CEWELD Powder NiBSi WC2

TYPE

Nickel based Cr free metal powder with high tungsten carbide content

APPLICATIONS

CEWELD® Powder NiBSi WC2 is a Cr free spray powder for overlay spray and fuse and Laser or PTA welding on wear parts that need to outlast new parts where high temperatures combined with corrosion and wear resistance is required.
Main applications in the field:
Stabilizers and hard band tools
Decanter screws
Debarking knives
Agitator blades
Bucket teeth and covers
Universal fan blades and slag mills
Agricultural scraper bars

PROPRIÉTÉS

CEWELD® Powder NiBSi is a self fluxing Tungsten alloy with excellent corrosion and wear resistance suitable for working temperatures Up to 650°C (1200°F). The coatings are dense and practically oxide free.The coatings produced in this way are hard, dense, and particularly resistant to abrasion and erosion under low loads. Machinable by grinding.
Hardness:
Matrix: 40-60 HRC
Carbid: 2000-3000 HV01
Layer thickness: 1-3 layers Max. 3 mm per layer possible
Standard particle size: 150/53 µm
also possible: 106/20 µm, 106/38 µm, 106/45 µm, 125/38 µm, 125/45 µm, 150/45 µm, 150/53 µm, 150/63 µm, 180/53 µm, 180/63 µm, 210/63 µm, 250/45 µm, 63/20 µm, 75/20 µm

CLASSIFICATION

EN ISO 14232-1 ~WC-NiB 60/30/3

CONVIENT POUR

For coating the following base materials:
Structural steel, stainless steel, nickel alloys, heat-treatable steels, if preheated to 300 °C (570 °F) to prevent extensive cracking in the coating.

AGRÉMENTS

POSITIONS DE SOUDAGE

ANALYSE CHIMIQUE TYPIQUE DU MÉTAL DE SOUDURE (%)

C	Si	Ni	B	Fe	W
0.04	3	Rem.	2.9	0.2	60

PROPRIÉTÉS MÉCANIQUES

Heat Treatment	$R_{P0,2}$ (MPa)	Rm (MPa)	A5 (%)	Hardness
As Welded				50 HRc

ETUVAGE

Not required

GAS ACC. EN ISO 14175