

# WISDOM Thermal Spray Consumables

## Nickel base alloy



NiCrTi

DATA SHEET

November 2015

### Introduction

NiCrTi is very effective in providing long term protection to boiler tubes against high temperature sulfidation. The wrought material is highly resistant to sulfur/vanadium atmospheres up to 1800 °F. Wrought material of this type has shown a 2 mil per year corrosion rate over a nine year period when used in the super heater section of boilers. Coatings of 45CT wire applied to boiler tubes have shown virtually no loss of thickness or spalling after 24 months of service.

They can equivalent to: 45CT Metco8500, PMET889.

### 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.

### Typical Uses and Applications

- Boiler Tubes
- Corrosion Resistance
- High-temperature oxidation protection

### Chemical composition

Ti%	Cr%	Ni%
0.3~1.0	45	Bal

### Standard Sizes & Packing

Diameter	Dimension Tolerance	Packing	Wire Weight
1/16"(1.6mm)	+0/-0.05	D 300 Spool	15kgs(33 lbs)/spool
2.0mm	+0/-0.05	D 300 Spool	15kgs(33 lbs)/spool
1/8"(3.17mm)	+0/-0.05	Coil Form	20-400kgs/coil

Other sizes can be produced by customers' requirement.

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