

# ER 90S-B3 (A33)

Low Alloy WIRE/GTAW

## Standards

EN/ISO-Standard - 21952-B  
EN/ISO-Classification - 2C1M

AWS-Standard - A5.28  
AWS-Classification - ER 90S-B3

## Features and Applications

- Low alloy copper coated wire with 2.25% Cr and 1% Mo content used for the welding of heat-resistant steels.
- Produces quality welds on pressure piping or boiler work.
- Designed to sustain elevated temperatures within demanding work environments.
- Recommended working temperatures of up to 600°C.
- Typical applications include pressure piping in steam power generating plants, boiler and heat exchanger tubes, chemical and petrochemical processing equipment 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

10CrMo9-10, GS 17CrMoV5 11, 10CrSiMoV7, 12CrSiMo8, GS12CrMo9 10, 10CrSiMoV7, 10Cr V63, 12CrSiMo8\*

\* 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 (-)

## Mechanical Properties (Typical)

Tensile Strength (N/mm <sup>2</sup> )	Yield Strength (N/mm <sup>2</sup> )	Elongation (%)	Impact Strength (J)	Test Temperature
640	540	22	90	-10°C

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

## Chemical Composition % (Typical)

C %	Si %	Mn %	P %	S %	Cu % <sup>a</sup>	Cr %	Ni %	Mo %	Al %	V %	Fx ppm
0.08	0.50	0.60	<0.012	<0.015	<0.25	2.40	<0.20	1.00	<0.020	<0.010	<15

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

## Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
3010300367	1.60	1000	5	Cardboard Tube
3010300369	2.40	1000	5	Cardboard Tube
3010300370	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.

