

Classifications

EN ISO 14341-A	EN ISO 14341-B	AWS A5.28
G 50 7 M21 2Ni2	G 57A 8 M21 SN5	ER80S-Ni2

Characteristics and typical fields of application

Low-alloyed solid wire electrode for shielded arc welding of cryogenic fine grained structural steels. Outstanding toughness values at low temperatures when deposited in combination with gas mixture.

Base materials

10Ni14, 12Ni14, 13MnNi6-3, 15NiMn6, S275N-S460N, S275NL-S460NL, S275M-S460M, S275ML-S460ML, 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

Typical analysis of solid wire (wt.-%)

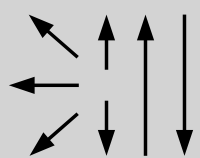
	C	Si	Mn	Ni
wt-%	0.08	0.60	1.00	2.35

Mechanical properties of all-weld metal

Heat-treatment	Shielding gas	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	-70 °C	-80 °C
aw	M21	510	620	24	120	47	
sr	M21	450	560	24	140		47

sr (560 °C / 4 h)

Operating data

	Polarity: DC (+)	Shielding gas: (EN ISO 14175) M1, M2	ø mm	Spool: B300 B300
			1.0	
			1.2	

Approvals

TÜV (01627), ABS, BV, DNV, GL, LR, CE