DURMAT® NISE-PLUS

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

General characteristics:

DURMAT NISE-PLUS is a tubular electrode filled with spherical fused tungsten carbide (SFTC) and a special nickel matrix for manual welding. This alloy is specially designed for application against extreme abrasion in combination with corrosion attacks. DURMAT NISE-PLUS can be applied on steel castings, nickel based and stainless steel alloys. The alloy combination of DURMAT NISE-PLUS 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. Also machine parts in the chemical and food industry.

Physical characteristics:

Hardness:	SFTC:	> 3000 $HV_{0.1}$
	Ni-matrix:	approx. 480 – 520 $HV_{0.1}$

Standard sizes:

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	¼	350 mm	160 A	= + / ~

Welding recommendation:

The alloy has a low melting point of between 950 – 1100°C (1,742-2,012°F) and feature self fluxing characteristic producing a smooth and clean surface.

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

Patents:

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