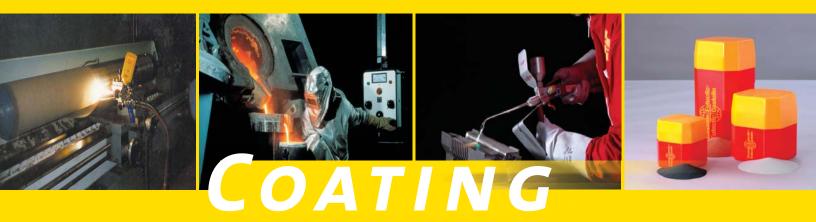
# Eutalloy 10185



- Excellent resistance to wear and corrosion
- Excellent weldability and machinability on a wide range of steels and stainless steels
- Thin, tough overlays maintain tight dimensional tolerances



# **DESCRIPTION:**

Eutectic 10185 is a nickel base Eutalloy alloy designed to provide a combination of machinability and resistance to wear and corrosion. Excellent weldability and machinability permits easy contour forming on steels, stainless steel, nickel alloys and cast irons. The Eutalloy process permits precise deposition of 10185 so that thin, tough overlays can be applied and dimensional tolerances maintained.

# **APPLICATIONS:**

Bearing surfaces Moulds
Crankshaft journals Pump parts
Dies Shafts
Diesel valves Tile dies
Feed rolls Valve plugs
Material pins Valve Seats

#### **TECHNICAL DATA:**

#### **Powder Properties**

Nominal Composition: Nickel, Balance Boron, Silicon

Hall Flow Rate: 14 seconds Bulk Density: 4.8 g/cc

Approximate Melting Range: Solidus, 1775°F (968°C)

Liquidus, 2100°F (1149°C)

Furnace Fusing: 2125°F (1163°C) (suggested set point)

## **Coating Properties**

Hardness: Rockwell C scale 39

Maximum Service Temperature: 900 - 1400°F (483-760°C)

Thickness Limit: 0.25", or more

# **FINISHING PROCEDURE:**

Grinding Wheel Type:	Green Silicon Carbide (For roughing)	Aluminum Oxide (For finishing)	Diamond D151 (FEPA std)
Grit Size:	60 - 120	120 or finer Concentration	75
Grade:	I-L	I-L	
Structure:	5 - 6 - 7	7 - 8 - 9	
Bond Type:	Vitrified	Vitrified	Metal
Wheel Speed:	6500 ft per minute	6500 ft per minute	18 - 22 meter/min
In-Feed:	Roughing:0.001 inches per pass		
	Finishing: 0.0005 inches per pass or less		
Coolant:	Flood coolant with rust inhibitors in 2-5% concentration		

Notes: 1. Before grinding, all edges and ends of coating must be chamfer ground. 2. Frequently dress the grinding wheel face to reduce friction and heat.

## **HEALTH & SAFETY:**

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 TSS-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 web site for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH

## YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



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