Silver Plating

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Silver plating process on Aluminium & Copper alloys. The Silver coatings produced under special conditions have high electrical conductivity values and very good adhesion to the Al & Cu alloy substrates. Silver coatings find application in the electronics & communication industry for components like wave guides etc requiring high electrical conductivities.

Salient Features

Silver plating is carried out in a Cyanide Silver plating bath at room temperature. A high Cyanide content Silver strike bath is used for Silver strike coating before Silver plating for achieving good adhesion of Silver coating to the substrates. Electroless Nickel undercoat below Silver coating provides improved hardness & corrosion protection for the substrate.

Major Description

Coating Thickness	5 µm (Electroless Nickel) 5±2 µm (Silver)
Coating Micro Hardness	≈ 100 VHN
Qualified Temperature Limits	-40°C to +80°C

Technology Transfer

URSC-ISRO offers to transfer this Silver-plating Process developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.