

## PAST APPLICATIONS OF THE BRUSH PLATING PROCESS

<u>APPLICATION MATERIAL</u>	<u>REASON FOR USE</u>	<u>BUILD UP</u>
<b>AUTOMOTIVE</b>		
Stamping and Draw Dies	Re-shape die surface	Nickel-Tungsten
Injection Molds	Repair porosity on die mould surface	Copper, Nickel
Axles	Re-size bearing diameters	Nickel-Cobalt
Hydraulic Pistons	Repair scoring on main towmotor mast	Copper, Nickel
Mining Truck Frame	Build up bearing fit	Nickel
<b>AIRCRAFT</b>		
Parts Subject To Corrosion conversion	Corrosion protection	Cadmium, Chrome
Bevel Gear	Silver coat spline diameter	Silver
Gyro Parts	Electrical conductivity	Silver
Landing Gear conversion	Corrosion resistance	Cadmium, Chrome
Components	Re-size shaft and bushing diameters	Nickel
<b>HELICOPTER</b>		
Pitch Changing Tube	Repair seal diameter	Nickel, Cadmium,
	Chrome	conversion
Hinge and Sleeves Ass'y conversion	Corrosion resistance	Cadmium, Chrome
Transfer Shafts conversion	Corrosion resistance	Cadmium, Chrome
Gear Box Shaft	Re-size bearing and seal diameters	Nickel
Radar Equipment	Conductivity	Silver, Gold
Drive Shafts conversion	Corrosion resistance	Cadmium, Chrome
<b>ELECTRONICS</b>		
Diodes	Solderability	Tin
Aluminum Electrical Cabinets	Electrical conductivity	Tin
Guidance Equipment	Electrical conductivity	Lead

**APPLICATION  
MATERIAL**

**REASON FOR USE**

**BUILD UP**

**RAILROAD**

Axle Shafts	Re-build bearing journal	Nickel
Car Cabinets	Electrical grounding	Tin
Diesel Engine Shaft	Re-build bearing journal	Nickel
Car Parts	Corrosion protection	Cadmium

**ELECTRICAL MOTORS**

Armature Shafts	Re-build bearing journals	Nickel
Rotor Shafts	Re-build bearing journal	Nickel
End Bells	Re-build bore diameters	Nickel
Drive Shaft	Re-build seal diameter	Nickel
Commutators	Corrosion protection of oxides	Gold, Rhodium, Gold

**CHEMICAL & PETROLEUM**

Bearing Housing	In place and in house repair	Copper, Nickel
Pumps	Re-build seal and bearing journal	Copper, Nickel
Mixer Shaft	Re-build seal and bearing journal	Nickel
Impellers	Hard coat impeller blades	Nickel-Cobalt

**PRINTING**

Blanket Cylinder	Re-build complete cylinders	Copper, Nickel
Plate Cylinder	Fill ding score or scratches	Copper, Nickel
Impression Cylinder	Repair corrosion damage	Copper, Nickel
Side Frame Bearing Housings	Re-size bore diameters	Nickel
Cylinders	Re-build bearing journal	Nickel

**MOULDS & DIES**

Extrusion Dies	Worn surface	Chrome, Nickel
Blow Film Dies	coat for low coefficient of friction	Nickel Semi-Bright
Injection Molds	Selective area build-up for re-work	Nickel

**MILITARY**

Specialize Spec Plating Gold	Plate to Military Specifications	Cadmium, Silver, Palladium, Black
Chrome Tank Support Beams	Wear plates	Nickel

**APPLICATION  
MATERIAL**

**REASON FOR USE**

**BUILD UP**

**MARINE**

Navigational Equipment	Electrical conductivity	Silver
Propeller Shafts	Re-build bearing journal	Nickel
Pump Housings	Re-build bearing journal	Nickel

**PULP & PAPER**

Motor Commutators	Corrosion protection	Gold, Rhodium
Fan Shafts	Build up shafts and bored diameters	Copper, Nickel
Draw Roll	Repair scoring on chrome cylinders	Copper, Nickel
Embossed Roll	Build up and match embossing	Copper, Nickel,
Chrome		
Re-winders	Build up bearing journals	Nickel

**NUCLEAR**

Fueling Ram Tubes	Repair wear damage	Nickel
Center Support	Repair support diameter	Nickel
Ajax Pump	Repair scoring damage	Copper, Nickel
Piston Rods	Repair corrosion damage	Copper, Nickel
Fueling Machine Head	Re-chrome chamfers	Trivalent Hard
Chrome		
Bevel Gear	Re-work diameter to new spec	Hard Chrome

**FOOD**

Mixers	Re-build seal and bearing journals	Nickel
Canning Machines	Re-build bed ways	Nickel-Cobalt