


Technical data sheet <small>100122MBA</small>	Cored welding Wire HARDFACE STEELCARBW	 Welding Alloys
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CLASSIFICATION

EN 14700: T Fe20

DESCRIPTION

- Tubular wire for self-shielded or gas shielded metal arc hardfacing
- Wire is made from a steel strip filled with cast tungsten carbides
- Weld deposit is extremely resistant to abrasion and erosion combined with moderate impact at temperatures up to 350°C

APPLICATIONS

HARDFACE STEELCARBW is used for hardfacing components subject to extreme abrasion and moderate impact. The weld deposit contains hard primary tungsten carbide granules in a secondary carbide eutectic matrix. The fine granulometry avoids wear by destruction of the matrix.

Examples

Used to protect carbide tool holders in mining machinery, drill bits, pug mill paddles and augers, mixer blades, paddles, drill collars and tool joints, dredge cutters, fan blades, muller ploughs, sand mixer blades, churn drills, post hole digger teeth, sand and gravel chutes, feed screws, oil industry drill stabilisers.

TYPICAL ALL-WELD METAL ANALYSIS

Cast tungsten carbides	Fe
50 to 60% depending on wire diameter	Balance

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: 1 layer on mild steel: 52 – 62 HRc
 2 layers on mild steel: 60 – 63 HRc
 3 layers on mild steel: 61 – 65 HRc

CONDITIONS OF USE

Current type	Protection
DC+	M21: Ar + 15 - 25%CO ₂ M12: Ar + 0,5 - 5% CO ₂ Self-shielded

Surfaces to be welded should be free of rust, scale, oil or any other contamination

Work with low heat input to avoid melting or sinking of the tungsten particles should be favoured

OPERATING CONDITIONS

Diameter [mm]	Current [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.6	80 – 200	150	17 – 22	19	10 – 25	20
2.4	120 – 300	200	18 – 26	22	15 – 35	25
2.8	140 – 350	250	18 – 26	22	15 – 35	25

Recovery: 95 %

WELDING POSITIONS

Flat, half up, half down

PACKAGING

Diameter	≤ 2.4 mm	≥ 2.4 mm	
Standard packaging	EN ISO 544: BS 300 spool	B 450 coil	Drum
Weight	15 kg	25 kg	Up to 330 kg

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.