



The Original **C-12 ACTIVATOR**

P.O. Box 67
Warne, NC
28909 USA

Toll Free: 800 211-7993
Local: 828 389-3074
Fax: 828 389-4023

The "Original C-12 Process" Versus Conventional Acid Activation

The key component to creating an active surface on any substrate for proper adhesion is the removal of oxygen from the substrate so the next layer will completely bond. Acid activation removes the oxidized surface while potentially pitting the substrate surface. Since this process does not prevent re-oxidation, the surface can once again become oxidized before being placed into the plating bath. This can create inconsistencies in the adhesion and potentially cause peeling of the final plating surface layers over time.

What is needed is a process that not only removes the oxygen from the substrate surface, but also prevents re-oxidation of that surface between activation and plating. "The Original C-12 Activator" process solves this problem by creating a thin barrier that prevents oxygen from returning to the surface of the substrate. This barrier lasts for up to 24 hours while improving adhesion of subsequent plating layers.

Aside from improved adhesion, the protected substrate surface possesses several other key advantages. There is an increase in throwing power, as well as the high and low current density areas being more even. This subsequently allows the substrate to be plated with less current than an acid activation process.

"The Original C-12 Activator" process enables processes that are otherwise virtually impossible. This includes plating chrome over chrome or plating over old nickel with near-perfect adhesion. There has even been success with plating acid copper directly onto steel.

Unlike conventional acid activation requiring up to 50% acid solution, "The Original C-12 Activator" process uses a mere 0% to 4% acid solution. This drastically reduces the potential for pitting and irritation of the plating substrate surface. This creates the advantage a surface that is more level and smooth, which reduces the plating metals required in the plating process. The cost savings are significant when plating using precious metals such as gold, platinum, and silver.

