

**Technical  
data sheet**

011121MBA

Cored welding wire

**HARDFACE DIAMOND****CLASSIFICATION**

EN 14700: T Fe16

**DESCRIPTION**

- Cored wire for self-shielded metal arc hardfacing
- Chromium cast iron deposit containing complex niobium, vanadium and chromium carbides
- Weld metal produces an extreme resistance against mineral wear
- Best results are achieved by welding two layers

**APPLICATIONS**

HARDFACE DIAMOND is used for hardfacing components that have to resist high stress grinding abrasion without impact up to 650°C

**Examples**

Rotating excavator buckets, lignite crusher-fans, gravel industry, conveyor screws, clinker crushers, homogenisers for coal and coke, shovel buckets working in sand etc.

**TYPICAL ALL-WELD METAL ANALYSIS**

C	Mn	Si	Cr	Nb	V	Fe
5	0.5	1.2	16	6.5	6.5	Bal.

Structure: complex carbides in an austenitic matrix

**TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES**

Hardness: 3-layer deposit on mild steel: 60 - 65 HRc

**CONDITIONS OF USE**

Current type	Protection
DC+	Self-shielded

**OPERATING CONDITIONS**

Diameter [mm]	Current [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.6	150 - 350	270	24 - 35	28	25 - 40	25
2.4	250 - 450	350	26 - 35	28	25 - 50	40
2.8	250 - 450	400	28 - 35	30	25 - 50	40

Recovery: 90 %

**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.