# ER 80S-G (Corten)

## Low Alloy WIRE/GMAW

#### **Standards**

**EN/ISO-Standard -** 14341-A **EN/ISO-Classification -** G 50 4 C1/M21 Z3Ni1

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

#### **Features and Applications**

- Solid wire suitable for welding weather resistant structural steels like corten and other high strength low-alloy steels.
- Alloyed with copper and nickel which gives a high resistance against atmospheric corrosion.
- This wire provides a unique aesthetic appeal and can be identified by its typically reddish rust or patina look for structural and artistic applications.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on the construction of containers, tanks, bridges, building panels, chimneys, means of transport, offshore platforms 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**

S235JRW, S235J2G3; Patinax 37, Alcodur50, Koralpin 52, ; S355J2G3Cu, 9CrNiCuP3-2-4; Corten A - B1; TsT52.3, S355K2W\*

\* Illustrative, not exhaustive list

#### **Welding Positions**

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

Shielding Gases	Polarity		
EN ISO 14175 - C1, M20, M21, M33	DC (+)		

### **Welding Parameters**

Ø mm	0.80	1.00	1.20
Current (A)	80-160	150-250	220-320
Voltage (V)	18-22	22-28	26-32

#### **Mechanical Properties (Typical)**

Tensile Strength (N/mm²)	Yield Strength (N/mm²)	Elongation (%)	Impact Strength (J)	Test Temperature
630	550	22	60	-40°C

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

#### **Chemical Composition % (Typical)**

<b>C</b> %	Si %	Mn %	P %	<b>S</b> %	Cu %a	Cr %	Ni %	Mo %	AI %	<b>V</b> %	Zr + Ti %
0.08	0.80	1.40	<0.020	<0.020	< 0.40	0.25	0.80	< 0.05	<0.020	<0.030	<0.15

<sup>&</sup>lt;sup>a</sup> (includes copper coating)

#### **Packaging Data**

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
6011100488	0.80	15	D300 PLW	72
6011100489	1.00	15	D300 PLW	72
6011100490	1.20	15	D300 PLW	72

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