

# Solid Wire Electrode for MIG/MAG Welding

## BA-MIG SG2

<b>Classification Wire:</b>	EN ISO 14341-A: <b>G 3Si1</b>
	SFA-5.18: <b>ER70S-6</b>
<b>Classification Weld Metal:</b>	EN ISO 14341-A: <b>G 38 2 C1 3Si1 / G 42 4 M21 3Si1</b>

### Main Application:

BA-MIG SG2 is a solid wire for GMAW welding of C-Mn mild steels. Used in shipbuilding, pressure vessels and general steel construction.

### Typical analysis and chemical composition acc. to EN ISO 14341-A and AWS A5.18: (Weight Percent)

Wire electrode	C	Si	Mn	Mo	Ni	Cr	P	S	Cu total
Typical analysis BA-MIG SG2	0.10	0,85	1.50	-	-	-	< 0.020	< 0.018	< 0.3
G 3Si1 acc. to ISO 14341-A	0.06- 0.14	0.7-1.0	1.30- 1.60	0.15	0.15	0.15	0.025	0.025	0.35
ER70S-6 acc. to AWS A5.18	0.06- 0.15	0.8-1.15	1.4-1.85	0.15	0.15	0.15	0.025	0.035	0.50

### All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	As Welded	As Welded
Yield Strength Re, N/mm <sup>2</sup> (ksi)	380 (55)	420 (61)
Tensile Strength Rm, N/mm <sup>2</sup> (ksi)	500 (73)	550 (80)
Elongation A5 [%]	>26	>26
Impact Energy ISO-V, J (ft lbs)	+20°C: 100 (86) -20°C: >50 (43)	+20°C: 120 (103) -40°C: >50 (43)
Current/polarity	DC +	DC +
Shielding Gas	ISO 14175: C1	ISO 14175: M21

### Base Materials:

A139, A210 Gr A1, A210 Gr C, A36, A234, A334 Gr 1, A106 Gr A, B, C, A131 Gr A, B, C, API 5L X42, API 5L X46, API 5L X52, API 5L X60, S185, S235, S275, S355, L210, L240, L290, L360, S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML

### Package Forms:

Spools BS300/15 kg, D200/5 kg, and drums as standard package forms for GMAW wire electrodes.

### Diameter:

GMAW: 0,8 – 1,6 mm. Sizes and tolerances acc. to ISO 544 and AWS A5.18;

SAW: 1,6 – 3,2 mm.

### Wire Electrode Surface:

Smooth finish free from surface defects and foreign matter.