TECHNICAL DATA SHEET

parweld
WELDING THE FUTURE

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	Ti + Zr
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

MADE IN EU