Pt Ru

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umicore Electroplating

PLATUNA®-ALLOY 1

PLATINUM RUTHENIUM ELECTROLYTE

Extraordinarily Abrasion-Resistant Coatings – Saving Platinum

PLATUNA®-Alloy 1 is used for depositing smooth, ultra-bright and extraordinarily abrasion-resistant platinum-ruthenium alloy coatings. The acidic electrolyte is used for decorative applications and guarantees light, white layers - crack-free up to 1 µm.

PLATUNA®-Alloy 1 works across a wide operating range and reaches an excellent covering speed. It is used for rack operation.

Advantages

- Acidic platinum alloy electrolyte - saves expensive platinum
- Light, white and ultra-bright coatings
- For decorative applications
- Extraordinarily abrasion-resistant
- Wide operating range
- Up to 1 µm layer thickness (crack-free)
- The coatings are RoHS compliant
- Suitable for racks

Applications

- Jewellery
- Writing implements
- Watches
- Spectacle frames
- Accessories

PLATUNA®-ALLOY 1

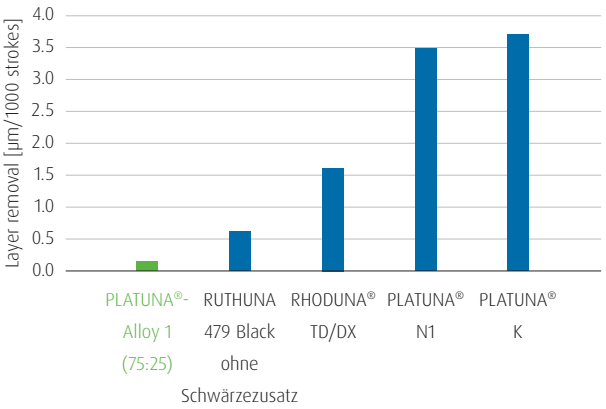
PLATINUM RUTHENIUM ELECTROLYTE

TECHNICAL SPECIFICATIONS

Electrolyte characteristics	
Electrolyte type	Strongly acidic
Metal content	1.0 (0.8 - 1.2) g/l Pt 1.0 (0.8 - 1.2) g/l Ru
pH value	< 1
Operating temperature	35 (30 - 40) °C
Current density range	2.0 (0.5 - 5.0) A/dm²
Plating speed	Approx. 0.08 µm/ min at 2.0 A/dm²
Anode material	MMO (type PLATINODE® 187 SO)

Coating characteristics	
Coating	Platinum-ruthenium
Alloy composition	75 weight % Pt 25 weight % Ru
Colour of deposit	White
Brightness	Bright
Hardness of deposit HV 0.015 (Vickers) approx. values	Not measurable, Approx. 500 HV
Max. coating thickness	1.0 µm
Density of the coating	Approx. 19.16 g/cm³

Bosch-Weinmann Wear Test



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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