DURMAT® NISE

Stick Electrode DIN EN 14700: E Ni20
(DIN 8555: E21-GF-UM-60-CGZ)

General characteristics:

DURMAT NISE is a tubular electrode filled with fused tungsten carbide and a special nickel alloy for manual welding. This alloy is specially designed for application where extreme abrasion in combination with corrosion is expected. DURMAT NISE can be applied on steel castings, nickel based and stainless steel alloys. The alloy combination of DURMAT NISE is specially designed for surfaces that are exposed to corrosive media and excessive wear conditions. The matrix is highly resistant to acids, lye's and other corrosive media.

Application:

Repairing and hard facing ferritic and austenitic steels (steel castings), stabilizer blades, conveyor screws, milling plates, deep drilling tools, and mixer blades.

Physical characteristics:

Hardness:	FTC:	approx. 2360 $HV_{0.1}$
	Ni-Matrix:	approx. 480 – 520 $HV_{0.1}$

Sales units:

Type	Ø mm	Ø inch	length of rod	Amps	Voltage
4005	4.0	5/32	350 mm	100 A	= + / ~
5005	5.0	3/16	350 mm	120 A	= + / ~
6005	6.0	1/4	350 mm	160 A	= + / ~
8005	8.0	-	450 mm	160 A	= + / ~

Welding recommendation:

The alloy has a low melting point of between 950 – 1100°C (1,742-2,012°F) and characteristically flows extremely well and produces a smooth and clean surface.

Note: DURMAT–NISE should be welded on the lowest possible current setting to avoid carbide damage and achieve maximum wear resistance.

Patents:

Germany:	No. 40 08 091.9-41
Great Britain:	No. 2.232.108
USA:	No. 5.004.886