

DETAILED PLATING INSTRUCTIONS

ALUMINUM / MAGNESIUM ALLOY CAN BE PLATED WITH THE FOLLOWING PROCESS:

Buff or polish the aluminum surface to a bright shine. Wash with a mild detergent and do not dry. Apply Samson Aluminum Cleaner by dipping or brushing it onto the work-piece. Note this is not an electroplating step. Rinse with clean water and without delay dip or brush on Samson Zincate Solution, you should get a light gray coating on the aluminum. If the coating is not even or has places without color. Cleaning and re-zincating is required. This is not an electroplating step.

Rinse with clean water and plate with alkaline copper to cover the surface of the work-piece with a uniform coat of copper. Rinse well with clean water and plate with acid hi-build copper to build-up a thick coating of copper. This coating may now be buffed to a high shine. Wash surface with a mild detergent, rinse with clean water and then plate with your choice of gold, silver, nickel, brass or bronze. Rinse with clean water and dry. If silver, brass or bronze finishes are selected, a light polishing with Samson silver polish will clean off the plating oxides that may have accumulated and temporarily protect the work-piece from oxidation

BRASS CAN BE PLATED WITH THE FOLLOWING PROCESS:

Note that old brass such a water spigots and brass ware may have a clear coating applied to keep it from tarnishing. This coat is usually apparent by noting an uneven tarnishing or black spotting of the surface to be plated. This coating must be removed before proceeding with the next step. To remove clear coating, spray area with Samson Clear Coat Remover, being careful not to get the spray on any painted surface. Wait for ten to twenty minutes than rise with clean water. The clear coating will wash off. The next step is to polish or buff the brass to a high shine. The better the shine the brighter the final finish. If lines or deep scratches are noted on the surface, acid hi-build copper may be plated on the bad areas to fill. Buff to a high shine. Wash polished or buffed surfaces with a detergent or Windex type product to remove the wax. Rinse with clean water. You may now plate with gold, silver, copper, nickel or rhodium. If the brass is hard to plate, a coat of nickel strike (Stainless Steel Preplate) may be applied to the brass, lightly, to make a better bond for the finish coat. It is recommended that a polish or protectant be applied to the surface.

COPPER CAN BE PLATED WITH THE FOLLOWING PROCESS:

To plate copper, you must remove any oxidation or scale from its surface by polishing or buffing the surface to a shine. Copper is an easy surface to plate, most metals bond very well to copper. After buffing and polishing, wash with a mild detergent, rinse with clean water, do not dry. Plate at once, copper will oxidize very fast so it is important to plate immediately. Bright nickel will give the best shine when applied over polished copper, although gold and silver may also be plated over copper.

BLACK CHROMIUM CAN BE PLATED WITH THE FOLLOWING PROCESS:

Black Chromium may be plated over bright chromium or nickel surfaces. The process is as follows. Clean the surface to be plated with a good detergent or alkali cleaning solution making sure that all the dirt, oil or oxidation is removed. If the surface is nickel or nickel plate then a light buffing with a soft wheel and white rouge may be needed. Wash surface and rise after buffing.

Black chrome requires a lot of voltage and current to plate properly. A plating machine with a minimum power of 25 volts at 25 amperes is required. A special high carbon steel anode is required. Practice plating chromium is necessary to master the techniques to plate well.

STEEL CAN BE PLATED WITH THE FOLLOWING PROCESS:

To plate over steel it is necessary to clean all rust, scale and oxidation from the surface along with all the oil, grease and any other surface contamination, use a strong detergent or electro-cleaner. The next step is to copper plate the steel. Apply a coat of either acid copper or alkali copper to the steel work piece. If final finish is going to be a high shine finish, buff the copper to a high shine. Next nickel plate the steel work piece with bright nickel. Rinse with clean water after each step. You may now apply the final finish, gold, silver, chrome, rhodium or other metals.

STAINLESS STEEL CAN BE PLATED WITH THE FOLLOWING PROCESS:

To plate stainless steel, you must clean the surface with a strong detergent making sure all surface oil, grease and other contaminants have been removed. Rinse with clean water. Plate with nickel strike or Samson SS Preplate with a thin coat that is hardly visible, one to two passes over the work piece, rinse with clean water and plate with gold, silver or other finish metals.

NICKEL CAN BE PLATED WITH THE FOLLOWING PROCESS:

To plate on a nickel surface, clean with a detergent, rinse with clean water, activate surface with Samson Nickel Activator and rinse with clean water. You may now gold, silver or chrome plate the nickel piece.

ZINC OR CHROMATE PLATED STEEL:

You cannot plate over zinc. It must be removed by soaking the part in a mixture of 50% muriatic acid and water. Soak until all the zinc has been dissolved and proceed with the steel plating instructions above.

POT METAL OR PEWTER CAN BE PLATED WITH THE FOLLOWING PROCESS:

Some pot metals and pewter may be plated using the aluminum process or if they are not aluminum based pot metal or pewter, clean with Samson Snap and rinse with clean water. Plate with alkaline copper, buff to shine and plate with gold, silver or other finish metals.