

Pre-Gold Bath JE285

Description:

The pre-gold bath JE285 is a strongly acidic gold electrolyte required for gold plating of stainless steels. The coatings are crack free, ductile, corrosion-protective and low-porosity. Layer thicknesses of up to 3 µm are possible. Thin layers of 0.1 µm are usually sufficient to ensure adhesion. The bath is ideal for direct gold plating of chrome-nickel-steel, molybdenum-containing steel and nickel-base alloys that are difficult to activate. Because of its strong activating effect, it can also be used on passive materials that are difficult to electroplate. The coating consists of a gold/cobalt alloy.

Operating data:

Gold content	3 g/L
Sulfuric acid content	25 g/L (20-30)

Deposition data:

Hardness	approx. 165 HV
Layer thickness	until 3 µm
Fineness of the gold coating	>99% Au

Operating conditions:

Voltage	2 - 3 V
Bath temperature	20 - 30 °C
Exposition time	2 - 5 min. (max. 45 min.)
Anode material	mixed oxide
Goods movement	required
Anode-/ cathode surface	1:1
Current density	2 - 6 A/dm ²
Bath filtration	from 10 liters

Form of delivery:

Ready to use 3 g/L Au
Regeneration solution JE285-R

Bath control / Regeneration:

After 20% of the gold composition, the electrolyte should be regenerated. For 1 g isolated fine gold you have to add 10 ml gold salt solution (100 g Au/L) and 5 ml regeneration solution JE285-R. Frame and rinsing losses are not included.

Attention. Only potassium gold III cyanide solution may be used to supplement the bath. If the usual potassium gold I cyanide solution is used, in addition to destruction of the bath, highly toxic hydrogen cyanide vapors must be expected to develop.

For the control of the isolated precipitation weight, we recommend an ampère minute counter.

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 off 10 liters.

Storage:

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

Risks/elimination

Wastewater treatment must be carried out before the aqueous solution is discharged into the sewage system. The regulations of the locally responsible water authority must be observed. We will be pleased to dispose the solution professionally for you.

Please consider our safety data sheet!

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Management Service

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