



Ni Based, Self-Fluxing Alloy

EuTroLoy PG 6606



- Outstanding corrosion resistance in a wide variety of applications
- Very good abrasion resistance
- Excellent when blended with tungsten carbide materials
- Low coefficient of friction in metal-to-metal wear applications

EuTroLoy PG 6606

EuTroLoy PG 6606 is a nickel-chromium-molybdenum alloy powder designed for the plasma transferred arc process. The coating deposits produced are hard, dense, essentially pore free and are alloyed with the base metal. The levels of alloying elements in the powder are synergistically balanced to insure good weldability along with excellent performance over a broad range of corrosion environments.

Applications for PG 6606 coatings include those that require a unique combination of resistance to low stress abrasion and corrosion. The recommended method of finishing is by grinding with coarse grit silicon carbide wheels.

PG 6606 is 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.

TECHNICAL DATA

Coating Properties	
Macro hardness:	55 HRC
Micro hardness:	HV 550
ASTM G-65 Test Results:	25mm ³ volume loss (Sch A)
Max. service temp:	~ 1922°F (1050°C)
Magnetic response:	Non-magnetic
Density:	8.1 g/cm ³
Expansion coef:	12.2 x 10 ⁻⁶ (room temp. - 1112°F (600°C))

PROCEDURE FOR USE:

Remove damaged material. Clean areas to be welded. Match heat input during welding to component, its material and dimensions, and follow the prepared welding procedure for the specific base metal chemistry. Keep dilution with base metal low. Allow workpiece to slowly cool upon completion of welding.

Finishing: Coatings of PG 6606 can be finished by grinding.

Parameters for Plasma Transferred Arc:

System:	GAP 2001 and 3001 systems
Torch:	E52
Anode:	Dictated by part geometry (1.2, 2.0 or 3mm / 90° or 180°)
Cathode:	Standard
Shielding Gas Nozzle:	Standard or high deposit
Pilot Gas:	Argon 2.5 Bar - 37 psi (1.5 L/min)
Carrier Gas:	2.5 Bar - 37 psi (1.8-2.5 L/min)
Shielding Gas:	Argon/5% hydrogen (10-15 L/min)
Powder Feeder:	EP2
Powder Wheel Speed:	Dictated by part geometry: 20-100 %
Powder Feed Rate:	Dictated by part geometry: 5-15 lb/hr (2.2 - 6.8 kg/hr)
Amperage*:	Dictated by part geometry: 90-200 A
Voltage*:	Dictated by part geometry: 19-28 V

***Note:**

Amperage and voltage should be kept as low as possible to maintain WC integrity, while maintaining a well bonded overlay.

TYPICAL APPLICATIONS

- Waste Incineration
- Chemical Processing
- Recovery Boilers
- Fly Ash Fans



Eutectic Corporation:
N94 W14355 Garwin Mace Dr.
Menomonee Falls WI, 53051 USA
+1 800. 558. 8524 • eutectic.com

Eutectic Canada:
428, rue Aimé-Vincent Vaudreuil-Dorion,
Québec J7V 5V5 Canada
+1 800. 361. 9439 • eutectic.ca



Follow Us On...

