

DURMAT[®] B

Welding Rod DIN EN 14700: T Ni20 (DIN 8555: G21-UM-55-CG)

General characteristics:

DURMAT B is a nickel core flexible rod coated with both fused tungsten carbide (FTC) and Ni-Cr-B-Si developed for oxyacetylene welding. The deposited alloy consists of approximately 65% FTC and 35% Ni-Cr-B-Si-matrix with a matrix hardness of 45 HRC. The overlay is highly resistant to acids, bases, lye and other corrosive media and excessive wear conditions. The rod has a low melting range of between 950 - 1050°C (1,742-1,922°F) and feature a self fluxing characteristic producing a smooth, clean welded surface.

Application:

Hard facing of ferritic and austenitic steels (steel castings), applied for overlaying mixer blades, screws and conveyors in chemical and dye industry, food industry. Specially recommended for stabilizer blades in the petroleum industry.

Typical physical characteristics:

Hardness: FTC: approx. 2360 HV_{0,1}
NiCrBSi-Matrix: approx. 420 - 450 HV_{0,1}

Sales units:

Type	Ø mm	Ø inch	grain size in mm	US mesh size
4002	4.0	5/32	0.15 - 0.45	40 – 100
4005	4.0	5/32	0.25 - 0.70	24 – 60
4010	4.0	5/32	0.70 - 1.20	14 – 24
5005	5.0	3/16	0.25 - 0.70	24 – 60
5010	5.0	3/16	0.70 - 1.20	14 – 24
5020	5.0	3/16	1.00 - 2.00	9 – 16
6005	6.0	¼	0.25 - 0.70	24 – 60
6010	6.0	¼	0.70 - 1.20	14 – 24
6020	6.0	¼	1.00 - 2.00	9 – 16
8005	8.0	5/16	0.25 - 0.70	24 – 60
8010	8.0	5/16	0.70 - 1.20	14 – 24
8020	8.0	5/16	1.00 - 2.00	9 – 16

Welding recommendation:

The surface to be hard faced should be clean and free of rust, scale, grease or other contamination preferably by grinding or grit blasting. Deposits should be made using a gas flame with a neutral to slight acetylene balance.