



## Eutalloy® BoroTec 10009

Atomised Metal Powder for anti-wear coatings

### Description:

BoroTec 10009 is a chrome-nickel alloy with properties which make it ideal for protective coating applications in cases of severe wear on a variety of base metals including stainless and other steels and nickel alloys. The deposit is extremely resistant to corrosion and oxidation, even at high temperatures, and has a low coefficient of friction and wear resistance properties which make it suitable for protection against metal-to-metal friction.

BoroTec 10009 is manufactured using a process of atomisation, designed to ensure both optimum spheroidisation and controlled granulometry. This in turn ensures trouble-free application of the alloy using Eutalloy.

BoroTec 10009, applied with the Eutalloy System, produces smooth and uniform quality coatings.

This maintenance-engineered coating technology increases the value and reliability of parts treated, with results far superior to conventional repair processes, as well as savings in costs including machining costs.

Industrial components protectively coated with BoroTec 10009 can outlast new parts several times over, even making it possible to use cheaper base metals for such components.

### Technical data:

	<i>Typical</i>
Melting range (sol. /liq.) (°C):	965-1210
Hardness (HRC)	56
Specific gravity (g/cm <sup>3</sup> ):	7.8
Max. Service temperature (°C):	~700
Metal-to-metal friction resistance:	Excellent
Abrasion resistance:	Very good
Heat-stability:	Good
Corrosion resistance:	Good
Machinability:	By grinding
Base materials: Recommended for steels including stainless and nickel alloys.	

**Torches:** Eutalloy A, B, C, Eutalloy Express and SuperJet.

### Applications:

Protective coating of conveyor screws, grit-blasting components, turbine guide vanes, wire-drawing dies, fan blades, pump screws.

### Procedure for use:

#### Preparation:

All surfaces to be coated should be thoroughly cleaned, removing all contaminants, oxides and grease. Thin surfaces and edges require no preheating. Large, heavy parts should be heated to about 300°C (blue hot).

#### Coating instructions:

For coating operations the flame of Eutalloy torch should be adjusted to neutral when powder feed is on.

To prevent oxidation of the base material we recommend spraying a thin coat of Eutalloy 10009. A second coat is delivered in the following manner: preheat locally to fusion point (when the first coat becomes glazed in appearance), then spray the second coat, moving progressively along the entire surface following this fuse-then-spray procedure.

Distance between the flame cone tip and the molten pool: approx. 6-10 mm.

Leave the part to cool slowly and avoid draughts. Where possible, place it in vermiculite.

#### Packaging:

BoroTec 10009 can be obtained in a 500-gram module and a 5Kg Mega-Pak size.

# DIGITALWELD

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