



Eutalloy® NiTec 10224

Nickel-Based alloy powder, recommended for cast irons

Description

NiTec 10224 is a nickel-based alloy with properties which make it ideal for protective coating, joining and cladding applications on a variety of base metals including steels, cast irons and nickel alloys.

The deposit is easy to machine, with standard cutting tools, and has a low coefficient of friction and wear resistance properties which make it ideal for protection against metal-to-metal friction. It is also exceptionally heat resistant.

NiTec 10224 is manufactured by a process of atomisation, designed to ensure both optimum spheroidisation and controlled granulometry. This in turn ensures trouble-free fusion of the alloy using Eutalloy torch SuperJet.

NiTec 10224, applied with a 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, and savings in costs including those of machining.

NiTec 10224 is recommended for rectifying both machining and casting defects, as well as for protective coatings against oxidation, with a considerable gain in service life for a number of parts.

Technical data:	<i>Minimum</i>	<i>Typical</i>
Hardness (HV ₃₀):	200	240
Melting range (sol./liq.) (°C):	-1050	-1280
Density (g/cm ³):		8.1
Heat-stability (°C):		To 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.

Applications:

Recommended for corrosion/wear-resistant coatings on journals and gearwheels, exhaust manifolds, etc., for repair of casting and machining defects and for repair of worn areas of deep-drawing dies.

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 NiTec 10224. 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

Eutalloy 10224 can be obtained in both a 500-gram module and 5kg Mega Pack.

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