

ElectroPass III

Electrolytic Passivation

A Breakthrough In Decorative Trivalent Chromium Plating

Decorative chromium plated deposits remain the preferred choice for manufacturers of steel wire and tubular components. Extensively used in shopfittings and furniture, the chromium plate gives a durable and aesthetically pleasing finish at an economical cost.

Typically these components are plated with thin layers of nickel metal. These thin layers of nickel can be porous, particularly in lower current density areas. This can lead to premature corrosion in areas such as wire joins and welded areas.

Previously overcoming this porosity involved passivating the steel in hexavalent chromium containing solutions, until now...

ElectroPass III is an electrolytic passivation based on non-carcinogenic **trivalent chromium** compounds. It works synergistically with our **TriMac**, **Envirochrome** and **MaCrome** decorative trivalent chromium plating solutions to deliver outstanding corrosion resistance, even on thin nickel plated steel parts!



Key Features

- Increases corrosion protection for nickel / chromium electrodeposits
- Solution is free of hexavalent chromium compounds
- Simple to make-up and operate solution
- Fits into most existing chromium plating lines
- Suitable for all MacDermid bright trivalent chromium plating solutions



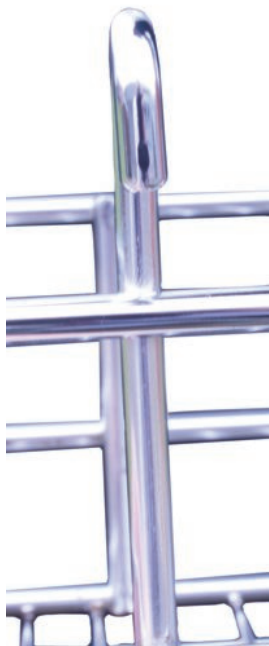
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Imagine more...

ElectroPass III is designed specifically for application over nickel chrome plated **ferrous** substrates. ElectroPass III is not recommended for application over deposits from hexavalent chromium solutions or for plated plastic substrates.

It is particularly effective for single layer nickel deposits over steel, designed to meet up to service condition 2. ElectroPass III will also offer some additional protection against flash rusting of small, un-plated areas of the steel substrate.



Passivated

These pictures demonstrate the dramatic improvement in corrosion protection for nickel / chromium coated steel wire.

The parts have been subjected to neutral salt spray for 72 hours to ASTM B117.

The average coating thicknesses are 8 micron for the nickel deposit and 0.3 micron for the chromium plate.



Un-passivated

Product Features

Service Condition*	Nickel Thickness μm	Typical Application
2	20	Bathroom / kitchen
1	10	Warm dry interior
-	<10	Warm dry interior

Regular chromium deposits at 0.3 micron thick

It takes more than innovative, high performance products and superior technical service to help our customers compete and win in today's global marketplace. It takes a total commitment to understanding their needs and the ability to provide the right solutions—every time.

When success is your only goal, trust MacDermid.



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