DURMAT® A

Welding Rod DIN EN 14700: T Fe20
(DIN 8555: G21-GF-55-CG)

General characteristics:

DURMAT A consists of a special pre-alloyed tube filled with coarsely grained Fused Tungsten Carbide (FTC) for oxyacetylene welding. The FTC has an exceptionally high hardness of over 2360 $HV_{0.1}$ giving outstanding wear protection to hard faced areas. For special hard facing on machine parts of unalloyed, low alloyed or cast steel with carbon content up to 0.45%. Higher carbon content could lead to cracking. Depending on the size and composition of the area to be hard faced, the proper rod diameter and grain size should be chosen. If the area will encounter heavy abrasion a small grain size is recommended. If a cutting action is desired a larger grain size is preferable.

Application:

For hard facing and repairing tools and machine parts exposed to wear in mining, road construction, ceramic, petroleum, excavation and dredging applications.

Sales Units:

Type	Ø mm	Ø inch	grain size mm	US Mesh size	Color code
3505	3.5	1/8	0.25 - 0.70	24-60	white
3510	3.5	1/8	0.70 - 1.20	14-24	yellow
4005	4.0	5/32	0.25 - 0.70	24-60	white
4010	4.0	5/32	0.70 - 1.20	14-24	yellow
4020	4.0	5/32	1.00 - 1.60	10-16	green
5005	5.0	3/16	0.25 - 0.70	24-60	white
5010	5.0	3/16	0.70 - 1.20	14-24	yellow
5020	5.0	3/16	1.00 - 2.00	9-16	green
6005	6.0	1/4	0.25 - 0.70	24-60	white
6010	6.0	1/4	0.70 - 1.20	14-24	yellow
6020	6.0	1/4	1.00 - 2.00	9-16	green
8010	8.0	5/16	0.70 - 1.20	14-24	yellow
8020	8.0	5/16	1.00 - 2.00	9-16	green
8030	8.0	5/16	1.50 - 3.00	7-12	blue

Standard rod lengths: 350mm (14“) and 700mm (28“)
Other rod lengths and mesh sizes are available on request.

Welding recommendation:

The area to be hard faced should be free of rust, scale, grease or other contamination. The burner nozzle should be held at a shallow angle to the work area with a neutral to slightly acetylene excess flame. To avoid overheating, the work area should be slightly wetted and the tube metal should not come into contact with the centre of the flame. Depending on the base metal and the size of the work area a preheating temperature between 350 – 500°C (660-930°F) is advised. Detailed welding directions are available upon request.