

Magnet Coating and Plating Comparisons

Coating	Description	Application Methods	Typical Thickness	Autoclave (96H)	85C/85%(500H)	Salt Spray (240H)
Ni-Cu-Ni	Bright Silver, Shiny Metallic Radius on edges	Electrolytically Deposited Barrel or Rack	0.0006"-0.0018"	96 H	500 H	72 H
Nickel	Bright Silver, Shiny Metallic Radius on edges	Electrolytically Deposited Barrel or Rack	0.0004"-0.0012"	96 H	450 H	66 H
Zinc	Dull to Bright Silver Satin to Bright Metallic Radius on edges	Electrolytically Deposited Barrel or Rack	0.0004"-0.0012"	96 H	400 H	60 H
Epoxy	Epoxy/Urethane Black or Gray color Radius on edges	Immersion Electro-deposition Spray or Dip	0.0006"-0.0015"	96 H	500 H	48 H
Phosphate	Iron Phosphate Chemical Passivation No Color	Dip	22-42 mg/ft ²	Under 24 H	Under 24 H	Under 24 H

- Phosphate treatment should not be considered for long term corrosion protection.
- Nickel and Zinc have certain limitations when magnets are to be glued onto a substrate.
- Magnets should be tumbled to achieve a radius on all edges before plating.

Above data is for general reference purposes only. Customers are advised to test their magnetic materials for corrosion protection based on their specific requirements and circumstances.