

Gas Atomized, Nickel Alloy Powder for the Plasma Transferred Arc (PTA) Process

# EuTroLoy® 16495



## COATING

- Specially developed for the plasma transferred arc process
- Spherically shaped to ensure highest purity
- Consistent powder distribution through equipment
- Abrasion and friction resistant coatings



## DESCRIPTION:

Eutectic 16495 is a high performance atomized nickel alloy powder optimized to produce hard, durable, abrasion, and friction resistant coatings using the Eutronic® GAP Plasma Transferred Arc Welding Process. Controlled composition based on AWS A5.13 and precise particle sizing ensures consistent, porosity free weld deposition.

## TECHNICAL DATA:

Hardness: Rockwell C scale: 49  
Density: 7.8 g/cc  
Hall Flow Rate: 18 seconds  
Bulk Density: 4 g/cc

## Nominal Composition:

Nickel, Chromium, Boron, Silicon, Iron, Carbon

## PROCEDURE FOR FINISHING:

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  
Use 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:

- Wash pipes (petroleum drilling)
- Guide plates
- Trimming dies
- Auger flights
- Pistons
- Hydraulic cylinders

## EQUIPMENT:

Made for use in Eutectic's GAP plasma transferred arc equipment. Please contact Eutectic to determine which GAP equipment is right for your coating needs.

## 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



*Eutectic Castolin develops and manufactures PTA welding units and accessories in various models and sizes either as standard units or as special developments. Our team of technicians will be able to design with you the cost effective and tailor made solution that fits your specific application. From power source to feed unit, welding torch, even handling devices or robots when required, we take care of all the details.*

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



**Eutectic Corporation**  
N94 W14355 Garwin Mace Drive  
Menomonee Falls, WI 53051 USA  
P 800-558-8524 • F 262-255-5542  
[www.eutectic.com](http://www.eutectic.com)

**Eutectic Services**  
12300 Carmen Avenue  
Milwaukee, WI 53225 USA  
P 800-558-8524 • F 262-255-5542



Statement of Liability: Due to variations inherent in specific applications, the technical information contained herein, including any information as to suggested product applications or results, is presented without representation or warranty, expressed or implied. Without limitation, there are no warranties of merchantability or of fitness for a particular purpose. Each process and application must be fully evaluated by the user in all respects, including suitability, compliance with applicable law and non-infringement of the rights of others, and Eutectic Corporation and its affiliates shall have no liability in respect thereof.

16495 9-15 © 2008, Eutectic Corporation, © Reg. T.M., Printed in the U.S.A.