



# RHODUNA® PT PEN

## RHODIUM PLATINUM ELECTROLYTE



#### PT PEN: Pen variant for targeted, partial rhodium plating

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.

With RHODUNA® PT PEN, targeted, partial rhodium plating is possible with a pen plating unit. This is mainly required for multicolor coatings, repair work and coatings of small areas. The layer consists of 40% rhodium and 60% platinum. 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 PEN is up to 43% cheaper than with a pure rhodium electrolyte.

Furthermore, RHODUNA® PT PEN not only convinces with cost advantages, but also impresses with high wear resistance and easy handling.



#### Advantages

- $\boldsymbol{\cdot}$  White and bright rhodium-platinum coatings
- · Uniform layer thickness
- · Crack-free up to 0,25 µm
- · Wide current density range
- · Abrasion-resistant
- · Easy maintenance
- · Less expensive than pure rhodium layers
- · Minor porosity and good throwing power
- Good covering

### **Applications**

- Jewellery
- Watches
- · Spectacle frames
- · Writing implements
- Fittings

# RHODUNA® PT PEN

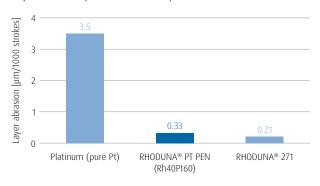
# RHODIUM PLATINUM ELECTROLYTE

# **TECHNICAL SPECIFICATIONS**

Electrolyte characteristics	
Electrolyte type	Strongly acidic
Metal content	0.8 g / 100 ml Rh 1.2 g / 100 ml Pt
pH value	< 1
Operating temperature	25 °C
Plating speed	approx. 0.1 μm/min

Coating characteristics		
Coating	Rhodium-Platinum	
Purity	40 % Rh 60 % Pt	
Colour of deposit	White	
Brightness	Brilliant	
Max. coating thickness	up to 0.25 μm	
Hardness of deposit HV 0.015 (Vickers) approx. values	approx. 600 HV	
Density	approx. 18.7 g/cm³	

#### Layer abrasion (Bosch-Weinmann)



#### Partial rhodium plating with a pen plating unit



# **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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