

Technical data sheet

011121MBA

Cored welding wire**ROBOFIL M NiMo****CLASSIFICATION**

ASME IIC SFA 5.28 / AWS A 5.28	E90C-G H4
EN ISO 18276-A	T 55 5 1.5NiMo M M 1 H5
EN ISO 18276-B	T625T15-1MA-N3M2-UH5
ASME IX Qualification	QW-432 F-N° 6 QW-442 A-N° 10

DESCRIPTION

- Seamless high fill copper coated metal-cored tubular wire for semi-automatic gas shielded arc welding
- Single and multipass welding of high yield strength 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
- Unique mechanical properties

APPLICATIONS

Fine-grained, cold tough (down to -50°C) and high yield strength steels (up to 550 MPa)

Examples

Fine grained steels	EN 10137	S460 to S550Q, QL and MC
	EN 10113	S460N, NL, M and ML
Pipe steels	EN 10208	L445MB to L550MB
	ISO/TR 15608: Groups 1.1, 1.2, 1.3, 2.1, 2.2 and 3.1	

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Ni	Mo
0.05	1.6	0.4	1.6	0.3

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp 0.2% [MPa]	As [%]	CVN [J]
640	540	18	-51°C: 80

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
720	610	24	-50°C: 80

SHIELDING GAS

EN ISO 14175: M21 (Ar + 15 - 25% 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 NiMo can be welded as well backhand (trailing) as forehand (pushing)

WELDING POSITIONS

ROBOFIL M NiMo 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.