



# ER 70S-6 (A18)

Mild Steel WIRE/GTAW



## Standards

EN/ISO-Standard - 636-A

EN/ISO-Classification - W 42 4 3Si1

AWS-Standard - A5.18

AWS-Classification - ER 70S-6

## Features and Applications

- A copper coated wire containing high levels of manganese and silicon for stronger deoxidizing power where stringent cleaning procedures are not possible.
- The high silicon content increases the fluidity of the weld pool, creating a smoother bead appearance and resulting in minimal post-weld grinding.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- 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**

## Approvals

CE, UKCA

## 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

## Shielding Gases

EN ISO 14175 - TIG: I1 (Argon)

## 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	<0.020	<0.020	<0.25	<0.15	<0.15	<0.050	<0.020	<0.030	<0.15

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

## Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
<b>3010300154</b>	1.00	1000	5	Cardboard Tube
<b>3010300155</b>	1.20	1000	5	Cardboard Tube
<b>3010300156</b>	1.60	1000	5	Cardboard Tube
<b>3010300158</b>	2.40	1000	5	Cardboard Tube
<b>3010300159</b>	3.20	1000	5	Cardboard Tube

**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.



## Mechanical Properties (Typical)

Tensile Strength (N/mm <sup>2</sup> )	Yield Strength (N/mm <sup>2</sup> )	Elongation (%)	Impact Strength (J)	Test Temperature
550	450	>24	>80	-40°C

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