



CHEM PROCESSING, INC.

Platings & Coatings for Industry

Copper Electroplating

Copper electroplating is a coating that can be applied for both engineering and decorative purposes, using a cyanide bath. Chem Processing uses copper electroplating for engineering applications only. Copper electroplating can be used as a **Heat Treatment Stopoff** on steel for nitriding, carburizing, and decarburizing. This means that a steel part with copper electroplating will be protected from heating applications, maintaining the hardness of the part. Copper electroplating can also be used as a strike layer, providing a base coat for additional plating. Advantages of copper electroplating include: excellent electrical conductivity, good lubrication, and solderability.

Chem Processing Inc. Copper Plating Capabilities:

- ✓ **Plating Thickness Range of 0.0001 to 0.0050 in.**
- ✓ **Rack and Barrel Plating Available**
- ✓ **Available Masking for Selective Surface Plating**
- ✓ **Hydrogen Embrittlement¹**
- ✓ **Thickness Analysis on a Fischer Technology XDL-B X-Ray Fluorescent Spec**

Applicable Specifications:

AMS 2418F
ASTM B734
MIL-C-14550B²

Chem Processing Inc. is *committed to excellence* in Copper Electroplating. Chem Processing Inc. uses their engineering expertise and computerized process controls to *exceed their customer's expectations* when adherence to strict thickness specifications is essential.

¹ Parts with a hardness of 36 Rc or greater will be baked a minimum of 3 hours at 375°F to relieve entrapped hydrogen

² MIL-C-14550B has been cancelled in favor of AMS 2418F, but is still widely used