

# ZINC NICKEL PLATING

Zinc-Nickel electroplating is an acid coating that is used in the protection of steel, cast iron, malleable iron, copper, and brass. Zinc-Nickel has become an environmentally safe alternative to cadmium electroplating. Zinc-Nickel demonstrates equivalent, or better, corrosion properties when compared to cadmium. Zinc-Nickel 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 a **RoHS compliant** Clear and Black Trivalent Chromate seal. Zinc-Nickel is an efficient economical coating, with minimal environmental impact.

## Chem Processing Inc. Zinc Plating Capabilities:

- **Plating Thickness Range of 0.0002 to 0.0010 in.**
- **Rack and Barrel Plating Available**
- **RoHS Compliant Clear and Black Trivalent Chromate Seal**
- **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)
- **Salt Spray Corrosion Test** (up to 1000 hours until red corrosion)
- **Thickness Analysis on a Fischer Technology XDL-B X-Ray Fluorescent Spec**

## Applicable Specifications:

ASTM B841

AMS 2417

## Typical Applications of Zinc-Nickel Electroplating:

- **Automotive Industry**, used for improved corrosion protection and a cadmium replacement
- **Electrical Transmission Industry**, used for anchors, cleat bolts, and coaxial cables
- **Fastener Industry**, used for improved corrosion protection and a cadmium replacement
- **Defense Industry**, used as a cadmium replacement

*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.*



**CHEM PROCESSING, INC.**  
*Platings & Coatings for Industry*

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