

ER 80S-D2 (A31)

Low Alloy WIRE/GMAW

Standards

EN/ISO-Standard - 14341-A
EN/ISO-Classification - G 50 2 M21 4Mo

AWS-Standard - A5.28
AWS-Classification - ER 80S-D2

Features and Applications

- A copper coated heat-resisting wire containing 0.5% molybdenum.
- Weld deposit yields excellent quality and bead appearance on carbon and low-alloy steels.
- Suitable for operating at high currents giving a stable arc with a low amount of spatter.
- Recommended working temperatures of up to 500°C.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on creep steels for construction steam boilers, pressure tanks, gas pipes, shipbuilding sector, petrochemical industry, heat exchangers, building of cranes, bridges 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

P235G1TH, P255G1TH, P310GH, 16Mo3, A255, A350, A612, A210, A333, A316, A369, A106*

* 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)	100-180	150-270	220-350
Voltage (V)	18-24	22-23	26-34

Mechanical Properties (Typical)

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Impact Strength (J)	Test Temperature
670	550	24	70	-30°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 %
0.09	0.70	1.90	<0.015	<0.015	<0.25	<0.15	<0.10	0.50	<0.020	<0.030	<0.050

^a (includes copper coating)

Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010203075	0.80	15	D300 PLW	72
3010203077	1.00	15	D300 PLW	72
3010203079	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.

