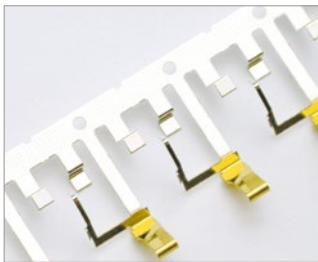




Version: 20 July 2017

# PALLUNA<sup>®</sup> 468

## PALLADIUM-NICKEL ELECTROLYTE



### For High-Speed Deposition in Reel-To-Reel Equipment

PALLUNA<sup>®</sup> 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 tab-plater continuous lines.

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.



### 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

- Continuous lines / reel-to-reel equipment (selective dipping, jet plating, brush plating)

# PALLUNA® 468

## PALLADIUM-NICKEL ELECTROLYTE

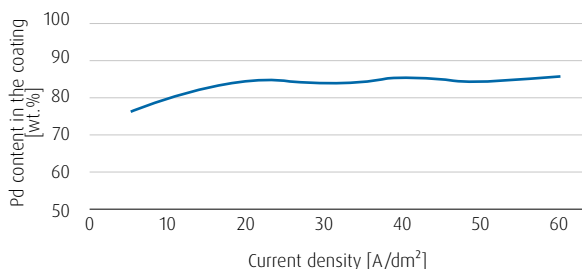


### TECHNICAL SPECIFICATIONS

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 <sup>2</sup>
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 of deposit HV 0.015 (Vickers) approx. values	580 - 620 HV
Max. coating thickness	10 µm
Density	10.8 g/cm <sup>3</sup>
Elongation	Approx. 3 %
Bendability (10 mm mandrel)	2 µm crack-free
Bondability with fine gold flash (ultrasonic with AlSi wire)	Good
Solderability (100 % wetting in dip-and-look-test)	Good

#### 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.

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