



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

# **EuTroLoy**

## **16625**



- Specially developed for the plasma transferred arc process
- Spherically shaped to ensure highest purity
- Consistant powder distribution through equipment
- Excellent resistance to acidic corrosion

# EuTroLoy 16625

EuTroLoy 16625 is specifically designed for use with the plasma transferred arc (PTA) process. The powder is manufactured by gas atomization. As a result, the particle shape is spherical and the oxygen content is minimal. Both characteristics insure good powder flow properties through the equipment and high quality, pore-free deposits. The particle size range is carefully controlled to enhance these characteristics.

Coatings of EuTroLoy 16625 are suitable for a wide range of applications where resistance to acid corrosion (ex. phosphoric, sulfuric, organic) or high temperature oxidation are required. The high chromium and molybdenum content of the powder make 16625 coatings extremely resistant to stress cracking in caustic environments.

In addition, 16625 can be used to provide a "buttering" layer for subsequent top-coating by a more crack sensitive coating.

## PROCEDURE FOR USE:

For some applications a modest pre-heat may be required. The degree is dependent on the shape and dimensions of the part and the thickness of the deposit.

Coatings of EuTroLoy 16625 can be machined using carbide tool bits. Grinding is recommended to achieve the best finish.

## TECHNICAL DATA

Typical Values	
Typical Macrohardness:	25 HRC (200 Vickers)
Max. Service Temperature:	1650°F (approx. 900°C)
Density:	0.305 lb/in <sup>3</sup> (8.44 g/cc)
Coefficient of Thermal Expansion:	7.3x10 <sup>-6</sup> in/in/F (13.1x10 <sup>-6</sup> m/m-C)

**Composition:** C, Fe, Cr, Si, Mo, Nb, Ni  
**Melting Point Range:** 2350°F-2460°F (1290°C-1350°C)

### 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.

## TYPICAL APPLICATIONS

Coatings are suitable for use on a wide range of parts (fittings) common to chemical plants, paper mills, and fertilizer plants. Examples:

- Valve Seats
- Chemical Pump Liners
- Kneader Blades
- Chemical Mixer Blades
- Mining Pump Shafts
- Valve Trim

To ensure a safe work environment observe normal welding practices, provide appropriate eye, hearing, skin and respiratory protection and pay attention to air flow patterns. For general weld practices, refer to ANSI Z49.1:2012 - "Safety in Welding, Cutting, and Allied Processes". Welding is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before starting operations. DO NOT operate your equipment or use the material supplied, before you have thoroughly read the equipment instruction manual. Contact Eutectic for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH.



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