

CLASSIFICATIONS

EN ISO 636-A

AWS A5.28

W 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	
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 636

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 - I1

DC-

PACKAGING AND AVAILABLE SIZES

Part Number	Diameter (mm)	Length (mm)	Weight (kg)	Packaging
XP15382	1.6	1000	5	PAP 20 Tube
XP15384	2.4	1000	5	PAP 20 Tube
XP15386	3.2	1000	5	PAP 20 Tube