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PLATUNA[®] PT

Platinum Electrolyte



Pure platinum electrolyte without yellow tint

The strongly acidic PLATUNA[®] PT platinum electrolyte is used to deposit smooth, crack-free platinum coatings up to a layer thickness of 5 µm. The deposited layers are characterized by a brilliant luster and, in contrast to conventional platinum coatings, do not exhibit a yellow tint.

Furthermore, the electrolyte has a low sulfuric acid content and is therefore less aggressive to the coating substrate. The deposition rate is independent of the current density, which leads to an optimum layer thickness distribution. No precipitation occurs and the platinum concentrate does not have to be stored in the refrigerator.



Advantages

- Excellent brilliance without yellow tint
- Up to 5 µm layer thickness
- High abrasion resistance
- Current density independent
- Easy handling - no cold storage and no precipitation

Applications

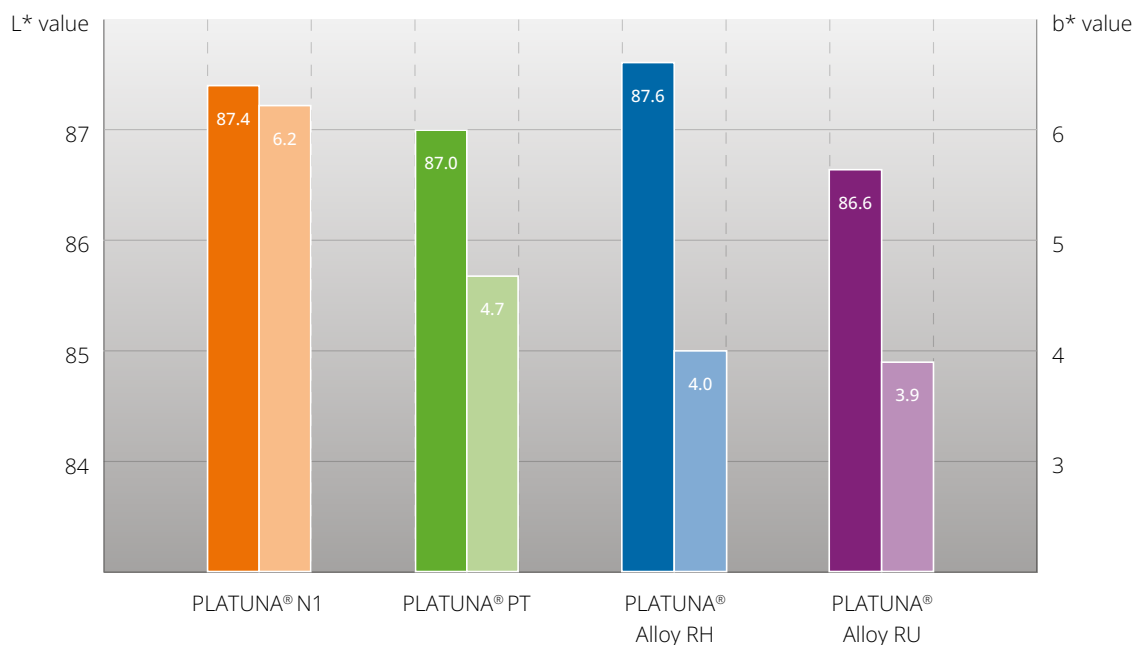
- Jewelry
- Watches
- Writing implements
- Spectacles frames
- Bathroom fittings

Technical Specifications

Electrolyte characteristics	
Electrolyte type	Strongly acidic
Metal content	2 (1 - 6) g/l
pH value	< 1
Operating temperature	60 (55 - 65) °C
Electrolyte density	approx. 1.02 g/cm ³
Current density range	5 (0.5 - 10) A/dm ²
Deposition speed	approx. 0.13 µm/min at 5 A/dm ²
Deposition rate	approx. 5.6 mg/Amin at 5 A/dm ²

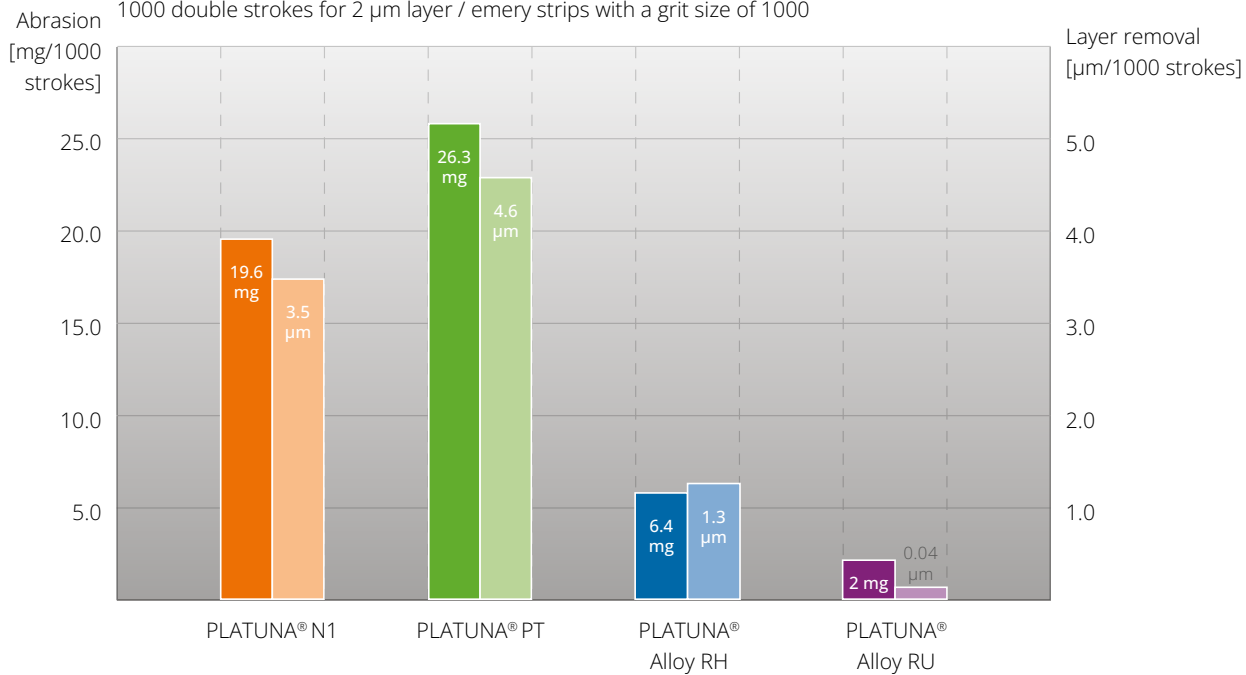
Coating characteristics	
Coating	Platinum
Purity	99.9 wt.% Pt
Colour of deposit	White
Brightness	Bright, brilliant
Hardness of deposit HV 0.015 (Vickers)	not measurable, approx. 350 HV
Max. coating thickness	approx. 0.5 µm bei 2 g/l Pt content, up to 5 µm at 6 g/l Pt content
Density of the coating	approx. 21,4 g/cm ³

Color measurement L* and b* value
Neutral gray axis and blue-yellow axis



Wear test (Bosch-Weinmann)

1000 double strokes for 2 µm layer / emery strips with a grit size of 1000



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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