

Technical data sheet

100122MBA

Cored welding wire**ROBOFIL M Mo****CLASSIFICATION**

ASME IIC SFA 5.28 / AWS A 5.28

E80C-G H4

EN ISO 17634-A

T MoL M M 1 H5

ASME IX Qualification

QW-432 F-N° 6 QW-442 A-N° 2

DESCRIPTION

- Seamless high fill copper coated metal cored wire for gas metal arc welding
- Single and multiple pass welding of high strength and matching creep resisting steels
- 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
- Service temperatures from -40°C up to 500°C

APPLICATIONS

ROBOFIL M Mo is designed for welding creep resisting steels of similar composition and high strength steels

Examples

Creep resisting steel

EN 10028-2

P235GH to P355GH, 16Mo3

ASTM

A336F1, A204 A, B & C

Fine-grained steels

EN 10028-3

P275N to P355N

EN 10113

S275N to S355N

ASTM A335P1, A209 and A250T1

Cast steels

ASTM A217WC1, A352LC1, GS-22Mo4

ISO/TR 15608: Groups 1.1, 1.2, 1.3, 2.1 and 3.1

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Mo
0.06	1.2	0.4	0.5

MINIMUM ALL-WELD METAL PROPERTIES

	Rm [MPa]	Rp 0.2% [MPa]	As [%]	CVN [J]
PWHT 1h / 620°C	550	470	22	+20°C: 47

TYPICAL ALL-WELD METAL PROPERTIES

	Rm [MPa]	Rp0.2% [MPa]	As %	CVN [J]
As welded	600	510	25	-40°C: 50
PWHT 1h / 620°C	580	480	27	-40°C: 60

SHIELDING GASEN 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 Mo can be welded as well backhand (trailing) as forehand (pushing)

WELDING POSITIONS

ROBOFIL M Mo 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 IIC 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.