



Product Code	307-169
Colour	White
Preparation	Product Ready to Use
Tanks	Polypropylene or Teflon
Anodes	Platinised Titanium
Heaters	Porcelain or PTFE
Agitation	Solution and/or work movement is recommended

USAGE: Heat the ready-to-use solution to 45-50°C. Dipping the platinum coated titanium (+) anode into it. Put the material you want to plate into the solution with the help of a current-conducting (-) hanger (Platinex hanger is recommended). Perform the plating process by immersing it and applying 2-2.2V voltage and moving it for 60 - 180 seconds. Platinum plating can be used as an alternative to rhodium plating . Provides 0,7 micron coating with 10 minutes of application.

IMPORTANT NOTE: The more accurate the pre-treatment processes before plating, the better the plating quality will be. Please contact our company regarding the pre-treatment preparation.



OPERATING CONDITIONS

Platin Content:	4 g/l \pm 0.5
Sulfuric Acid:	80 g/l (75-85 g/l)
pH:	1.0
Temperature:	45 - 50 °C (recommended 45°C)
Cathodic Current Density:	1.0 - 2.0 A/dm ²
Voltage:	2 – 2.2V
Anode-To-Cathode Ratio:	2 : 1 or higher
Plating Efficiency:	10 mg/A.mn
Deposition Rate:	~ 0,7 μ 10 minute ve 1 A/dm ²
Plating Time:	60-180 second



DEPOSITION CHARACTERISTICS

Purity:	99.9 %
Hardness:	350 - 400 HV
Density:	21 g/cm ³



MAINTENANCE RATE

Consumed 5.000 Amps Per Minute

- 50g Platinum 3000 Replenisher (20g/L Pt)

SOLUTION MAINTENANCE

The Platinum metal content should be maintained at the recommended concentration (4,0 g/l) with periodic additions of PLATINUM 3000 Replenisher (containing 20 g/l Pt).

The temperature should be maintained at the recommended level of 45 - 50 °C. An increase in temperature will produce a mat deposit. A decrease in temperature will give a low plating efficiency.



EQUIPMENT REQUIRED

1. TANKS

Tanks should be made from Polypropylene or Teflon. Prior to use, the tank should be leached with a 5 % solution of sulfuric acid for several hours and subsequently rinsed in several changes of water.

2. HEATERS

Heaters should be made from Porcelain or PTFE. The temperature of the bath should be maintained at 45-50°C.



3. FILTRATION

The solution should be filtered continuously. All parts of the filter should be temperature and acid resistant. When new cartridge filters are used, they should be leached in 1 % sulfuric acid prior to use. Solution volume should be filtered at least twice per hour and particle retention should be 5 µ. Avoid the use of cotton filters.

4. AGITATION

A moderate agitation is recommended. Work movement should be adjustable (2-6 m/min.)

5. ANODES

Platinised titanium anodes should be used with this solution. The area should be sufficient to provide an anode-to-cathode ratio of 2 : 1 or better.



TROUBLE SHOOTING

CONSTITUENT	LOW	HIGH
Platinum	Low Plating Efficiency	Hazy Deposit
pH	Low Plating Efficiency	Mat Deposits and Precipitation of The Solution
Temperature	Low Plating Efficiency	Hazy Deposit
Current Density	Low Plating Efficiency and Dark Deposits	---
Sulfuric Acid	Hazy Deposit	Low Plating Efficiency but Bright Deposits