



CAL 584

Still tank methods of cleaning aluminum sheets, castings or bar stock prior to anodizing.

Introduction: Anodizing consists of treating aluminum electrolytically as the anode in an acid solutions to produce an oxide film. The oxide film, while providing a surface, which is suitable for painting, lacquering, or dyeing, is also more resistant to corrosion and abrasion.

Anodizing processes that require that the aluminum surfaces be free of any oil, dirt, grease, etc., which will interfere with obtaining a uniform coating. Since aluminum is attacked by uninhibited alkaline cleaners, an alkaline cleaner with an inhibitor is used.

Metal: Aluminum and it's alloys.

Preceding Operations: Machining, forming, stamping, etc.

Soils to be removed: Cutting oils, forming compounds, chips, etc.

Subsequent operation: Anodizing

Cal-Pac Methods:

1. **Optional.** Heavily soiled parts may be given a pre-soak in a self-emulsifying solvent cleaner such as "Cal Solv-Off" straight or one part, "Cal Solv" or "Super Solv", to four thru eight parts of kerosene or solvent. This pre-soak should be followed by a hot pressure spray rinse. If a hot pressure spray rinse is not available, a cold pressure spray rinse or agitating the work in a hot rise tank may prove satisfactory.
2. Clean in, "Cal 31" or "Cal 32" at 4 to 6 ounces per gallon water at from 160°F - 180° F. Immersion times will vary from 3-10 minutes.
3. Cold running rinse.
4. Etch with a highly alkaline solution is the best is "Cal 584" at 4-6 ounces per gallon of water from 120° F - 180° F. dwell time is influenced by the finish desired.
5. Cold running rinse.
6. Remove copper smut anoxides in, "Cal 585" or "Cal 1169" (a sulfuric acid mixture) at 10-12 ounces per gallon of water at room temperature.

7. Rinse cold running water thoroughly.
8. Anodize.