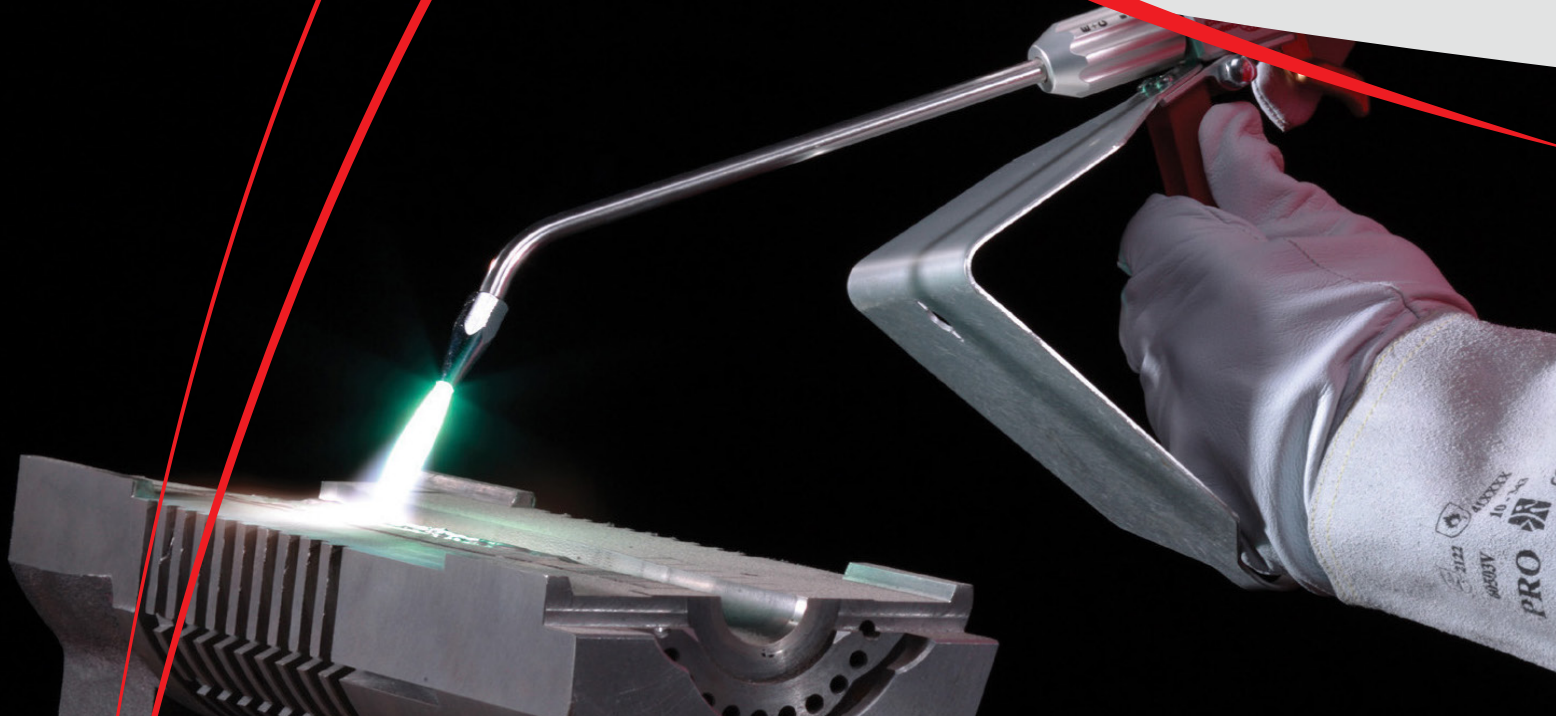




Nickel-Based Alloy Formulated
for the Spray and Fuse Process

Eutalloy®

11493



- Easy contour forming on stainless steels, steels, nickel and cast iron
- The deposit is easy to machine with standard cutting tools
- Exceptionally heat resistant
- Excellent resistance to wear and corrosion

Eutalloy® 11493

Eutectic 11493 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 11493 so that thin, tough overlays can be applied and dimensional tolerances maintained.

TECHNICAL DATA

Typical Powder Properties	
Nominal Composition:	Nickel, Boron, Silicon
Hall Flow Rate:	14 seconds
Bulk Density:	4.8 g/cc
Approximate Melting Range:	Solidus: 1775°F (968°C) Liquidus: 2100°F (1150°C) Furnace Fusing: 2125°F (1163°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.

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.

TYPICAL APPLICATIONS

- Bearing Surfaces
- Crankshaft Journals
- Dies
- Diesel Valves
- Feed Rolls
- Material Pins
- Molds
- Pump Parts
- Shafts
- Tile Dies
- Valve Plugs
- Valves Seats
- Wear Rings

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 T55-85, "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.



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