

Technical data sheet

EN180225GB

Cored welding Wire

HARDFACE HCP-O**CLASSIFICATION**

EN 14700: T Fe15

DESCRIPTION

- Cored wire for self-shielded metal arc hardfacing
- High chromium cast iron deposit containing a high proportion of hard primary chromium carbides in a tough austenitic matrix
- The deposit is suitable for hardfacing components subject to extremely severe abrasive wear and moderate impact
- Designed to improve out-of-position welding compared to other chromium carbides welding wires

APPLICATIONS

HARDFACE HCP-O is used for hardfacing components undergoing wear by earth, sand and abrasives. HARDFACE HCP-O 1.6mm can be welded out-of-position for parts than cannot be welded in the flat position.

Relief checking is normal and does not affect the properties of the deposit. However, it is best limited to two layers unless impact loading is small. Multi-layer deposits are possible in specific applications.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr
5.5	1.2	1.7	29

Structure: primary carbides and eutectic carbides of the M_7C_3 type in an austenitic matrix

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: 3-layer deposit on mild steel: 58 - 64 HRC

CONDITIONS OF USE

Current type	Protection
DC+	Self-shielded

OPERATING CONDITIONS

Weld position	Voltage [V]	Wire speed [m/min]	Stick-out [mm]	Current [A]	Weld torch travel angle
Flat	18-28	2.0 – 8.9	12-38	100-350	0-15° Drag
Horizontal	26	5.7	19	205	0-10° Drag
Vertical up	21	2.3	16	115	5-15° Upward
Vertical down	22	2.8	16	135	5-15° Upward
Overhead	23	3.3	19	155	5-10° Drag

Recovery: 98%

WELDING POSITIONS

HARDFACE HCP-O can be welded flat, ID pipe, OD pipe and out-of-position in (but not limited to) horizontal, overhead, vertical down and vertical up.

PACKAGING

Diameter	1.6 mm
Standard packaging	EN ISO 544: BS 300 spool
Weight	15 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.