

# ER 80S-B6 (CrMo5)

Low Alloy WIRE/GTAW

## Standards

EN/ISO-Standard - 21952-A  
EN/ISO-Classification - W CrMo5Si

AWS-Standard - A5.28  
AWS-Classification - ER 80S-B6

## Features and Applications

- Low alloy copper coated wire with 5% Cr and 0.5% Mo content used for the welding of heat-resistant steels.
- High strength and corrosion resistant particularly in environments involving hot hydrogen gas.
- Recommended working temperatures of up to 650°C.
- Typical applications include pressure piping in steam power generating plants, boiler and heat exchanger tubes, oil refineries, chemical and petrochemical industries.
- 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

X12CrMo5, GX12CrMo5, A213, A217:C5, A355:P5, GS 12CrMo19 5\*

\* 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
660	560	22	180	+20°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 %	Ti %
0.07	0.45	0.60	<0.012	<0.015	<0.25	5.70	<0.20	0.60	<0.020	<0.030	<0.010

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

## Packaging Data

Part No.	Diameter Ø (mm)	Package Length (mm)	Package Weight (Kg)	Package Type
3010300404	1.60	1000	5	Cardboard Tube
3010300406	2.40	1000	5	Cardboard Tube
3010300407	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.

