



PALLUNA® 468 Palladium-Nickel Electrolyte

For high-speed deposition in reel-to-reel equipment

PALLUNA® 468 is a weakly ammoniacal high-speed electrolyte for depositing palladium-nickel alloys in reel-to-reel equipment (selective dipping, jet plating, brush plating) and in reel-to-reel tab-plater.

Normally, coatings containing at least 80 % of palladium are deposited, the alloy composition can be adjusted by simply changing the palladium concentration in the electrolyte, however. The ductile layers are white, bright and they exhibit a good resistance to tarnishing and corrosion.



Electrolyte characteristics

Electrolyte type	Weakly ammoniacal
Metal content	20 (18 - 22) g/l Pd
pH value	7.5 (7.4 - 8.0)
Operating temperature	45 (43 - 47) °C
Current density range	up to 60 A/dm ²
Plating speed	up to 16 µm/min
Anode material	Pt-Ti (type PLATINODE® Pt/Ti)

Coating characteristics

Coating	Palladium-nickel
Alloy composition	80 wt.% Pd 20 wt.% Ni
Colour of deposit	White
Brightness	Bright
Hardness	580 - 620 HV
Max. coating thickness	10 μm

Density of the coating	10.8 g/cm ³
Solderability	Good
Elongation	Approx. 3 %
Bendability	2 μm crack-free
Bondability	(with fine gold flash) Good

Advantages

- Improved abrasion resistance
- High number of mating cycles
- Low porosity and crack-free
- Low internal stress
- High plating speed
- Constant alloy composition
- Long bath life

Applications

Reel-to-reel equipment (selective dipping, jet plating, brush plating)



Alloy Composition vs. Current Density

PALLUNA[®] 468: Alloy composition in dependence on the current density. 20 g/l palladium, 15 g/l nickel, 45 °C, pH 7.5, dip and spray cell.

Demand: min. 80 % palladium in the coating. The alloy composition is only minimally influenced by the current density applied.

Your contact person



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