Incralac Surface Preparation / Removal

The performance of any coating or treatment applied to copper-based alloys is dependent upon the care with which the metal surface has been prepared prior to the application of the coating. The following general conditions of the surface to be protected must be considered:

The surface of new metal must be thoroughly buffed and made chemically clean. The metal should be treated with a copper cleaner. After removal of the cleaner, it should be possible to wipe the metal with a cloth, which has been dampened with a solvent compatible with that cleaner. The surface will then be sufficiently clean for the application of the coating.

The surface of old metal that is to be refinshed must be completely free of all minute traces of old coating, and all surface stains removed. If the old coating is Incralac, no stripping is required. After removal of accumulated dust and grime, simply apply a new coating of Incralac. Where other coatings had been used, a lacquer stripper is generally best. The thickened material is spread on the surface to be stripped and allowed to soak for a few minutes. A scouring pad may be used to apply the lacquer remover. (Steel wool should not be used on copper-based alloys.) Rubbing should be with the “grain” of the metal, not across the metals rolling direction.

The stripper should then be allowed to stand on the old coating a few minutes, then removed by wiping with a clean cloth, or flushed with appropriate solvents. In many instances, multiple applications of the stripper are necessary to completely remove all traces of the coating from the metal. After removal of the stripper, a cleaner is applied to the surface of the metal using a cloth wetted with the cleaning compound.

To avoid staining, the cleaner should be applied to a limited area of the surface and quickly wiped off with a clean cloth or scouring pad. Should staining occur, it could be removed by additional applications of cleaner. In cases where stains persist it may be necessary to use the more abrasive scouring pads to mechanically abrade badly corroded areas.

If the metal has been severely stained, it can frequently be restored to its initial appearance by the application of a solution containing about 5% oxalic acid dissolved in a mixture of three parts water and one part butyl cellosolve. When using oxalic acid solutions as stain removers, care must be taken to remove all traces of the acid by repeated washing with clean water on water and butyl cellosolve, and wiping dry with a clean cloth.

High humidity conditions will accelerate corrosion of the copper substrate. Incralac should be applied within one hour of cleaning the metal and to a dry surface, or clounding will occur.

Common based solvents for removal of Incralac (solvent base) are (best to worst): acetone or any ketone, xylene, toluene, 3M Safest Stripper, Klean Strip-X, Klean Toluene/Xylene Substitute, and methanol. Not affected by turpentine or mineral spirits, which can be used as cleaners for this surface.

**Note:** The recommendations above are for educational purposes only, and testing should always be done prior to application of any of the products or techniques mentioned above.