

Nickel-Copper Alloy Designed for Re-Building Steels, Stainless Steels, Nickel  
and Wrought or Cast Monel

# Eutalloy® 11494



## COATING

- Excellent corrosion resistance
- Excellent weldability
- Good machinability



## DESCRIPTION:

11494 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 11494 so that thin, tough overlays can be applied and dimensional tolerances maintained.

## TECHNICAL DATA:

### Powder Properties

Nominal Composition: Ni, Cr, Si, B  
Hall Flow Rate: 15 seconds  
Bulk Density: 4.5 g/cc  
Approx. Melting Range: Solidus, 1780° F (971°C)  
Liquidus, 2120° F (1160°C)  
Furnace Fusing, 2150° F (1177°C) (suggested)

### Coating Properties

Hardness: Rockwell C scale: 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

Roughing: 5-15 inches per minute  
Finishing: 3-8 inches per minute

### 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.

## APPLICATIONS:

- Bearing surfaces
- Crankshaft journals
- Dies
- Diesel valves
- Feed rolls
- Material pins
- Molds
- Pump parts
- Shafts
- Tile dies
- Valve plugs
- Valve Seats
- Wear rings

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**EUTECTIC CORPORATION**  
N94 W14355 Garwin Mace Drive  
Menomonee Falls, WI 53051 USA  
Tel.: +1 (800) 558-8524  
eutectic.com

**EUTECTIC CANADA**  
428, rue Aimé-Vincent  
Vaudreuil-Dorion, Québec  
J7V 5V5 Canada  
Tel.: +1 (800) 361-9439  
eutectic.ca



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