Thermion®

Data Sheet

TH218 Nickel Chrome 718

DESCRIPTION

TH210 is a solid wire specifically designed for arc spray systems. It produces a self-bonding nickel-chromium-molybdenum deposit with excellent high temperature oxidation and corrosion resistance. TH210 can be used for dimensional restoration of parts.

TYPICAL DEPOSIT CHARACTERISTICS:

- Bond Strength 9000 psi
- Typical Hardness HRC 30
- Deposit Rate 18 lbs./hr./150-200 Amps
- Deposit Efficiency 70%
- 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:

- Part Restoration

NOMINAL CHEMICAL COMPOSITION (wt. %):

Ni	Cr	Mo	Cb+Ta	Ti	C	Co	Al	Fe
50.0 - 55.0	17.0 - 21.0	2.80 - 3.30	4.75 - 5.50	0.65 - 1.15	0.04 Maximum	1.0 Maximum	0.20 - 0.80	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# spool