



DURMAT-B

Welding Rod DIN EN 14700: G21-UM-55CG

GENERAL CHARACTERISTICS:

DURMAT-B is a nickel cored flexible rod coated with both fused tungsten carbide (FTC) and Cr-B-Si developed for oxyacetylene welding. The deposited alloy consists of approximately 65% FTC and 35% Ni-Cr-B-Si-matrix with a deposit 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° (1742-1922° F) and characteristically it wets easily and flows extremely well producing a smooth, clean welded surface.

APPLICATIONS:

Hard facing of ferritic and austenitic steels (steel castings), overlay mixer blades, screws & conveyors in Chemical and dye industry, Food industry. Specially recommended for stabilizer blades in the petroleum industry.

WELDING DIRECTIONS:

The surface to be hard faced should be clean and free of rust, scale, grease or other dirt preferably by grinding or shot blasting. Deposits should be made using a gas flame with a neutral to slight acetylene excess. To avoid puddling and overheating, sweat deposits on the base metal with minimum penetration.

HARDNESS:

FTC: approx. 2360 HV_{0.1}
Ni-Cr-B-Si-Matrix: approx. 420-450 HV_{0.1}

STANDARD SIZES:

Type	Ø mm	Ø inch	Grain size in mm	US mesh size
4005	4.0	5/32	0.25-0.70	24 - 16
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	1/4	0.25-0.70	24 - 60
6010	6.0	1/4	0.70-1.20	14 - 24
6020	6.0	1/4	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