

ER 120S-G

Low Alloy WIRE/GMAW

Standards

EN/ISO-Standard - 16834-A

AWS-Standard - A5.28

EN/ISO-Classification - G 89 4 M21 Mn4Ni2,5CrMo

AWS-Classification - ER 120S-G

Features and Applications

- A copper coated wire containing NiCrMo for welding ultra-high tensile strength steels.
- Designed for fine grain steels exceeding 890 MPa yield strengths.
- High impact strength at low temperatures with exceptional plasticity of the weld deposit.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on lifting and handling machinery, bridges, tanks, transport, shipbuilding, railway, mines, cranes, frames, 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

S890QL, S960Q ; P460NH, P460NL1 ; Weldox 900, Weldox 960, Strenx 960*

* Illustrative, not exhaustive list

Welding Positions

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

Shielding Gases

EN ISO 14175 - C1, M20, M21, M33

Polarity

DC (+)

Welding Parameters

Ø mm	0.80	1.00	1.20
Current (A)	90-160	150-250	220-320
Voltage (V)	18-22	22-28	26-32

Mechanical Properties (Typical)

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Impact Strength (J)	Test Temperature
1040	960	16	60	-40°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 %	Ti %	Zr %
0.110	0.70	1.90	<0.015	<0.015	<0.25	0.50	2.50	0.50	<0.010	<0.030	0.08	<0.050

^a (includes copper coating)

Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
6031100426	0.80	15	D300 PLW	72
6031100427	1.00	15	D300 PLW	72
6031100428	1.20	15	D300 PLW	72

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.

