



TH318 Stainless Steel

DESCRIPTION

TH318 is an 18/5 stainless steel specifically designed for arc spraying. It produces dense, well-bonded coatings with excellent machinability and corrosion resistance. TH318 is widely used for wear resistance applications

TYPICAL DEPOSIT CHARACTERISTICS:

- Bond Strength 4350 psi
- Typical Hardness HRB 90-95
- 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:

- Corrosion Resistance
- Rams
- Food Industry Rolls
- Parts Restoration

NOMINAL CHEMICAL COMPOSITION (wt. %):

Cr	Mn	Ni	Si	Fe
18.0	8.0	5.0	0.5	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#