

Comparison Table of Different Coating Types

	Suggested Environment Temperature	Coating Thickness	Salty Spray Test	Pressure Cooker Test	Temperature & Humidity Test	Resistance of Weak Acid & Weak Alkali	Resistance of solvent	Comments
Phosphorization	< 80°C	< 1μm	Worse	Not Available	24Hours Very Poor	Very poor	Very Poor	Protection for temporary storage and short term transportation.
Blue & White Zn	< 150°C	17-15μm	>24hours	Not Available	24Hours, Very Poor	Poor	Poor	Poor protective capability, only for common environment
Rainbow Zn	< 150°C	7-15μm	>48hours	Not Available	48Hours, Poor	Fair	Fair	With good protective capability for moisture, hot and industrial environment.
Ni	< 200°C	10-20μm	>24hours	Fair	Fair	Fair	Good	For general protection purpose and suitable for most kinds environment.
Ni+Ni	< 200°C	15-25μm	>48hours	Good	Good	Fair	Good	etter corrosion resistance than Ni coating, suitable for dew atmosphere and long time using.
Ni+Cu+Ni	< 200°C	15-25μm	>72hours	Very Good	Very Good	Fair	Good	BThe most popular coating type. Corrosion resistance is better than Ni+Ni coating.
Epoxy / Ni+Cu+Epoxy	< 130°C	15-25μm	>96hours	Not Available	Good	Very Good	Poor	Special for requirement of electric insulation& environment of strongly industrial corrosion.
Ni+Sn	< 150°C	15-25μm	>72hours	Not Available	Very Good	Fair	Good	Superior resistance to humid atmosphere even better than Ni+Cu+Ni
Spray Coated Al	< 200°C	5-10μm	>288hours	Not Applicable	Very Good	Fair	Good	Superior resistance to salt and humid atmosphere,suitable for coating big size & anomalous magnet
Ion Vapor Deposited Al	< 400°C	10-30μm	>288hours	Very Good	Very Good	Fair	Good	Same protecting role as spray coated Al.,even coating layer with excellent adhesion on magnet.
Ni+Cu+Ni plus EVERLUBE	< 100°C	15-30μm	>120hours	Better than Ni+Cu+Ni	Very good About 500hours	Very good	Better Than Epoxy	resistance to corrosion & wearing, good chemical stability, special for engineering usage.

- Remark: 1)All above mentioned surface treatments conform to RoHS rule of EU directive 2002/95/EC
 2)All test result is subject to typical shape and dimension sample.
 3)Salty spray test condition: 5% NaCl solution, PH=6.5-7.2, temperature 35°C, spray sinking speed 1.5ml/hour and continuous spray.
 4)Pressure cooker test condition: temperature 120°C, 100% relative humidity, 2 atmosphere.
 5)Temperature and humidity test condition: temperature 60°C, relative humidity 90%.
 6)Test condition could be adopted according to customer's requirement.