

Technical data sheet

Version 00

HARDFACE HCP-O**CLASSIFICATION**

Not Specified by AWS

DESCRIPTION

- 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.
- Hardface HCP-O was designed to improve out-of-position welding compared to other chrome carbide welding wires.

APPLICATIONS

Hardface HCP-O is used for hardfacing components undergoing wear by earth, sand and abrasives. HCP-O 1/16" can be welded out-of-position for parts than cannot be welded in the flat position.

TYPICAL COMPOSITION & HARDNESS

Base Metal: Mild Steel	C	Mn	Si	Cr	HRc
All Weld Metal	5.0-6.0	0.5-1	1-2	30-32	59-64
One Layer Stringers	4.5-5.0	0.5-1	1-2	25-30	63-67
Two Layer Stringers	5.0-5.5	0.5-1	1-2	27-32	64-68

Structure: primary carbides and eutectic carbides of the M_7C_3 type in an austenitic matrix
Relief checking is normal.

CONDITIONS OF USE

Current type	Protection
DC (+)	Self shielded

OPERATING CONDITIONS

Hardface HCP-O is designed to improve weldability in all welding positions when utilizing the correct parameters. Welding parameters used will depend on the welding process. Contact Welding Alloys for technical advice.

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.

Flat Position	
Volts	18-28
Amps	150-350

Overhead
Flat position reduced by 10%

Vertical Up
Flat position reduced by 25%

Vertical Down
Flat position reduced by 15-20%

Flat and horizontal position welding can be done with any type of arc transfer. For vertical and over-head welding it is recommended that the arc mode be short-circuit transfer.

STANDARD DIAMETERS

1/16" (1.6mm)

Other diameters: please consult us

STANDARD PACKAGING

Diameter	1/16" (1.6mm)			
	Type	Spool	Coil	Drum
Weight	33.1 lb or 25 kg	55 lb or 25 kg	250 lb or 125 kg	500 lb or 250 kg

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.