Eutalloy® ChromTec 10680

High strength nickel based alloy for dies, conveyors, impellers, moulds

Description:

ChromTec 10680 is a high strength, machinable, nickel base alloy for joining, cladding, building up and sealing carbon and low alloy steels, stainless steels, nickel base alloys and cast iron.

Toughness:

ChromTec 10680 exhibits good impact resistance qualities. Deposits stand up to many tough combinations of service conditions. ChromTec 10680 exhibits a good degree of heat resistance and also resists attack from a wide range of corrosive media.

Machinability:

Deposits of ChromTec 10680 may be machined easily with all standard machining tools.

Build-up Ability:

Building-up, sealing and cladding of stainless steels, nickel base alloys and cast iron is accomplished with ease. The wettability is excellent, making it a joining filler when necessary. Additionally, ChromTec 10680 is often used as a build up base on steels, before overlaying a harder deposit.

Control:

With the Eutalloy Process, deposits are placed with precision, over-deposition is greatly reduced.

ChromTec 10680 can be used either for thin overlays or multi pass build-ups of any dimension.

Economy:

Material is used economically - only when and where needed. And machining operations are drastically cut, if not eliminated entirely.

Technical data:	*Minimum*	*Typical*
Hardness (HV_{30}):	200	240
Melting range (sol./liq.) (°C):	1050	1280
Density (g/cm^3):		8.1
Heat-stability (°C):		600
Metal-to-metal friction properties:	Excellent.	
Corrosion resistance:	Very good.	

Machinability: Excellent, with normal cutting tools.

Base materials: Recommended for steels, cast irons and nickel alloys.

Gases: Oxygen-acetylene.

Torches:

Eutalloy A, B, C, Express and SuperJet.

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Applications:

Typical Industries:

Agriculture, Automobile, Brick, Cement, Clay. Coal, Coke, Food Processing, Foundry, Glass, Machine, Mining, Municipal, Oil, Paper & Pulp, Petrochemical, Power, Printing, Pumps and Valves, Railways, Rubber. Steel, Tool & Die.

Typical Applications:

Repair of gears, valve seats, moulds, keyways, roller bearing races and stamping tools. Correction of machining errors, etc.

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 ChromTec 10680. A second coat is delivered in the following manner: preheat locally to fusion point (when the first coat becomes glazed in appearance), then spray and fuse the second coat simultaneously. Move progressively along, spraying and fusing, until the entire surface is covered.

Distance between the cone of the flame and the piece: 6-20 mm.

Leave the part to cool slowly and away from air currents. Where possible, place it in vermiculite.

Packaging:

ChromTec 10680 can be obtained in both a 500-gram module and a 5kg Mega Pack

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