

**TH235 Nickel Iron****DESCRIPTION**

TH235, is a nickel-iron based alloy, used for its low thermal expansivity. Which also provides a tough, strong, and ductile coating with some corrosion resistance characteristics. TH235 is the standard alloy for low expansivity up to 400 °.

TYPICAL DEPOSIT CHARACTERISTICS:

- Bond Strength 5800 psi
- Typical Hardness HRB 95-100
- Deposit Rate 18 lbs./hr./150-200 Amps
- Deposit Efficiency 80%
- Wire Coverage 2 sq. ft./lbs. @ 12 mils
- Surface Texture Variable
- Machinability Good

SURFACE PREPARATION:

Surface should be clean, white metal, with no oxides (rust), dirt, grease, or oil on the surface to be coated. NOTE: It is best not to handle surfaces after cleaning. Recommended method of preparation is, to grit blast with 24 mesh aluminum oxide, rough grind, or rough machine in a lathe. *Thermion recommends a 3.5 mil minimum anchor tooth profile.

Applications:

- Carbon Fiber Tools

NOMINAL CHEMICAL COMPOSITION (wt. %):

Ni	Mn	Cr	Si	Al	Mg	Zr	Ti	P	S	Fe
35.0-38.0	.50	.25	.25	.10	.10	.10	.10	.02	.02	Bal

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16" (1.6mm)	80-100 psi	28-32	100-300	4-7" (10-17cm)

Parameters are typical and may vary depending on equipment used.

STANDARD SIZES & PACKAGING:

Diameter	Packaging
1/16 (1.6mm)	25#