

# HARDFACE 168Nb-O

## CLASSIFICATION

EN 14700 T Fe6

## DESCRIPTION

- Tubular wire for self-shielded metal arc hardfacing
- Designed for hardfacing of items subjected to impact, gouging and abrasion under high stress
- Gives a highly abrasion-resistant crack-free deposit which may be machined despite its high hardness
- Suitable for multi-layer deposits

## 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 stress levels: crushing hammers and rollers, leading edges and teeth of excavator buckets, bulldozer blades, rotary crusher cones, hardbanding, etc. Also used in applications such as oil press tooling, where tight tolerances must be maintained under abrasive conditions.

## TYPICAL ALL-WELD METAL STRUCTURE

Structure: martensite with finely dispersed niobium carbide particles.

## TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3 Layers deposit: as welded 55 - 60 HRc

## CONDITIONS OF USE

### Current type

DC (+)

Self shielded

### Shielding

## OPERATING CONDITIONS

Diameter [mm]	Amperage [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.6	150 - 300	270	24 - 35	28	15 - 25	25
2.0	200 - 400	300	26 - 35	28	20 - 50	30
2.4	250 - 450	350	26 - 35	28	25 - 50	40

Diameter [mm]	Amperage [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
2.8	250 - 450	400	28 - 35	30	25 - 50	40

Recovery: 95%

#### WELDING POSITIONS

Flat

#### STANDARD DIAMETERS (mm)

1.6, 2.0, 2.4, 2.8

Other diameters: please consult us

#### PACKAGING

Diameter	2.4 mm		2.4 mm	
	Standard packaging	Spool EN759: BS 300	Coil	Drum
Weight		15 kg	25 kg	Up to 330 kg