



### TH220 Nickel Chromium

#### DESCRIPTION

TH220 is a high purity nickel chrome wire specifically designed for arc spraying. It produces dense, well-bonded coatings with excellent machinability, electrical conductivity and high temperature oxidation resistance up to 1800° F. It is widely used for machine element repair, electrical and high temperature corrosion applications.

#### TYPICAL DEPOSIT CHARACTERISTICS:

- Bond Strength 7300 psi
- Typical Hardness HRB 90
- Deposit Rate 18-65 lbs. per hr.
- Deposit Efficiency 70%
- Wire Coverage 4 sq. ft. per lbs. at 8-10 mils thick
- Surface Finish Textured

#### 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:

- Oxidation and Heat resistant Coatings

#### NOMINAL CHEMICAL COMPOSITION (wt. %):

Cr	Ni
20	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#