

- Heavy-duty protection against abrasion
- Utilizes angular carbides which remain captured in the matrix during service
- Excellent wetting action for smooth and even deposits

# TeroCote® 78881

TeroCote 7888T is a high performance anti-wear alloy. Produced in a single continuous coil from, 7888 T is a flexible continuous cord, comprised of a nickel core wire covered with an elastic binder which contains a high proportion of angular tungsten carbides and alloy powder. The coil is wound on a cellulosic material spool which can be mounted to facilitate use with automated wire feeder systems.

7888T deposits offer an extremely dense mass of ultrahard carbides (80% by weight) in a tough, durable coating with low sensitivity to cracking due to a nickel enhanced matrix.

The deposit structure of 7888T offers demonstrably superior anti-abrasion properties against a wide variety of mineral matter. This is due not only to the extremely high hardness of the carbides, but also to their angular profiles. Unlike spheroidal shapes, carbides with angular profiles resist being ejected from the matrix as it wears around the carbides.

The fluxing properties of both the binder and the alloy powder help control oxidation during deposition.

For problems of very aggressive fine particle abrasion, 7888T can be applied in conjuction with a Eutalloy® powder such as 10112.

# **TECHNICAL DATA**

Typical Values	
Hardness, Matrix:	Rc 35
Micro-Hardness, Carbides (50 - 100g load kg/mm²):	K 2500
Granulometry:	0.5 - 1.0mm
Available Diameters:	5.0, 6.0 and 8.0mm
Max. Service Temperature:	1300°F (704°C)
Storage Requirements:	Cool and Dry, Max. temp. 100°F (38°C)

# PROCEDURE FOR USE

### **DEPOSITION BY OXY/ACETYLENE FLAME:**

- 1. Mechanically clean the area to be coated by grinding or grit blasting.
- 2. Adjust torch for a neutral to slightly oxidizing flame. Apply a general preheat. 400 650°F (204 343°C), followed by a concentrated local heating of the area to be coated, 900 1000°F (482 538°C)
- 3. Bring the end of the coil into contact with the work piece, at an angle of 35° from the work surface, with the torch nozzle at 60 70° pointing in the direction of travel.
- 4. As the alloy begins to melt, oscillate the torch nozzle from side to side advancing the flame along the alloy, which should be kept in contact with the work surface.
- Maintain a 3/16" gap between the inner flame coen and the work surface.

DEPOSITION BY TIG PROCESS: Procedure is similar to that for the flame process. Maintain a gap of approximately 3/16" between the electrode and the work surface. Use a low amperage setting.

Note: For all processes, allow the work piece to cool slowly.

# TYPICAL APPLICATIONS

7888T is designed expressly to provide durable protection of large industrial components against wear by abrasion, thereby greatly extending effective service life. It can be applied to a wide variety of ferritic base metals, although not for steels containing high percentages of Manganese (ie. 12 - 14% Mn).

IMPORTANT: 7888SH is not recommended for use on high manganese, austenitic steels

### **Applications**

- Ripper Teeth
- Drill Bits, Stabilizers, etc.
- Mixer & Scraper Blades
- Extrusion Press Screws
- Conveyor Screws
- Decanter Pump Rotors and Sleeves
- Guides & Scraper Blades
- Cutting Edges on Plow Shares

#### **Industries**

- · Mining & Earthmoving
- Oil Exploration
- · Brick/Cement making
- Mineral Processing
- Iron & Steel
- Agriculture





