

HARDFACE VNB-O

CLASSIFICATION

EN 14700 T Fe16

DESCRIPTION

- Tubular wire for self shielded metal arc hardfacing
- Highly-alloyed chromium cast iron containing complex niobium, vanadium and chromium carbides
- High chromium cast iron for hardfacing components subject to extremely severe abrasive wear and moderate impact up to 400°C.

APPLICATIONS

Hardface VNB-O is designed to give a weld deposit of particularly high hardness and wear resistance on account of the dispersion of complex carbides it contains. This gives superior performance compared to standard chromium cast irons up to 400°C. The properties are reached in only three layers and relief checking is normal.

Examples

Used for rotating excavator bucket, lignite crushers-fans, Clinker crushers, homogenisers for coal or coke, Sintering installations, equipment for the electro-metallurgical industry etc.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Nb	V	B	Fe
5.50	0.50	1.30	16.0	6.50	6.00	1.00	Rest

Structure: hard primary chromium and complex carbides in a tough secondary carbide eutectic matrix

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3-Layer deposit on mild steel : 65-67 HRc

CONDITIONS OF USE

Current type

DC (+)

Shielding gas

Self shielded

OPERATING CONDITIONS

Diameter [mm]	Amperage [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.6	150 - 350	270	26 - 35	28	25 - 50	25

Diameter [mm]	Amperage [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
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	26 - 35	30	25 - 50	40

Recovery: 90 %

WELDING POSITIONS

Flat, half up, half down

STANDARD DIAMETERS (mm)

1.6, 2.0, 2.4, 2.8, 3.2

Other diameters: please consult us

PACKAGING

Diameter	2.4 mm		2.4 mm
Standard packaging [EN ISO 544]	Spool : BS 300	Coil : B 450	Drum
Weight	15 kg	25 kg	Up to 330 kg