

Technical data sheet

011121MBA

Cored welding wire**ROBOFIL M CrMo1****CLASSIFICATION**

ASME IIC SFA 5.28 / AWS A 5.28	E80C-B2 H4
EN ISO 17634-A	T CrMo1 M M21 1 H5
EN ISO 17634-B	T55T15-1M21-1CM-H5
ASME IX Qualification	QW-432 F-N° 6 QW-442 A-N° 3

DESCRIPTION

- Seamless high fill copper coated metal cored wire for gas metal arc welding
- Single and multiple pass welding of creep resisting steels alloyed with 1.25Cr-0.5Mo
- Optimal productivity by combining advantages of both seamless and seamed tubular wires
- H_{DM} guaranteed < 4 ml/ 100g deposited metal over the whole parameter box
- No moisture pick-up, excellent wire feeding properties, good weldability and low spatter
- Designed for service temperatures up to 550°C

APPLICATIONS

Welding creep-resisting steels of similar composition.
Preheat at 150-250°C and stress relief at 660 -700°C must be carried out.

Examples

Creep resisting steel	EN 10028-2	13 CrMo 4-5
	EN 10083-1	25 CrMo 4
	EN 10222-2	14 CrMo 4-5
Case hardening steel	DIN 17210	16MnCr5
	ISO/TR 15608: Group 5.1	

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Mo
0.06	0.8	0.3	1.2	0.5

MINIMUM ALL-WELD METAL PROPERTIES

	Rm [MPa]	R 0.2% [MPa]	A ₅ [%]	CVN [J]
P.W.H.T 1h / 690°C	550	470	20	+ 20°C: 47

TYPICAL ALL-WELD METAL PROPERTIES

	Rm [MPa]	Rp0.2% [MPa]	A ₅ [%]	CVN[J]
P.W.H.T 1h / 690°C	630	530	22	+20°C: 120
				-20°C: 65
				-40°C: 45

SHIELDING GAS

EN ISO 14175: M21 (Ar + 15 - 25% CO₂), M20 (Ar + 5 - ≤ 15% CO₂)

OPERATING CONDITIONS

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick-out [mm]
1.2	DC+ or pulsed	100 - 350	15 - 35	12 - 25
1.4	DC+ or pulsed	120 - 400	15 - 35	12 - 25
1.6	DC+ or pulsed	130 - 450	15 - 35	15 - 25

ROBOFIL M CrMo1 can be welded as well backhand (trailing) as forehand (pushing)

WELDING POSITIONS

ROBOFIL M CrMo1 is primarily used in the flat and horizontal-vertical positions. However, welds in other positions are also possible using the short-circuiting or pulsed arc modes of transfer.

PACKAGING

Diameter	1.0 mm	1.2 mm	1.6 mm
	EN ISO 544 – ASME II C SFA-5.2 M		
Spool type	BS300		
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.