

Schoonmaken van brons vóór het patineren

For all metal coloring and electroplating a clean metal surface is essential. The cleaning process must remove mineral oils, organic oils and greases as well as traces of chemicals on the surface. It must remove oxidation which might interfere with the metal coloration or plating adhesion and it should possible activate or roughen the metal surface to better receive the treatment.

Cleaning may be accomplished using mechanical (abrasive), chemical (heating, solvents, pickling with acids) and electrolytic (electrocleaning, electrostripping) means. Examples of easily achieved clean surfaces include **sandblasted** ones and ones scrubbed well twice with rinsing using Fantastic®. **A pumice rub followed by scrubbing with dish-washing liquid and ammonia on a toothbrush does pretty well.** Best of all is electrocleaning.

A simple procedure is:

- 1.0 Anneal and pickle in suitable acid. (citroenzuur of azijnzuur)
- 1.1 Rinse 3-5 times in running water.
- 1.2 Dip into simmering ammonia and detergent solution and scrub well.
- 1.3 Rinse well 5 – 10 times.

<https://www.ganoksin.com/article/process-cleaning-metal-surfaces/>

Clean the metal surface - All traces of oils and oxidation should be removed before applying patina chemicals. The most common oils are oils from your hands. Use rubber gloves during washing and subsequent handling. Surfaces can be cleaned by **bead-blasting** immediately before patina application. A soaking in 10% hydrochloric acid (zoutzuur) for five to six hours also serves to remove any traces of surface dirt or oil. **Other methods include a good detergent (afwasmiddel) wash with a bristle brush and rinsing thoroughly in cool water followed by wiping with a solvent like methyl alcohol (spiritus).** Rubbing with green square pot scrubbers such as Scotch-Brite® or regular steel wool during washing improves the surface for patina by removing oxidation. Also using a fine abrasive along with the steel wool will help the patina to adhere to the surface. Dry with compressed air, clean towels or a hair dryer. Immediately follow with the patina chemicals.

<https://www.sciencecompany.com/Creating-Patinas.-On-Brass-Bronze-and-Copper.aspx>

METAL SURFACE CLEANING

The surface of the material you are working on should be clean and free of any dirt or grease. When working with Iron, Steel, or Aluminium you may want to remove rust and fire scale. When applying the Solvent Dyes or Metal Coatings to Resins, Epoxies, Glass, or any very high polished surface you may need to not only clean the surface but slightly abrade it also

The best method of cleaning most materials is to **sandblast**. Different types of blasting material may be used in order to keep the surface, as you want it. Wire wheels, Scotch Brite Pads or 3M abrasives are another method of cleaning. Be careful not to leave any polishing compound on the surface.

A good metal cleaner is a great way to get the surface ready to work on. **Sometimes mild acids are used but often they can interfere with the patina process to come later.** Renaissance developed two great metal cleaners; they work on both ferrous and non-ferrous metals.

For use on Bronze, Brass, and Copper

1. Apply the cleaner with a brush, sponge, or rag.
2. Let stand on the metal for approximately 5 minutes.
3. Rub with a red or green "Scotch Brite"
4. Rinse with water.
5. Repeat if necessary.
6. Dry the surface.
7. Apply the desired finish to the metal surface.

http://www.sculpt.com/catalog_98/patina/Patina_Instructions.htm

Make sure your object that you're applying a patina to is free of dirt and grease. You can scrub it with a solvent (xylene or **acetone** works well for removing grease), **or a bit of soap and water. Rinse it well with clean water and you're ready to go.**

<http://www.instructables.com/id/Hot-Patina-on-Bronze/>

Cold patinas are generally more successful on a rough cast surface than on plate or polishes surface.

If the surface is highly polished there is often the problem of achieving an even wetting of the surface. To overcome this situation add a small amount of a commercial wetting agent or methylated spirit (**spiritus**) to the chemical to improve the contact between solution and surface.

Dry with a hair dryer or bake in an oven!