

**Technical
data sheet**

011121MBA

Cored welding wire**ROBOFIL M 71****CLASSIFICATION**

ASME IIC SFA 5.18 / AWS A 5.18	E70C-6M H4
EN ISO 17632-A	T46 6 M M21 1 H5
EN ISO 17632-B	T55 6 T15-1 M21 AP-UH5
ASME IX Qualification	QW-432 F-N° 6 QW-442 A-N° 1

DESCRIPTION

- Seamless copper coated metal-cored tubular wire for semiautomatic gas shielded arc welding
- Single and multi-pass welding of CMn steels
- Optimal productivity by combining advantages of both seamless and seamed tubular wires
- Very good penetration, high tolerance to primer
- H_{DM} guaranteed < 4 ml/ 100g deposited metal over the whole parameter box
- No moisture pick up, excellent wire feeding properties
- Unique mechanical properties

APPLICATIONS

Unalloyed construction steel, boiler plate, pipe steels, fine-grained steels, shipbuilding steels, cast steels

Examples

Unalloyed construction steels	EN 10025	S185, S235JR to S355K2G4
Boiler plate	EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine grained steels	EN 10028-3	P275N, NH, NL1, NL2 to P460N, NH, NL1, and NL2
	EN 10113	S275N to S460N, S275M to S460ML
Pipe steels	EN 10208	L240NB to L445NB
	API 5LX	X42, X46, X 52, X60, X65
Pressure vessel plates	ASTM	SA-516 Gr55 to SA-516Gr70
Shipbuilding steels	A, B, D, E, and A32/36 to F40	
Cast steels	DIN 1681	GS-38, GS-45, and GS-52
	ISO/TR 15608: Groups 1.1, 1.2, 1.3, 2.1 and 3.1	

APPROVALS

TÜV (09210.03), DB (42.128.01), LR

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si
0.07	1.4	0.5

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
530	460	20	-60°C: 47

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
580	510	26	-60°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 71 can be welded as well backhand (trailing) as forehand (pushing)

WELDING POSITIONS

ROBOFIL M 71 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
Spool type	EN ISO 544 – ASME IIC SFA-5.2 M: 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.

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