

Data Sheet

# TH151 Tungsten Carbide

## DESCRIPTION

**TH151** is a 50% blend of cast tungsten carbide particles in a tough stainless matrix designed for either arc spray or welding. Deposit of this blend of Tungsten Carbide and Stainless is a sandpaper-like appearance. It can be used on components subject to extreme earth abrasion. When arc sprayed the coating is not typically machined.

## **TYPICAL DEPOSIT CHARACTERISTICS:**

- Bond Strength HRB 95-100
- Typical Hardness 5800 psi
- Deposit Rate 18 lbs./hr./150-200 Amps
- Deposit Efficiency 80%
- Wire Coverage 2 sq. ft./lbs. @ 12 mils
- Surface Texture Variable
- 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. 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.

### **APPLICATIONS:**

- Dredge cutter blades
- Augers
- Conveyor flights
- Scraper blades
- Tool Joints

### NOMINAL CHEMICAL COMPOSITION (wt%):

W2C/WC	V	Мо	Fe
41.0	1.0	.5	Bal

#### **RECOMMENDED SPRAY PARAMETERS:**

Diameter	Air Pressure	Voltage	Amperage	Standoff
I/I6 (I.6mm)	80-90 psi	32	100-200	4-8 in (10-20cm)

\*DC reverse and lowest practical current setting is recommended. High current setting will dissolve tungsten Carbide particle in the matrix.

### STANDARD SIZES & PACKAGING:

Diameter	Packaging	
I/I6 (I.6mm)	25#	

5813 NE Minder Road Poulsbo WA 98370 TF: 877-844-3428 WWW.THERMIONINC.COM