

Rhodium solution JE88-1

Description

The Rhodium solution JE 88 deposits mirror shining, brilliant white, magnificent hard, abrasion resistant rhodium coatings. It is preferably used for decorative coatings and jewelry industry. It wins also through its corrosion protection characteristics. Therefore the rhodium electrolyte JE 88 is adopted in many cases as tarnish protection for silver products. Coatings up to 1,5 µm can be deposited.

Operating data

Rhodium content	1,0 g/l Rh
pH-Value	<1
Density	1,015 – 1,08 g/cm ³

Operating conditions

Voltage	2 - 3 Volt
Bath temperature	25 - 40°C
Exposure time	2 min (1 - 5 min)
Anodes	Platinized titanium, mixed-metal-oxide
Anode/Cathode surface	1 : 1
Agitation	Advantageous
Current density	0,5 – 2 A/dm ²
Bath filtration	From 10 liters

Deposition data

Hardness	800 – 900 HV
Layer thickness	Max. 1,5 µm
Layer density	Approx. 12,4 g/cm ³

Form of delivery

- Ready to use (1 g Rh/ltr.)
- Concentrate form (1 g Rh/100ml)
- Rhodium Replenisher (1 g Rh/100ml)

Solution preparation concentrate form

Mix 100 ml of the Rhodium JE88 concentrate with 900 ml distilled water.

Bath control/regeneration

Regeneration should be made at the latest after 20% of the Rhodium content is worked out. For 1 g of Rhodium 50 ml of Rhodium Replenisher JE88 must be added. For control of the deposition weight we recommend an ampere minute counter. Even by bigger baths control should take place in regular intervals. If required we accomplish a bath analysis for you.

Cleaning process

Organic contaminants can be removed very well by a charcoal cleaning:

- Stir in 2 – 3 g/l charcoal into the electrolyte
- Let it take effect for 2 hours, if possible stir slightly during this time
- Then filter through a fluted filter
- After this the Additive JE88 must be absolutely added (Art. No. 10150.100 or 9781.1000)

Recommended pre-treatment

After electrolytic degreasing rinse well and dip in 3 – 5% sulfuric acid. So a contamination of the rhodium bath will be avoided.

Recycling

The used solution contains precious metal, which we like to recycle for you. Recycling of these solutions can be profitable from 10 liters.

Storage

Store closed and separated from food products and storage in convenient and special marked boxes. Do not bring in contact with cyanides or cyanide solutions, because the solutions contain acid sulfur.

Risks/Disposal

Before drain off the hydrous solutions in the canalization a liquid waste treatment should take place. The specifications of the local responsible water authority are to be regarded.

Please note our Safety Data Sheet!