

Cored welding wire

270721ES

HARDFACE CN-O



CLASSIFICATION

EN 14700: T Fe15

DESCRIPTION

- Tubular wire for self-shielded metal arc hardfacing
- High chromium cast iron containing hard complex carbides in a tough austenitic matrix
- Resists extreme conditions of abrasion and impact up to 300°C

APPLICATIONS

HARDFACE CN-O is designed to give a weld deposit of high hardness and wear resistance. It is used for hardfacing components undergoing heavy wear by earth, sand or other abrasives. Relief checking is normal.

Examples

Sand and earthmoving equipment such as buckets and teeth, railway ballast tampers, dredge buckets and lips, dragline buckets, coke hammers, rippers, sizing screens, crushing equipment, brick industry components, Muller tyres, catalyst lift pipes, pump impellers, fan blades, rockwool rolls, wear plates operating at high temperature in the steelmaking industry.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Nb		
5	0.5	1	22	7		

Structure: chromium and niobium carbides in an austenitic matrix. Niobium carbides increase abrasion and impact resistance compared to classical high chromium cast irons.

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3-layer deposit on mild steel: 62 - 64 HRc

CONDITIONS OF USE

Current type	Protection			
DC (+)	Self-shielded			

OPERATING CONDITIONS

Diameter	Current [A]		Voltage [V]		Stick-out [mm]	
[mm]	Range	Optimum	Range	Optimum	Range	Optimum
1.2	100 - 300	230	22 - 28	24	25 - 50	25
1.6	150 - 350	270	24 - 28	24	25 - 50	25
2.0	200 - 400	300	26 - 30	26	25 - 50	35
2.4	250 - 450	350	26 - 30	28	25 - 50	40
2.8	250 - 450	400	28 - 32	30	25 - 50	40
3.2	250 - 500	450	28 - 32	30	25 - 50	40

Recovery: 90 %

WELDING POSITIONS

Flat, half up, half down

STANDARD DIAMETERS (mm)

1.2, 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	Spool EN ISO 544 : BS 300	Coil	Drum
Weight	15 kg	25 kg	Up to 330 kg

Other packaging: 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.