Zinc Plating

Zinc electroplating is an acid coating that is used in the protection of steel, cast iron, malleable iron, copper, and brass. As zinc is applied to any of these base materials, strong bonds are created. Zinc is normally applied for corrosion purposes, and functions as a "sacrificial coating", corroding before the base material.

To increase the corrosion protection Chem Processing Inc. offers **RoHS** compliant Clear Trivalent Chromium and Black Trivalent Chromium seals, as well as Yellow Dichromate and Olive Drab Hexavalent seals. Zinc is an efficient, economical coating, with a minimal environmental impact. Zinc is not recommended for equipment that is continually immersed in solutions, petroleum applications, pharmaceutical applications, and food-handling applications.

Chem Processing Inc. Zinc Plating Capabilities:

- Plating thickness range of 0.0001 to 0.002 inches
- Rack and Barrel plating available
- Available masking for selective surface plating
- Hydrogen Embrittlement (Parts with a hardness of 36 Rc or greater will be baked a minimum of 3 hours at 375° F to relieve entrapped hydrogen)
- RoHS Compliant Clear and Black Trivalent Chromium seals
- Yellow Dichromate and Olive Drab Hexavalent seals
- Thickness Analysis on a Fischer Technology XDL-B X-Ray Fluorescent Spec

Applicable Specifications:

ASTM B633 AMS 2402 MIL-STD-171 QQ-Z-325

Typical Salt Spray (ASTM B117) Results:

Finish	Hours Until Red Rust	
Zinc Zinc w/ Clear Chromate Zinc w/ Yellow Chromate Zinc w/ Black Chromate Zinc w/ Olive Drab Chromate Zinc w/ Clear Chromate & Seal	12 168 240 168 312 240	

All processes comply with industry specifications including ASTM, SAE, MIL, etc., as applicable for the particular process involved and are performed under ISO 9001:2000/AS9100B standards. Specific company approvals may also apply.

