Technical data sheet 011121MBA	GMAW - Solid wire # WA MCS 70S-6	Welding Alloys

CLASSIFICATION

ASME IIC SFA 5.18 / AWS A 5.18:	ER70S-6
EN ISO 14341-A:	G 46 4MG3 Si1

DESCRIPTION

- Solid GMAW wire for general use
- Suitable for welding with CO_2 or mixed gas
- Single and multipass welding of CMn steels (Rp0.2 ≤ 460 MPa)
- High deoxidation capacity
- Excellent weldability, trouble free feeding and minimum spatters
- A thin and homogenous copper coating protects the wire from rusting

APPLICATIONS

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

Examples

Unalloyed construction steels	EN 10025	S235JRG1 to S355J2G3
Boiler plate	EN 10028-2	P235GH to P355GH
Fine-grained steels	EN 10028-3	P275N to P420N, P275NL to P420NL
	EN 10113	S275N to S420N, S275NL to S420NL
Pipe steels	EN 10208	L240NB to L415NB
	API 5L	X42, X46, X52, X60
Pressure vessel plates	ASTM	SA516 Gr55 to Gr70
Shipbuilding steels	A, E, A32-F40	
Cast steels	DIN 1681	GS-38, GS-45, GS-52
	IS/TR 15608: Groups 1.1, 1.2, 1.3, 2.1 and 3.1	

TYPICAL ALL-WELD METAL ANALYSIS [%]

C	Mn	Si
0.08	1.5	0.9

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A_5 [%]	CVN [J]
530	460	22	-30°C: 55

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Shielding gas	Rm [MPa]	Rp0.2% [MPa]	A_5 [%]	CVN [J]
CO_2	540	470	28	-30°C: 60
Ar+CO_2 (M21)	590	490	30	-30°C: 80

SHIELDING GAS

EN ISO 14175: CO_2 or M21 (Ar + 15 - 25% CO_2)
Gas flow rate: 12 – 16 l/min

OPERATING CONDITIONS

Diameter [mm]	Current type	Current [A]	Voltage [V]
0.9	DC+	80 - 180	17 - 20
1.0	DC+	120 - 240	17 - 22
1.2	DC+	160 - 260	18 - 26
1.6	DC+	180 - 300	20 - 29

WA MCS 70S-6 can be welded as well backhand (trailing) as forehand (pushing)

WELDING POSITIONS

WA MCS 70S-6 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	0.9 - 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