



Nickel-Copper Based Powder Exhibiting  
Excellent Corrosion Resistance when  
Applied with Plasma or Combustion Systems

# **ThermoTec 18917**



- Excellent service in sea and other salty waters
- Freedom from chloride stress corrosion cracking
- Good strength and toughness over a wide temperature range
- Can be applied with conventional plasma or high energy combustion systems

# ThermoTec 18917

ThermoTec 18917 is a dense, fine nickel base alloy which exhibits excellent corrosion resistance qualities when applied with combustion or plasma flame spray equipment.

## TECHNICAL DATA

Typical Values*	
Typical Macrohardness:	81 HRB
Apparent Density:	3.6 g/cc
Porosity:	< 2%
Bond Strength:	>5000 psi
Max Serv. Temperature:	1000°F (cont)
Melting Point:	2370°F
Hall Flow Rate:	20.8 sec/50g
Nominal Particle Size:	-325 +5 µm

*\* Values shown for conventional Plasma system.  
Coating thicknesses in excess of 0.050 in. are not recommended.*

## PROCEDURE FOR USE:

ThermoTec 18917 can be finished by machining or by grinding. Good machined finishes can be obtained using high speed steel tools in low turning speeds in the range of 60 to 70 surface feet per minute.

## TYPICAL APPLICATIONS

Salt water corrosion, propeller shafts, atmospheric and marine environments, crude oil distillation towers, valve and pump components, chemical processing plants.

Observe normal spraying practices, respiratory protection and proper air flow pattern advised. For general spray practices, see AWS Publications AWS C2.1-73, "Recommended Safe Practices for Thermal Spraying and AWS T5S-85, "Thermal Spraying, Practice, Theory and Application." Thermal spraying is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before starting spray operations. DO NOT operate your spraying equipment or use the spray material supplied, before you have thoroughly read the equipment instruction manual. Refer to the Eutectic website for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH.

