TECHNICAL DATA SHEET

parweld
WELDING THE FUTURE

XP Ni2

LOW TEMPERATURE

CLASSIFICATIONS

EN ISO 14341-A	AWS A5.28
G 50 9 M23 2Ni2	ER80S-Ni2

KEY FEATURES AND APPLICATIONS

- 2.5% Nickel alloyed wire ideal for high-strength and low-temperature applications.
- Provides a minimum yield strength of 500 MPa.
- Offers good arc stability and penetration resulting in high-quality welds.
- Excellent mechanical properties at subfreezing temperatures down to -90°C.
- Widespread usage across diverse industries, including structural steel fabrication, pipeline construction, naval architecture, pressure vessel manufacturing, offshore installations, mechanical engineering, heavy-duty transportation and general metalworking.

BASE MATERIALS

10Ni14, 12Ni14, 13MnNi6-3, 15NiMn6, S275N-S460N, S275NL-S460NL, S275M-S460M, S275MLS460ML, P275NL1-P460NL1, P275NL2-P460NL2

ASTM A 203 Gr. D, E; A 333 Gr. 3; A334 Gr. 3; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65; AA 529 Gr. 50; A 572 Gr. 42, 65; A 633 Gr. A, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 738 Gr. A; A 841 A, B, C

CHEMICAL COMPOSITION OF WIRE %

	C	Si	Mn	P	S	Ni	Cr	Mo	V	Cu	Al	Ti + Zr
MIN	0.06	0.40	0.80	-	-	2.10	-	-	-	-	-	-
MAX	0.14	0.80	1.40	0.020	0.020	2.70	0.15	0.15	0.03	0.35	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
530 (≥500)	630 (560 - 720)	26 (≥18)	100 (≥47)	-90°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 - M21	DC+

PACKAGING AND AVAILABLE SIZES

Part Number	Diameter (mm)	Spool	Weight (kg)	Pallet Qty
XP15245	0.8	BS300	15	72
XP15248	1.0	BS300	15	72
XP15251	1.2	BS300	15	72

MADE IN EU