

Classifications

EN ISO 636-A	EN ISO 636-A	EN ISO 636-B	AWS A5.28	AWS A5.28M
W0 (for rod)	W 46 5 W0	W 55A 5U WN2	ER80S-Ni1	ER55S-Ni1

Characteristics and typical fields of application

Ni-alloyed GTAW rod for welding of offshore pipe work and similar high integrity applications. High impact properties down to -50°C.

Base materials

Cryogenic fine-grained steels and high strength steels up to 460 MPa yield strength.

S275N-S460N, S275NL-S460NL, S275M-S460M, S275ML-S460ML, P355N, P355NH, P460N, P460NH, P275NL1-P460NL1, P275NL2-P460NL2, L360NB, L415NB, L360MB-L450MB, L360QB-L450QB

ASTM A 203 Gr. D, E; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65, 70; A 572 Gr. 42, 50, 55, 60, 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; API 5 L X52, X60, X65, X52Q, X60Q, X65Q

Typical analysis of solid wire (wt.-%)

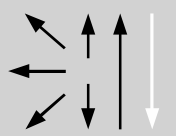
	C	Si	Mn	Ni	Mo
wt.-%	0.09	0.6	1.1	0.95	0.25

Mechanical properties of all-weld metal

Condition	Yield strength R _{p0,2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J		
	MPa	MPa	%	+20°C	-30°C	-50°C
u	500 (≥ 470)	600 (550 – 680)	25 (≥ 20)	180	150	≥ 47

u untreated, as welded – shielding gas Argon

Operating data

	Polarity: DC (–)	Shielding gases: 100% Argon	Rod marking: front: ✦ W0 back: ER80S-Ni1	∅ (mm) 1.6 2.0 2.4
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Preheating, interpass temperature and post weld heat treatment as required by the base metal.

Approvals

CE