Future Coat Technology

ULTRA SONIC CLEANER CLEAN L C

Ultra sonic cleaner clean L C is a non-Silicate, mildly alkaline soak cleaner for aluminum which can be used for either non-etch cleaning or mild-etch, cleaning. It is also an excellent for zinc die castings and other reactive metals.

Clean L C is ideal for non-etch cleaning of aluminum prior to anodizing, chromating, bright dipping and electroplating. Because non-silicates are present in the cleaner, no residual siliceous films remain to cause non-uniform anodizing or conversion coatings, and no fluoride containing acid dips are required to remove such films.

Clean L C is highly buffered to prevent attack on aluminum and other sensitive metals. No etching of aluminum occurs at low concentration and temperature, where as mild controlled etching can be achieved at higher concentration and temperature. The cleaner has good detergency and rapidly removes light soil, light buffing compounds and marking ink. However, for removal of heavy soil and buffing compounds, the work should be pre-cleaned in emulsion type or solvent type cleaner.

OPERATING CONDITIONS:

For non-etch cleaning

Concentration - 15-45 g/l

Temperature - 50- 65° C

Time 1-5 minutes

For mild-etch cleaning:

Concentration - 20-35g/l

Temperature - 70-80°C

Time - 1-5 minutes

CONCENTRATION:

The higher the concentration of the cleaner the greater the speed of cleaning and the greater the amount of etching. For no-etch cleaning as the concentration is increased, the time should be decreased to prevent etching. Even at low concentrations, some light clouding of buffed surface may be noticed during prolonged immersion. This will not be visible after plating or other finishing.

OPERATION:

Cleaning is accomplished by simple immersion of the work in ultra sonic cleaner clean L C

If the cleaner is operated as a mild-etch cleaner, a light smut will form on the surface of aluminum. The extent of smut formation will depend upon the etching time and the composition of the alloy. Alloys high in copper or silicon form a dark smut. Copper smuts can be removed in 66% v/v nitric acid solution. If silicon is present in addition to copper, mixtures of nitric acid and must be used

EQUIPMENT:

Stainless steel, fiber glass or polypropylene lined tanks with stainless steel heating coils are recommended if aluminum and other reactive metals are processed through the same tank.

CONTROL:

The concentration of ultra sonic cleaner clean L C can be determined by simple titration with standard acid using methyl red as indicator.

CAUTION:

Ultra sonic cleaner clean L C is mildly alkaline in nature and contact of the salts or solution with the skin or eyes should avoided.