

# SG2 - G3Si1

Mild Steel WIRE/GMAW

## Standards

EN/ISO-Standard - 14341-A

AWS-Standard - A5.18

EN/ISO-Classification - G 42 3 C1 / G 42 4 M21 3Si1

AWS-Classification - ER 70S-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.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications etc.
- Green wire is produced using virgin raw materials sourced from 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

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

## Shielding Gases

EN ISO 14175 - C1, M21

## Polarity

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	60-200	80-300	120-380	220-500
Voltage (V)	15-20	18-24	18-32	18-34	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.



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