content (to achieve an alloy composition of approx. 70-80% palladium in the layer)	8 g/l Pd 2,5 g/l Ni
Metal content (to achieve an alloy composition of approx. 60-70% palladium in the layer)	8 g/l Pd 5 g/l Ni

If necessary, the electrolyte can be prepared and operated with low metal content, which reduces both the preparation costs of the process and the precious metal dragout.

A preparation recommendation with reduced metal content is available.

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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