

# SG2 - G3Si1

Mild Steel MIG/GMAW

## Standards

BS EN/ISO-Standard - 14341-A  
AWS-Standard - A5.18

BS EN/ISO-Classification - G 42 3 C1/42 4 M21 3Si1  
AWS-Classification - ER70S-6

## Features and Applications

- A copper coated solid wire suitable for single pass or multipass welding of unalloyed and low-alloyed carbon-manganese steels.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- Vacuum-sealed aluminium foil packaging to prevent moisture absorption.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications.
- Green wire is produced using virgin raw materials sourced from most specialised steel mills, which ensures consistent reliability and quality.
- **Test Certificates can be found online @wilkinsonstar247.com**



## Typical Base Materials

S185, S235, S275, S355 - Grade A, B, D, AH32 to DH36 - L210, L240, L290, L360, L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB - X42, X46, X52, X60 - P235T1, P235T2, P275T1 - P275T2, P355N - P235GH, P265GH, P295GH, P355GH - S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML\*

\* Illustrative, not exhaustive list

## Welding Positions

BS EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

## Shielding Gases

BS EN ISO 14175 - C1, M21

## Polarity

MAG DC (+)

## Chemical Composition % (Typical)

C %	Si %	Mn %	P %	S %	Cu % <sup>a</sup>	Cr %	Ni %	Mo %	Al %	V %	Zr+Ti %
0.07	0.85	1.45	<0.025	<0.025	<0.35	<0.15	<0.15	<0.15	<0.020	<0.030	<0.15

<sup>a</sup> (includes copper coating)

## Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010200522	0.60	15	D300 PLW	72
3010200523	0.80	15	D300 PLW	72
3010200525	1.00	15	D300 PLW	72
3010200527	1.20	15	D300 PLW	72
3010200454	1.60	15	D300 PLW	72

1kg, 5kg, BS300 & Drums also available.

## Welding Parameters

Ø mm	0.60	0.80	1.00	1.20	1.60
Current (A)	50-100	60-180	80-230	120-350	220-500
Voltage (V)	15-20	18-22	20-28	26-34	28-38

## Mechanical Properties (Typical) - C1

Tensile Strength (N/mm <sup>2</sup> )	Yield Strength (N/mm <sup>2</sup> )	Elongation (%)	Impact Strength (J)	Test Temperature
540	440	30	70	-30°C

## Mechanical Properties (Typical) - M21

Tensile Strength (N/mm <sup>2</sup> )	Yield Strength (N/mm <sup>2</sup> )	Elongation (%)	Impact Strength (J)	Test Temperature
580	460	26	90	-40°C

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

**Liability:** Whilst all reasonable efforts have been made to ensure the accuracy of the information contained, this information is subject to change without notice and can be only considered as suitable for general guidance.



Exclusive Partnership



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