



2000 McCain Parkway ▪ Pelham, AL 35124 ▪ 205-621-8841

Plating Name	Color/Finish	Typical Thickness	Min. Time		Max Working Temp (°C)	Properties	Typical Applications
			PCT (120° C, RH 100%, 200KPa)	Salt Spray Test (acc to ASTM-B117)			
Zinc (ZN)	White-Blue	5-25um	24hrs	24-48hrs	120	Standalone coating with only one layer.	Motor magnets, Automotive industry
	Black		12-24hrs				
NiCuNi	Bright Silver/Semi-Bright Silver	15-25um	48hrs	48-72hrs	200	Most common used coating, price beneficial, excellent against humidity.	Consumer goods, Industrial magnets, Motors
	Black & Colored options						
Silver (Ag)	Silver	10-20um	48-72hrs	48-72hrs	200	High electrical conductivity	Electrical components
Gold (Au)	Gold	0.1-1um	48-72hrs	48-72hrs	200	Corrosion resistance, high conductivity, very thin layer. For thicker gold: excellent wear resistance, high hardness.	Medical, Electrical components, Decorative
					Melting point: 1,000		
Copper (Cu)	Copper	10-20um	48-72hrs	48-72hrs	200	Slightly weaker abrasion and corrosion resistance than NiCuNi, but the ductility of coating is better than NiCuNi.	Speakers, industrial magnets
Chromium (Cr) Decorative	Bright/White-Blue	0.3-1um	48-72hrs	48-72hrs	200	Good decoration & corrosion resistance.	Bathroom, automotive, hardware
Chromium (Cr) Hard		10-50um				Good abrasion and oxidation resistance, does not lose its shine in the atmosphere.	Linear motors, automotive, generators
Everlube	Yellow	>=10um	72-120hrs	72hrs	160	Superior ability of humid heat	Speakers, industrial magnets
Epoxy	Normally, Black & Gray	15-30um	48hrs	96-108hrs	200	High-corrosion and chemical resistance, not shock-resistant.	Linear motors, automotive, generators
NiCuEpoxy	Normally, Black & Gray	25-45um	16-30hrs	168-1000hrs			
Parylene	Clear	10-30um	N/A	24hrs	120-350	High reliability, light weight, low coefficient of friction, high tensile, bio-compatible.	Medical, aerospace, commercial
Passivation	Light Gray	1-2mm	4-8hrs	4-8hrs	60	Temporary protection	Normally used before over-molding or encasing
PTFE (Spray)	Typically Black (other color opt.)	20-25um	Have not tested	600hrs	250	High lubrication, best aging life in plastics, non toxic, non-stick, low coefficient of friction, high electrical strength, chemical resistance, 100% waterproof.	Medical, food & beverage
PTFE (Molded)	Typically White (other color opt.)	1.5-3mm					
Rubber	Normally Black & White	~0.5mm	N/A	96-108hrs	135	Excellent adhesion, abrasion and impact resistance.	Holding applications
Titanium Nitride (TiN)	Golden Yellow	3-6um	Have not tested	Have not tested	500	High hardness, wear and corrosion resistance, reduce friction coefficient, high electrical conductivity and superconductivity.	Medical, industrial magnets
					Melting point: 3,000		
Rhodium	Silver	0.3-0.5um	Have not tested	Have not tested	500	High hardness, wear and corrosion resistance, good reflective effect, very stable chemical property, good anti-oxidation and anti-fog effect.	Medical
					Melting point: 2,000		