

<b>Technical data sheet</b>  <small>011121MBA</small>	<b>Cored welding wire</b> <b>HARDFACE W-O</b>	
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### CLASSIFICATION

EN 14700: T ZFe3

### DESCRIPTION

- Tubular wire for self shielded metal arc hardfacing
- Martensitic alloy used in applications where greater hardness of the weld metal is required up to 500°C
- Outstanding resistance to low stress abrasion with heavy impact and high compressive stresses

### APPLICATIONS

HARDFACE W-O is used for surfacing parts subjected to heavy compressive stresses and moderate abrasion or metal-to-metal wear, combined with mechanical and thermal shocks.

Pre-heat is an essential requirement to prevent hot cracking. The degree of preheat is a function of the size and geometry of the component to be hardfaced and its chemical composition. Large deposit build-ups should be stress-relieved. Avoid excessive build up thickness (use HARDFACE WLC-O for rebuilding and Hardface W-O for the cap layer)

### Examples

Refurbishing of steel mill rolls, crane wheels, hot work extrusion mandrels, crushing hammers, shear knives, pulleys and winches

### TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Mo	W
0.5	2	0.8	6.5	1.5	1.5

Structure: martensite

### TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: 3-layer deposit on mild steel: 52 – 56 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
1.2	120 – 320	250	26 – 30	28	25 – 40	30
1.6	150 – 350	270	26 – 30	28	25 – 50	30
2.4	200 – 450	350	26 – 30	28	25 – 50	40
2.8	250 – 550	400	28 – 32	30	25 – 50	40
3.2	300 – 600	450	28 – 32	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.