

SG Ni1 Tig

CATEGORY GMAW-GTAW Solid wires

TYPE Filler metal for fine grain steels and cold-tough steels.

APPLICATIONS Offshore requirements at working temperatures down to -60° C such as crane, vessel, rigs, platforms, pipelines for NACE requirements, boiler, tubing etc.

PROPERTIES Excellent impact properties at low temperatures due to the addition of Nickel and increased yield strenght above 460 N/mm2.

CLASSIFICATION

AWS	A 5.28: ER 80S-Ni1
EN ISO	636-A: W 50 5 W3Ni 1
DIN	8575: SG Ni1

SUITABLE FOR	Materials	DIN	EN	ASTM
	shipbuilding	A, B, D, E, AH 32 - EH 36	same	Typical
	Unalloyed steels	St 33, St 37-2 - St 52-3	S185 - S355-S460	A 258 / A 516
	boiler steels	H I, H III, 17Mn4, 19Mn5	P235GH, P355GH	A 662 / A 387
	pipe steels	St 35.8, St 45.8	P235T1/T2, P460NL2	A 738 / A 612
	-	StE 210.7 TM, StE 480.7 TM	L210 - L480MB	A 299
	Fine grain steels	StE 255 to StE 460	S255 - S500 (NL1,2)	-
	API-standard	X 42, X65	X 42, X65	-

APPROVALS CE approved



WELD METAL ANALYSIS (TYPICAL, WT%)

C	Mn	Si	Ni	S	P
0.08	1.05	0.50	0.9	0.017	0.007

ALL WELD METAL MECHANICAL PROPERTIES

Heat Treatment	Rp0,2 (N/mm ²)	Rm (N/mm ²)	A5 (%)	Impact Energy (J) ISO-V	
				-40°C	-60°C
AW	> 470	> 560	> 24	70	> 47

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters		Packing	
D (mm)	Current (A) DC-	single	master
1,6 x 1000 mm	50-90	5 kg cartons	25 kg cartons
2,0 x 1000 mm	70-110	5 kg cartons	25 kg cartons
2,4 x 1000 mm	110-180	5 kg cartons	25 kg cartons
3,2 x 1000 mm	150-250	5 kg cartons	25 kg cartons

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1