

ER 70S-3 (SG1)

Mild Steel TIG/GTAW

Standards

EN/ISO-Standard - 636-A

AWS-Standard - A5.18

EN/ISO-Classification - W 42 4 2Si

AWS-Classification - ER 70S-3

Features and Applications

- A copper coated wire designed for welding carbon and carbon-manganese steels.
- Suitable for single pass or multipass welding.
- Ideal for joining thin sheet metals.
- Typically used in general construction works, shipbuilding, bridges, tanks, boilers, earthworks 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 - TIG: I1 (Argon)

Polarity

TIG DC (-)

Chemical Composition of Weld Metal % (Typical)

C %	Si %	Mn %	P %	S %	Cu % ^a	Cr %	Ni %	Mo %	Al %	V %	Zr+Ti%
0.070	0.65	1.15	<0.020	<0.020	<0.25	<0.15	<0.15	<0.050	<0.020	<0.030	<0.15

^a (includes copper coating)

Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
3010300102	1.60	1000	5	Cardboard Tube
3010300104	2.40	1000	5	Cardboard Tube
3010300106	3.20	1000	5	Cardboard Tube

Mechanical Properties (Typical)

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Impact Strength (J)	Test Temperature
530	430	24	>80	-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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