

Umicore Electroplating

ARGUNA® 621 EF



For Noble Silver Hollow Jewellery

ARGUNA® 621 EF is a silver electrolyte, especially to produce noble hollow jewellery. A layer with high thickness can be deposited on mandrels made conductive.

The electrolyte works with wax and metal cores. It can be used within a wide current density range and is suitable for relatively high temperature ranges (40 degrees Celsius).

Its good throwing power results in a uniform layer thickness distribution. The surfaces are bright and brilliant white, without blue cast and have a fineness of 99.9 percent silver.



Advantages

- Bright silver electrolyte for producing hollow jewellery on wax and metal cores
- Suitable for relatively high temperature ranges (40 degrees Celsius)
- Surfaces are brilliant white
- Wide current density range
- Very good throwing power, therefore, uniform thickness distribution

Applications

- Electroforming
- Hollow jewellery

ARGUNA® 621 EF **BRIGHT SILVER ELECTROLYTE FOR ELECTROFORMING**

TECHNICAL SPECIFICATIONS

| Electrolyte characteristics | |
|-----------------------------|---|
| Electrolyte type | Alkaline-cyanide |
| Metal content | 40 (35 - 45) g/l Ag |
| pH value | No control required |
| Operating temperature | 40 to max. 45 °C |
| Current density range | 1 - 2 A/dm² |
| Plating speed | Approx. 0.6 μm/min at 1.0 A/dm²; approx. 1.2 μm/min at 2.0 A/dm² |
| Anode material | Fine silver |



Coating characteristics

| Coating | Fine silver |
|--|--------------------------------|
| Alloy composition | 99.9 wt. % Ag |
| Colour of deposit | Brilliant white |
| Brightness | Bright |
| Hardness of deposit HV 0.015 (Vickers) approx. values | 85 - 185 HV |
| Max. coating thickness | Several 100 µm |
| Density of the coating | Approx. 10.5 g/cm ³ |

YOUR CONTACT

Do you have a specific question or would you like a no-obligation quote calculation? Our specialist will be happy to help you with any technical questions you might have.



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