

XP CORTEN

WEATHERING STEEL

CLASSIFICATIONS

EN ISO 14341-A
AWS A5.28

G 50 4 C1/M21 Z3Ni1

ER80S-G

KEY FEATURES AND APPLICATIONS

- Low-alloyed solid wire specifically designed for welding weathering steels (like CORTEN).
- Provides a minimum yield strength of 500 MPa.
- Offers superior corrosion resistance in atmospheric environments due to the presence of Ni Cu.
- Excellent mechanical properties at subfreezing temperatures down to -40°C.
- Widely used in the construction of bridges, building panels, chimneys, railway gantries and offshore platforms.

BASE MATERIALS

S235JRG2Cu, S235J2G4Cu, S235J0Cu, S235JRW, S355J0Cu, S355J2G3Cu, S355J0W, 235J2W-S355J2W, S355K2W

ASTM A 588 Gr. A, B, C, K; A 618 Gr. II; 709 Gr. C

CHEMICAL COMPOSITION OF WIRE %

	C	Si	Mn	P	S	Ni	Cr	Mo	V	Cu	Al	
MIN	0.06	0.70	1.30	-	-	0.70	0.20	-	-	0.25	-	-
MAX	0.10	1.30	1.50	0.020	0.020	1.00	0.40	0.15	0.03	0.50	0.02	0.15

Single values are maximum values according to EN ISO 14341

MECHANICAL PROPERTIES OF ALL-WELD METAL - TYPICAL (MIN.) VALUES

Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Impact ISO-V (J)	Test Temperature
550 (≥500)	630 (560 - 720)	22 (≥18)	60 (≥47)	-40°C

Test data for mechanical properties are not guaranteed since actual as welded conditions depend on numerous variables

OPERATING DATA

Shielding Gases
Polarity

EN ISO 14175 - C1, M21

DC+

PACKAGING AND AVAILABLE SIZES

Part Number	Diameter (mm)	Spool	Weight (kg)	Pallet Qty
XP15227	0.8	BS300	15	72
XP15230	1.0	BS300	15	72
XP15233	1.2	BS300	15	72