

Data Sheet

TH229 Nickel Chrome Titanium

DESCRIPTION

TH229 is a nickel chrome titanium solid wire specifically designed for arc spraying. It produces dense, well-bonded coatings with excellent corrosion resistance and good wear resistance. It is highly resistant to sulfur and vanadium atmospheres up to 1825 degrees F. It has proven to be particularly effective as a protective arc spray coating for boiler tubes in black liquor recovery boilers and coal fired utility boilers.

TYPICAL DEPOSIT CHARACTERISTICS:

 Bond Strength 	7000 psi
 Typical Hardness 	HRB 30-35
 Deposit Rate 	18 lbs./hr./150-200 Amps
 Deposit Efficiency 	85%
 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:

- Boiler Tubes
- Corrosion Resistance

NOMINAL CHEMICAL COMPOSITION (wt. %):

Cr	Ti	Ni
43.0	0.7	Bal

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff	
I/I6" (I.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
I/I6 (I.6mm)	25#
3/32 (2.3mm)	25#