

**Technical  
data sheet**

011121MBA

Cored welding wire

**HARDFACE 168Nb-O****CLASSIFICATION**

EN 14700: T Fe6

**DESCRIPTION**

- Flux cored wire for self-shielded hardfacing
- Designed for hardfacing of items subjected to impact, gouging and abrasion under high stresses
- Gives a highly abrasion-resistant crack-free deposit which may be machined despite its high hardness
- Suitable for multi-layer deposits (2-3)

**APPLICATIONS**

- HARDFACE 168Nb-O is designed for hardfacing of pieces subjected to extreme wear conditions. The deposit contains no cracks or pores yet possesses the exceptional hardness and abrasion resistance of a chromium cast iron product
- The product is used for items that must resist wear while withstanding impacts and very high stresses: crushing hammers and rollers, leading edges and teeth of excavator buckets, bulldozer blades, rotary crusher cones etc. Also used in applications such as oil press tooling, where tight tolerances must be maintained under abrasive conditions.

**TYPICAL UNDILUTED WELD METAL DEPOSIT ANALYSIS**

C	Mn	Si	Cr	Nb	Fe
1.3	0.8	1.5	6	8.5	Bal.

Structure: martensite with finely dispersed niobium carbide particles.

**TYPICAL WELD DEPOSIT PROPERTIES**

Hardness: 3-layer deposit: 55 - 58 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 - 50	25
2.0	200 - 400	300	26 - 35	28	25 - 50	35
2.4	250 - 450	350	26 - 35	28	25 - 50	40
2.8	250 - 450	400	28 - 35	30	25 - 50	40

**WELDING POSITIONS**

Flat, half up, half down

**PACKAGING**

Diameter	≤ 2.4 mm	≥ 2.4 mm	
Standard packaging	Spool EN ISO 544: BS 300	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.