



DATA SHEET

TH353 Low Chromium Carbide

DESCRIPTION

TH353 is a stainless steel material containing carbon, chromium, nickel, chromium carbide, tungsten carbide and boron. The corrosion characteristics are similar to stainless steel with the added benefit of wear resistance.

TYPICAL DEPOSIT CHARACTERISTICS:

Bond Strength	5000 psi
Typical Hardness	HRC 39-42
Deposit Rate	18 lbs./hr./150-200 Amps
Deposit Efficiency	80%
Wire Coverage	2 sq. ft./lbs. @ 12 mils
Surface Texture	Grind**
Machinability	Good

**Grind using Aluminum Oxide

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.

NOMINAL CHEMICAL COMPOSITION (wt%):

Cr	Ni	C	Mn	Si	Mo	Fe
26.0	3.0	1.7	1.6	1.6	0.8	Bal

RECOMMENDED SPRAY PARAMETERS:

Diameter	Air Pressure	Voltage	Amperage	Standoff
1/16 (1.6mm)	80-100 psi	28-32	100-300	4"-8" in

Parameters are typical and may vary depending on equipment used.

STANDARD SIZES & PACKAGING:

Diameter	Packaging
1/16 (1.6mm)	25#