

ELETOBRIGHTENING SALTS

Treatment to improve the surface of Gold and Silver before polishing

Used extensively in mass production and repair workshops to remove the hardened surface to heat oxidised gold and silver, rendering the metal ready for barrel polishing or hand finished. Improve the colour of the metal and produce high value metal ready assay or reuse.

Container	-	Glass, polypropylene or PVC.
Anodes	-	Stainless Steel, connect to negative out-put of D.C. supply.
Temperature	-	60 – 75 degrees Centigrade.
D.C. Current	-	6 – 8 volts (Gold) 6 – 10 volts (Silver). 1 – 3 amps per square cm.
Time	-	10 – 40 seconds
Heater	-	Stainless Steel
Agitation	-	Gentle horizontal movement.
Availability	-	5 litre packs of salts. Stock No 5036E.
Make-up	-	Add 500 grams of salts to 5000 ml of cold water, stir and heat to recommended temperature. The salts are suitable for Gold or Silver electrobrightening, but it is preferable to use separate solutions where possible to avoid colour forming on the Gold surfaces.

Operation

Hang articles on copper, brass or stainless steel wire, jigs or racks. Connects to positive out-put of D.C. supply. Correct the voltage to the correct level and agitate gently. Rinse well in water after processing.

Maintenance

During all periods that electrostripping solutions are heated they consume Potassium Cyanide. A method of determining if there is sufficient Potassium Cyanide in the process, is to carry out the following test.

1. Heat solution to 65°C. Place a component of Silver or Gold into the solution, connected to the positive out-put of the D.C. supply. Turn the D.C. supply up to 7 volts and without agitation, leave the component in the solution for 15 seconds.
2. On removing the work, the surface should be clean white or gold. If the surface is black, the Potassium Cyanide content is low.
3. Add Potassium Cyanide at the rate of 245 grams per litre of solution and repeat stages 1 and 2 until surface is clean.

Disposal

Because of the high level of toxic material, this solution must not be discharged untreated. Solution should be safely bottled and re-processed by a suitable refining company. Gold and silver can be extracted by using our ELEROLYTIC RECOVERY CELL system to produce high quality metal.