Gold Plating Bath JE250

Description:

The micron gold plating bath JE250 is weakly acidic hard gold electrolyte which deposits yellow, uniformly shiny hard gold coatings. It is suitable for technical and decorative applications, as the deposited layers have high corrosion and abrasion resistance. It is suitable for an excellent deposit of gloss retention and hard gold layer up to a maximum of 10µ. This value is highly variable and depends on the gold content and the temperature of the bath. The coating consists of a gold/cobalt alloy.

Operating data:

Gold content	3, 5, 8 or 12 g/L
pH-value	4,0 (3,8 - 4,2)
Density	1,035 g/ml (1,030 - 1,050)

Deposition data

Hardness	150 - 220 HV
Layer thickness	max. 10 µm
Fineness of the gold layer	ca. 99,5 % Au

Working conditions:

Voltage	2,5 - 4 V
Bath temperature	20 - 40 °C
Anode material	platinized titanium
Goods movement	required
Anode- /cathode surface	1:1
Deposition rate	approx. 22 mg/Amin
Power density	approx. 1 - 2,5 A/dm^2
Bath filtration	from 10 liters

Form of delivery:

Ready for use with 3, 5, 8 or 12 g/L Au
Regeneration solution JE250-R

Bath control/Regeneration:

A regeneration has to be effected at the latest gold composition of 20 %. For 1 g isolated fine gold you have to add 10 ml Potassium gold I-cyanide solution (100 g/L Au) and 1 ml regeneration solution JE-250.
For the control of the isolated precipitation weight recommend we an ampére minute counter.
The pH value and density should be checked regularly and corrected accordingly in case of deviation. At a to high pH-value you should add carefully citric acid and at a to low pH-value you should add carefully 10% caustic potash. Bath inspection should be carried out at regular intervals. For sure we make a bath analysis for you.

Recycling:

The used solution contains precious metal, which we work up for you. The recovery of this solution can be profitable from 10 liters.

Storage:

Store closed and dark, in suitable and well marked containers. Do not bring in contact with cyanides or cyanide solutions.

Risks/elimination

Before desistance of the liquid solution in the canalization a wastewater treatment should be effected. The specifications of the local water authority should be regarded.

Please consider our safety data sheet!

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