



RHODUNA®-Alloy 1 Rhodium-Ruthenium Electrolyte

The first pure white electrolytic rhodium alloy

RHODUNA®-Alloy is the first alloy electrolyte in the world combining the high-quality metals rhodium and ruthenium. The basic materials of the new coating are truly royal: A mixture of rhodium, one of the world's most valuable precious metal, and the platinum group metal ruthenium.

Its white colour is absolutely equivalent to that of a pure rhodium layer. The electrolyte has all the quality characteristics of high-grade rhodium coatings and surpasses them in durability and uniformity. Its good throwing power even permits the plating of parts with complex geometries. It can be directly deposited on nickel, palladium, silver and gold.

At the same time, the „White Queen“ is considerably less expensive than pure rhodium layers.



Further information

- 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	1.6 (0.8 - 1.8) g/l Rh 0.4 (0.2 - 0.5) g/l Ru
pH value	< 1
Operating temperature	45 (40 - 50) °C
Current density range	4.0 (3.0 - 5.0) A/dm ²
Plating speed	Approx. 0.2 µm/min at 4.0 A/dm ²
Anode material	MMO (type PLATINODE® 187 SO)

Coating characteristics

Coating	Rhodium-ruthenium
Alloy composition	75 wt. % Rh, 25 % Ru
Colour of deposit	White
Brightness	Bright
Hardness	600 - 900 HV

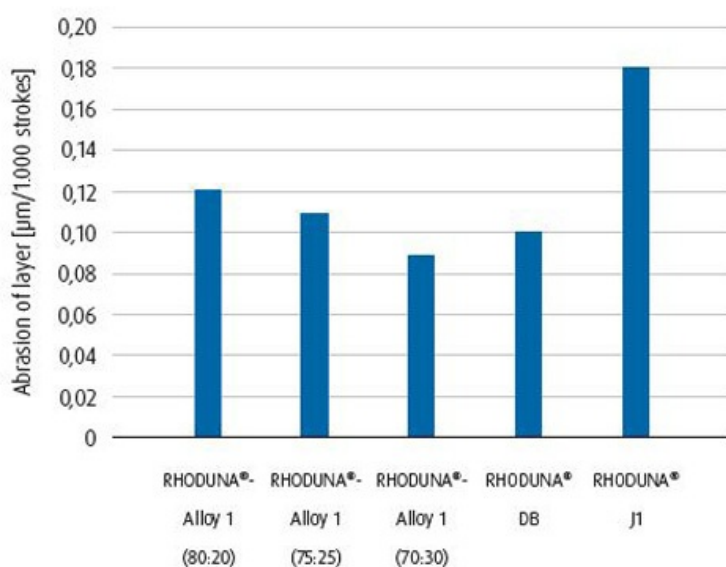
Advantages

- Very light, white and ultra-bright coatings
- More uniform layer thickness
- Crack-free up to 1 μm
- Wide current density range
- Extremely abrasion-resistant
- Less expensive than pure rhodium layers
- Ideal for parts with complex geometries, e.g. chains
- Suitable for rack and barrel

Applications

- Spectacle frames
- Writing implements
- Jewellery
- Watches

Abrasion Test (Bosch-Weinmann)



Your contact person





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