



RHODUNA® PT Rhodium-Platinum-Electrolyte

Irresistible – Rhodium with the allure of platinum

Rhodium creates a brilliant white surface on decorative products. Platinum has enjoyed an incredibly stable price for a number of years, and its name is desirable for all buyer groups. Imagine an alloy that combines the benefits of both precious metals.



A RHODUNA® PT layer is built up of rhodium and platinum one half each, notwithstanding that the high-quality alloy can not be distinguished from that of a pure rhodium electrolyte, even with a trained eye. Due to the high societal significance of platinum, your product also gains in psychological value and its price acceptance increases significantly – conversely, for you as a producer a coating with RHODUNA® PT is more attractively in price than that with a pure rhodium electrolyte.

Alternatively, the alloy composition of rhodium and platinum can be variably adjusted. Compositions of 80 % platinum to 20 % rhodium, and vice versa, are possible - and all this with constant layer properties. Therefore you always have the price advantage on your side.

Further information

- about [RHODUNA® PT](#)
- about [RHODUNA® Alloy price advantage](#)
- about [RHODUNA® Alloy for technical applications](#)
- about [RHODUNA® Alloy Black for dark layers](#)

Electrolyte characteristics

Electrolyte type

Strongly acidic

Metal content

0,6 - 1,5 g/l Rh, 0,6 - 1,5 g/l Pt

pH value	< 1
Operating temperature	45 (40 - 50) °C
Current density range	3,0 (2,0 - 4,0) A/dm ²
Plating speed	ca. 0,1 µm/min 3 A/dm ²
Anode material	MMO (type PLATINODE® 187 SO)

Coating characteristics

Coating	Rhodium-platinum
Alloy composition	20 - 80 % Rh, 20 - 80 % Pt
Colour of deposit	White
Brightness	Bright
Hardness of deposit	600 HV (at 50 % Rh and 50 % Pt)
Max. coating thickness	up to 0,3 µm
Density of the coating	Approx. 15,7 g/cm ³ (at 50 % Rh and 50 % Pt)

Advantages

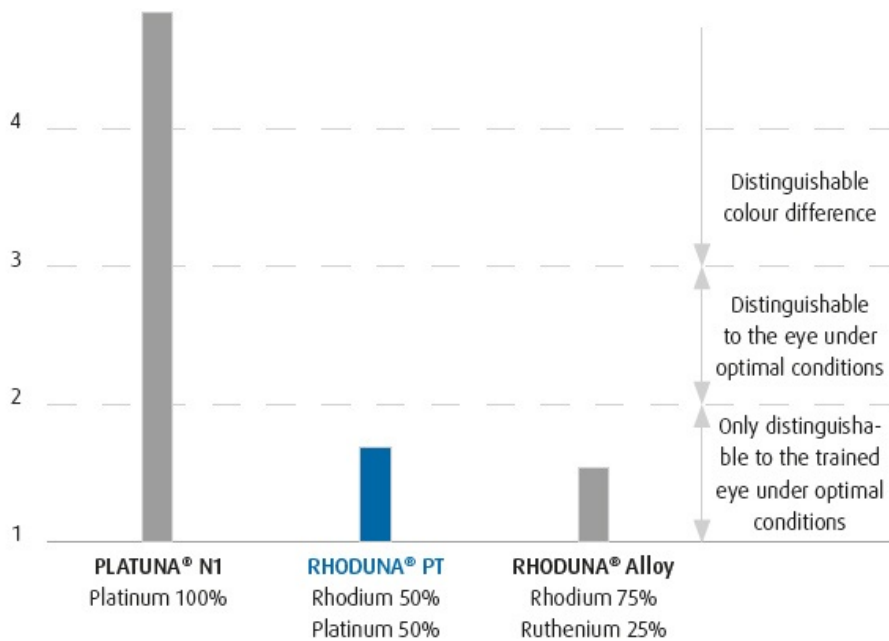
- White and bright rhodium-platinum coatings
- Uniform layer thickness
- Crack-free up to 0,3 µm
- Wide current density range
- Abrasion-resistant
- Less expensive than pure rhodium layers
- Minor porosity and good throwing power
- Good covering speed
- For rack and barrel plating

Applications

- Jewellery
- Watches
- Writing implements
- Eyeglasses
- Fittings

ΔE colour deviation

compared to RHODUNA® Diamond Bright pure rhodium electrolytes



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