



Platinum-DNP-Bath

High-quality platinum electrolyte for technical applications







Precious metal baths

Platinum-DNP-Bath

Technical data Bath concentration: 15 g Pt / L (range: 6 - 25 g Pt / L) pH range: 2.0 (range: 1.5 - 2.5) solution buffers around pH 2 (range: with NH₃ or H₃PO₄) pH adjustment: Temperature: 80°C (range: 70 - 85°C) 1.5 - 2.5 V Voltage: **Bath movement:** 1 cm / s Current density, cathodic: 0.3 - 1.5 A / dm² Anode: Pt-niobium, Pt-titanium, MOX-titanium Anode: Cathode: $1 \mu m / 12 min at 1 A / dm²$ **Deposition rate:** Yield: 18 mg Pt / Amin (range: new: 15 mg / Amin, incorporated: 18 mg / Amin)



10.185

2024/11 | Item number: 10.184,

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For further information please contact us:

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E-Mail: info@metakem.de Web: www.metakem.de **Platinum-DNP-Bath** is an acidic platinum bath for technical applications, with which light-coloured, hard coatings are deposited.

Features of the Bath

- Substrate: Nickel, copper, brass, stainless steel, gold and silver
- Substrate after suitable pre-treatment: Titanium, niobium, tantalum, molybdenum, tungsten
- Phosphoric acid
- Regenerable with Platinum-DNP-Bath-R

Properties of the Layer

- High adhesive strength
- Layer thickness up to 50 μm
- Coating hardness 500 700 HV

Bath Replenishment

The platinum content of the bath can be worked up to 5 - 6 g Pt / L without changing the current yield, but should preferably be added after 20 % platinum has been removed. Platinum-DNP-Bath is replenished with Platinum-DNP-Bath-R (50 g Pt / L). For 1 g of platinum removed, 20 ml of Platinum-DNP-Bath-R is added to the bath. The addition increases the phosphate content of the bath. It should be measured in between. A phosphate content of between 180 and 260 g / L delivers perfect results. If the phosphate content rises too high, some of the bath solution can be skimmed off and the rest diluted again with water. The removed platinum-containing phosphate concentrate can be used to replenishment drag-out losses or can be transferred to METAKEM for reprocessing.

Delivery Forms

The bath is supplied ready for use with the Pt concentration required by the customer.

