

SILVER-PLATING / TINNING

Range of treatments for electrical and mechanical applications on copper, copper alloys and steels.

Electrolytic deposition of silver, tin and tin/lead on copper, copper alloys and steels is widely used in the electrical industry to improve electrical conductivity and solderability.

Silver can also be used in interesting applications that involve friction, for example, improving the seizure resistance of stainless steels.

Sample applications:

- Soldered connections
- Crimp connections
- Connecting brackets
- Flexible connector pads
- Pin headers
- Solder tags
- Panel strips
- Long-length link bars (continuous processing)
- Fuse connectors
- Valve gaskets
- Ball valves
- Flexible braided connectors
- etc.

SILVER PLATING

Quality of the treated parts:

- Very good electrical conductivity
- Excellent friction properties
- Gloss or semi-gloss deposition
- Solderable depositions
- Ductile deposition
- Good accommodation and deformability
- Seizure resistant

Possibilities:

- Sub-layers: Depending on the application, copper or nickel sub-layers may be required.
- Masking: For example, for certain thick applications, these depositions can be applied locally to the parts. In this case, the areas to be masked and the areas to be coated must be indicated on the plans. All these depositions are feasible in bulk.

Materials that can be treated:

- Copper
- Bronze
- Brass
- Copper-nickel
- Copper-beryllium
- Special copper: type tellurium copper: chromium copper
- Steels
- Cast irons
- Aluminium alloys

TINNING**Quality of the treated parts:**

- Good appearance
- Solderable depositions
- Gloss plating
- Excellent friction properties
- Ductile depositions
- Good electrical conductivity

Possibilities:

- Masking: For example, for certain thick applications, these depositions can be applied locally to the parts. In this case, the areas to be masked and the areas to be coated must be indicated on the plans. All these depositions are feasible in bulk.

TIN/LEAD**Characteristics:**

- Uniform depositions
- Cold electrolytic deposition
- Good solderability
- Deposition adapted to undercooling
- Alloy 60% Sn, 40% Pb tolerance $\pm 5\%$
- Good penetration of the deposition

Quality of the parts treated:

- Ductile soft depositions
- Depositions with excellent intermixing properties
- Depositions to improve the corrosion resistance of steels and ferrous materials

Possibilities:

- Masking: For example, for certain thick applications, these depositions can be applied locally to the parts. In this case, the areas to be masked and the areas to be coated must be indicated on the plans. All these depositions are feasible in bulk.