



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**



Approvals

CE, UKCA

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 (-)

Chemical Composition % (Typical)

C %	Si %	Mn %	P %	S %	Cu % ^a	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

^a (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

Mechanical Properties (Typical)

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	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.