



Aussiemet



PT20

Technical Chart

Aussiemet PT20 Superbright deposits platinum-white coatings of previously unattained lightness and brilliance. It is additionally characterized by high covering speed and excellent throwing power.

The characteristic as follows:

- ◆ Bright and Hard Deposits
- ◆ Transparent and clear solution makes ease of operations
- ◆ For rack and barrel plating
- ◆ Exceptional coating
- ◆ Process Working, when needed, at Room Temperature

Technical Specification

Parameter	Unit	Range	Optimum
Platinum Concentration	g/l	2-10	2
Sulphuric Acid Concentration	ml/l	20-100	50
Temperature	°C	25-70	40
Exposure Time	Sec	40-80	60
pH			< 1
Current Density	A/dm ²	0.5-10	3
Voltage	V	2-6	3
Cathodic Efficiency at 3A/dm ²	mg/Amin'	3-12	6
Anodes			Platinum or Ti/Pt
Agitation		Moderate-Fast	moderate
Anode /Cathode Ratio		2:1-5:1	3:1

Deposition Data

PURITY	>99.9 % Pt.
APPEARANCE	Brilliant
HARDNESS	400 HV
DENSITY	21.4 g/cc
ELECTRICAL RESISTIVITY	9.8 micron ohms/cm

Equipment

For small installations (within 5 liters), heat resistant glass vessels are satisfactory.

For larger installations, Polypropylene or PTFE lined tanks are suitable and must have the following:

Rectifier with an Ampere meter and Volt meter producing a DC output with less than 5% ripple. Ampere minute meter

Platinised (2.5.micron Pt) titanium anodes

Filter pump with 5 – 15 micron polypropylene cartridge

Note: In order to avoid organic pollution it is recommended to wash and boil the cartridge before using.

Additional Information

PRETREATMENT

- ◆ Electroclean or ultrasonic clean parts to ensure they are free from grease
- ◆ Rinse with deionised water
- ◆ Activate parts in 10% v/v Sulphuric Acid for about 10 - 20 secs
- ◆ Dry

Demineralised Water:-

The quality of all additions to the bath should be controlled to ensure maximum performance. Use only the highest quality to prevent darker deposit. As with all precious metal plating electrolytes care must be taken to keep bath in a clean working environment and every effort should be made to ensure good rinsing techniques avoid drag over contaminants from cleaning and other plating processes.

Agitation:-

For the best colour and performance, agitation is supplied by the filter pump to give a gentle to moderate rate of agitation. For smaller installations the gentle movement of the parts by hand is sufficient.

Temperature:-

The bath can be operated over a wide temperature range; this especially give advantages when the part to be plated is sensible to heat e.g. lacquered items. Room temperature operation enables a variety of metals and alloys to be plated with minimal chemical attack. For decorative Flash plating room temperature is satisfactory. For thicker deposits and for faster deposition speed the temperature might be increased.

Solution Preparation

Bath Make-up 1 Ltr

- ◆ Add 750 ml of Deionised water to clean tank
- ◆ Add 250 ml of PT20
- ◆ Mix Well

NOTES:-

Aussiemet always recommends:

1. Before handling any ordered product please carefully read the relevant MSDS .
2. Please treat spent solutions in accordance with the in place regulations



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