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

# EuTroLoy<sup>®</sup>16006



- Spherically shaped to ensure highest purity
- Excellent resistance to liquid erosion
- High resistance to cavition
- Good resistance to impact



# **DESCRIPTION:**

The alloy EuTroLoy 16006 has been specially developed to meet the metallurgical and physical standards of the Plasma transferred arc (PTA). The alloy characteristics, combined with the regularity and efficiency of the process, give constant high quality deposits, very low dilution of the base metal and high deposition speed. High resistance to erosion in liquid media. High resistance to cavitation. Good resistance to impact.

EuTroLoy 16006 is a pre-alloyed powder. It is manufactured by gas atomisation to have a spherical shape and to ensure the highest purity, in particular to keep a low oxygen content. The spherical shape and the grain-size distribution of the particles ensures a regular flow of powder through the equipment.

#### **PROCEDURE FOR USE:**

Preheat follow by slow cooling is necessary for a crack-free deposit. The preheat temperature depends on the dimensions and shape of the part and the deposit.

# **TECHNICAL DATA:**

Nominal Composition (mass %): C, Cr, W, Si, Co Powder Morphology: Pre-alloyed, homogeneous, spherical particles of uniform composition. Typical Density: 8.44 g/cc (0.305 lb/in<sup>3</sup>) G65 wear test results: 30mm<sup>3</sup> volume loss

	Minimum	Nominal
Hardness Undiluted(HRC):	37	40
Max. Service Temperature:	-	1382°F (750°C)
Other size ranges can be supplied on request.		

# **APPLICATIONS:**

Valve fittings (seats, shutters and cones) for use with steam, oil, chemical products and sea water. Diesel engine valves. Processing machinery for vegetable matter. Extruder screws. Bond coat for EuTroLoy 16019 and 16001

# **EQUIPMENT:**

EuTroLoy 16006 powder is made for use in Eutectic's GAP 400, GAP 2001, GAP 3001 and GAP 3002 PTA equipment. It is also capable of being used with some manual torch applications. Please contact Eutectic to determine which GAP and/or torch 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



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