

ER 100S-G

Low Alloy WIRE/GMAW

Standards

EN/ISO-Standard - 16834-A

AWS-Standard - A5.28

EN/ISO-Classification - G 55 5 M21 Mn3NiCrMo

AWS-Classification - ER 100S-G

Features and Applications

- NiCrMo fine-grained steels for low temperature high strength applications.
- Extreme crack resistant alloy with high mechanical properties and excellent welding characteristics.
- High impact strength at sub-zero temperatures down to -50°C.
- Precision layer wound for superior wire feeding characteristics.
- Typically used in the industrial sectors of means of transport and ground movement, building industry, bridges, tanks, railway transport, mining industry, shipbuilding 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

T1, T1A, T1B, StE 460, StE590, X60, X65, X70, X80, S460, S500, S550, S620, Weldox 500*

* 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
730	640	20	50	-50°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 %
0.08	0.75	1.40	<0.015	<0.015	<0.25	0.55	0.60	0.25	<0.020	<0.020	<0.050	<0.050

^a (includes copper coating)

Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010203273	0.80	15	D300 PLW	72
3010203275	1.00	15	D300 PLW	72
3010203277	1.20	15	D300 PLW	72

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