

Automotive Finishes



Other Automotive Finishes You Might Want...



...and Why

Protect natural surfaces from corrosion (salt spray performance test)

To achieve a distinctive appearance (using a colored chromate dip)

Abrasion resistance (aluminum parts)

Electrical conductivity

Solderability



Electroplating
Electro-less Plating

Zinc
Electro-less nickel
Anodizing (Al)

Chemical Conversion

Black oxide
Gray phosphate
Alodine (Al)



Plating with Zinc

Electro Zinc plating also known as electro galvanizing

A compatible alternative to a toxic cadmium plating

Zinc plated parts can be passivated with clear – yellow – black - olive drab chromate conversion coating



Electroless Nickel

Electroless nickel is a plating process which does not require electric current

Excellent wear and corrosion resistance

Uniform plating thickness on all areas of part being plated

Eliminate some post finishing operations



Anodizing Aluminum

Immersed in a bath of sulfuric acid running a low-voltage electric current

Forms a thin coating of aluminum oxide on the surface (rust)

Hard anodizing happens as temperatures reach the freezing point of water

Colors are unlimited including white and with various degrees of gloss



Black Oxide

For steel - stainless steel - cast iron – copper - brass

No dimensional change

No chipping

Retains surface properties

Absorb oil and wax

Can be exposed to heat without fading

Your Shop



Chemical Conversion

Phosphate is a crystalline conversion coating

Occurs on surface when the solution comes in contact with the metal

Corrosion resistant and improves friction properties of sliding components

Applied to threaded parts and top coated with oil



Production Facility



Summary



While paint is an important automotive finish, there are other equally important finishes. These can be important for corrosion protection and for the appearance of your project.

After all, whatever it takes to improve the originality and quality of your restoration, is what makes it fun in the first place.

