

ER 80S-G (A32)

Low Alloy WIRE/GMAW

Standards

EN/ISO-Standard - 21952-A
EN/ISO-Classification - G CrMo1Si

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

Features and Applications

- A low alloy copper coated wire with 1.15% Cr and 0.5% Mo content for welding creep resistant steels.
- Good resistant properties against hydrogen and sulphur agent attacks.
- Recommended working temperatures of up to 550°C.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on equipment for the chemical and ammonia synthesis process, heat exchangers, boilers, pipes, pressure vessels, petrochemical industries 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

13CrMo4-5, 15CrMo5, 16CrMoV4, G17CrMo5-5, G22CrMo5-4 A193 Gr.B7, A355 P11-12, A193: B7 13CrMo4-5, 15CrMo3, 13CrMo44, 15CrMo3, 13CrMo4 2, GS-25CrMo 4, GS-17CrMo55, GS17CrMo55, GS22CrMo4 H IV, 15CrMo3, 13CrMoV42, 13CrMo44, St44KL*

* Illustrative, not exhaustive list

Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

Shielding Gases

EN ISO 14175 - C1, M21

Polarity

DC (+)

Welding Parameters

Ø mm	0.80	1.00	1.20
Current (A)	60-200	80-260	100-360
Voltage (V)	16-28	17-32	18-34

Mechanical Properties (Typical)

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Impact Strength (J)	Test Temperature
630	520	23	100	+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 % ^a	Cr %	Ni %	Mo %	Al %	V %	Zr+Ti%	Nb %
0.090	0.65	1.05	<0.012	<0.015	<0.25	1.15	<0.15	0.50	<0.020	<0.030	<0.050	<0.010

^a (includes copper coating)

Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010201776	0.80	15	D300 PLW	72
3010201778	1.00	15	D300 PLW	72
3010201780	1.20	15	D300 PLW	72

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