



TH250 Nickel Chrome Tungsten

DESCRIPTION

TH250 is a nickel chrome silicon boron matrix system, with 38-44% tungsten carbide particles. This combination produces a superior microstructure when welded and has excellent fine particle erosion, corrosion and toughness. The low heat input when welding Tungsten Carbide reduces the amount of tungsten carbide particles going into solution. Deposits are not machinable and cannot be flame cut.

TYPICAL DEPOSIT CHARACTERISTICS:

- Typical Hardness 50-60 HRC
- Bond Strength 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 No

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:

- Dredge Cutter Teeth & Heads
- Rotary Bucket Dredge Teeth
- Drill Bits and Drill Stabilizer
- Pipe & Elbow ID Slurry Type Application
- Filter Screens
- Mud Pumps

NOMINAL CHEMICAL COMPOSITION (wt. %):

| W | Cr | Si | B | Ni |
|-------|------|-----|-----|-----|
| 38-44 | 10.0 | 2.2 | 1.0 | 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# |