

Magnet Coatings

Dexter Magnetic Technologies GmbH

Dexter Magnetic Technologies GmbH
Siemensstrasse 4, Freiburg
Germany 79108
info@dextermag.eu

Magnet Coatings (Typically NdFeB)

Metallic	Organic
Nickel – Copper – Nickle	Epoxy (E-coat)
Zinc	Powder Coat
Aluminum Ion Vapor Deposition (IVD) with Chromate Conversion	Everslik 1221/1225 – Phenolic Resin
Everlube Vaccoat 10047	Parylene (C/D/HT)
	Everlube 9800
	Vaccoat 20011

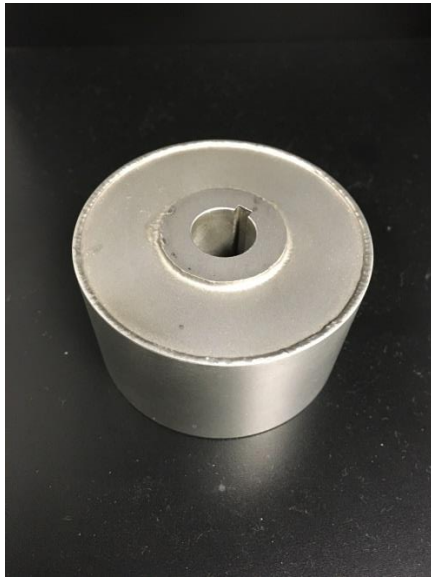
Coatings Summary

(Typically NdFeB)

Name	Thickness Range	Maximum Temperature	Salt Fog Corrosion Resistance
Nickel – Copper – Nickel	25 microns max	200°C	>500 hours
Zinc	25 microns max	200°C	>96 hours
Aluminum IVD with Chromate Conversion	7.5 to 25 microns	500°C	>500 hours
Everlube Vaccoat 10047	10 to 30 microns	180°C	>1000 hours
Epoxy (E-coat)	15 to 60 microns	130°C	>240 hours
Powder Coat	50 to 125 microns	130°C	>500 hours
Everslik 1221/1225 – Phenolic Resin	8 to 20 microns	150°C	<1000 hours
Parylene (C/D/HT)	78 to 50 microns	400°C	>100 hours
Everlube 9800	25 to 50 microns	200°C	>1300 hours
Vaccoat 20011	10 to 30 microns	200°C	>500 hours

Solution: Complete Encapsulation

- Use weldable materials
 - 304L Stainless Steel
 - Inconel



Coatings at Various Temperatures



-250°C	-200°C	-150°C	-100°C	-50°C	Coating	+50°C	+100°C	+150°C	+200°C	+250°C	+300°C	+350°C	+400°C
Red	Red	Green	Green	Green	Nickel-Copper-Nickel	Green	Green	Green	Green	Green	Green	Green	Red
Red	Red	Yellow	Green	Green	Zinc	Green	Green	Green	Red	Red	Red	Red	Red
Red	Red	Yellow	Green	Green	Aluminum IVD	Green	Green	Red	Red	Red	Red	Red	Red
Red	Red	Yellow	Green	Green	Al IVD w/Chromate Conversion	Green	Green	Green	Green	Green	Green	Green	Green
Red	Red	Yellow	Green	Green	Everlube Vaccoat 10047	Green	Green	Green	Yellow	Red	Red	Red	Red
Red	Red	Red	Yellow	Green	Vaccoat 20011	Green	Green	Green	Green	Red	Red	Red	Red
Red	Red	Red	Yellow	Green	Epoxy (E-coat)	Green	Green	Yellow	Red	Red	Red	Red	Red
Red	Red	Red	Yellow	Green	Powder Coat	Green	Green	Yellow	Red	Red	Red	Red	Red
Red	Red	Red	Yellow	Green	Everslik 1221/1225 – Phenolic Resin	Green	Green	Green	Yellow	Red	Red	Red	Red
Red	Red	Green	Green	Green	Parylene C	Green	Green	Green	Green	Yellow	Red	Red	Red
Red	Red	Red	Yellow	Green	Parylene D	Green	Green	Green	Green	Yellow	Red	Red	Red
Red	Red	Red	Yellow	Green	Parylene Nova HT	Green	Green	Green	Green	Green	Green	Green	Green