Chrome

Printing: Rolls, Copper Rolls, Former Boards and Knives
Packaging & Converting: Cylinders with Mirror Finish

- Hard Chrome Plating
- Micro Welding
- Nanoforia Surfacing
- Electroless Nickel
- Superfinishing Cylindrical

Chrome is recommended for molds, dies, and critical parts:

Hardness
MGF G-Chrome is super hard, 72rc as deposited. Only the diamond is harder than chromium. MGF G-Chrome's high hardness value makes it abrasion and corrosion resistant. It is essential that MGF G-Chrome be applied to a base metal which is hard enough to give it the support necessary.

Coefficient of Friction
MGF's G-Chrome has the lowest coefficient of friction of any structural metal. Its low coefficient of friction means less drag and therefore, less heat is generated as the parts rub together.

Corrosion Resistance
MGF's G-Chrome resists attack by most organic and inorganic compounds except sulfuric acids, to gain the greatest advantage of this property. Our Chrome deposited surfaces will be continuous and free from pin holes and other imperfections. Surfaces with good corrosion resistant properties will exhibit less chemical attack with no generation of metallic oxidation products which become abrasive particles damaging the base metal.

Heat Resistance
The melting point of G-Chrome is 2930°F. It will not oxidize at temperatures under 1200°F. When properly deposited, it protects base metals from scaling in heat and is not affected by molten tin, zinc, brass or aluminum. Heat tends to soften chromium at temperatures above 700°F, yet it still retains its low coefficient of friction and resistance to oxidation and corrosion thus providing resistance to abrasive and chemical attacks.

Adhesion
When properly electro deposited, G-Chrome has positive adhesion to all base metals and mold alloys. The adhesion of G-Chrome is achieved by a molecular bond. Bond strengths have been measured as high as 64,000 psi on some ferrous metals. G-Chrome will not chip, crack, or peel when applied to base metals with a deposit of less than .0005.