

- Designed for rebuilding steel, stainless steel, nickel, and wrought & cast monel
- Excellent corrosion resistance
- Excellent weldability + good machinability

# **Eutalloy® 11494**

11494 is a nickel-based 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 11494 so that thin, tough overlays can be applied and dimensional tolerances maintained.

#### **TECHNICAL DATA**

Typical Powder Properties		
Nominal Composition:	Ni, Cr, Si, B	
Hall Flow Rate:	15 seconds	
Bulk Density:	4.5 g/cc	
Approximate Melting Range:	Solidus: 1780°F (971°C) Liquidus: 2120°F (1160°C) Furnace Fusing: 2150°F (1177°C)	
Typical Coating Properties		
Hardness:	HRC 39	
Maximum Service Temperature:	900 - 1400°F (482 - 760°C)	
Thickness Limit:	0.25", or more	

## **PROCEDURE FOR USE**

### **Finishing Procedure:**

Grinding Wheel Type: Green Silicon Carbide Grit Size: 60 - 80 Grade: H (soft)

Structure: 5 Bond Type: Vitrified

Wheel Speed: Use Manufacturer's Recommendation Work Speed: 50 - 65 surface feet per minute

	Traverse Speed	In-Feed
Roughing	5 - 15 inches per minute	0.001 inches per pass
Finishing	3 - 8 inches per minute	0.0005 inches per pass or less

Coolant: Flood coolant with rust inhibitors in 2-5% concentration.

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.

### TYPICAL APPLICATIONS

- Bearing Surfaces
- Pump Parts
- Crankshaft Journals
- Shafts

Dies

- Tile Dies
- Diesel Valves
- Valve Plugs
- Feed Rolls
- Valves Seats
- Material Pins

- Wear Rings
- Molds

 $Observe\ normal\ spraying\ practices, respiratory\ protection\ and\ proper\ air\ flow\ pattern\ advised.\ For\ general\ spray\ practices, see\ AWS$ 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 website for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH.



