



# CHEM PROCESSING, INC.

*Platings & Coatings for Industry*

## Type I Anodizing: Chromic Acid

Type I Anodizing is an electrochemical process that creates a thin aluminum oxide film by rapidly controlling the oxidation of an aluminum surface. The resulting aluminum oxide film is electrically non-conductive. The active ingredient in Type I Anodizing is chromic acid. Type I anodizing produces a thinner film than Type II and Type III Anodizing and produces enhanced drawing and forming characteristics. It is also important to remember that Type I Anodizing works best on aluminum with few alloying elements.

### Chem Processing Inc. Type I Anodizing Plating Capabilities:

- Typical Formed Thickness is 0.00005 to 0.0002 in.
- Rack Anodizing
- Available Masking for Selective Surface Anodizing
- Salt Spray Corrosion Test (minimum 336 hours of salt spray resistance)
- Thickness Analysis

### Applicable Specifications:

MIL-A-8625F Type I

MIL-STD-186 D (201)

ASTM B580-79 (Type G)

AMS B117

MIL-STD-171D (7.1.1 & 7.1.2)

MIL-F-14072B (E511)

AMS2470

### Properties of Type I Anodizing:

- **Corrosion Resistance:** The aluminum oxide film is resistant to atmospheric and salt-water environments.
- **Electrical Insulation:** Aluminum oxide film is dielectric.
- **Paint Adhesion:** Aluminum oxide film is a chemically active surface for painting.
- **Adhesive Bonding:** Aluminum oxide film improves adhesion and bond strength.

**Chem Processing Inc.** is committed to excellence in aluminum anodizing. 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.