Union MoNi

Solid wire, low-alloyed

Classifications

EN ISO 16834-A	EN ISO 16834-B	AWS A5.28
G 62 5 M21 Mn3Ni1Mo	G 69A 5 M21 N2M2T	ER90S-G

Characteristics and typical fields of application

Medium alloy solid wire electrode for shielded arc welding of quenched and tempered and thermomechanically treated fine grained structural steels; creep resistant structural steels with higher yield strength.

Outstanding toughness values of the weld metal at low temperatures when deposited with CO_2 and gas mixture.

Base materials

S460N, S460M, S460NL, S460ML, S460Q-S555Q, S460QL-S550QL, S460QL1-S550QL1, 460N,P460NH, P460NL1, P460NL2, L415NB, L415MB-L555MB, L415QB-L555QB, 20MnMoNi4-5, 15NiCuMoNb5-6-4;

ASTM A 572 Gr. 65; A 633 Gr. E; A 738 Gr. A; A 852; API 5 L X60, X65, X70, X80, X60Q, X65Q, X70Q, X80Q

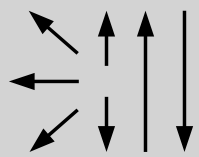
Typical analysis of solid wire (wt.-%)

	C	Si	Mn	Mo	Ni
wt-%	0.10	0.65	1.55	0.40	1.10

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	–40 °C	–50 °C
aw	CO_2	550	640	20	80	47	
aw	M21	620	700	18	100		47

Operating data



Polarity:	Shielding gas:	ø mm	Spool:
DC (+)	(EN ISO 14175)	0.8	B300
	M2, M3, C1	1.0	B300
		1.2	B300

Approvals

TÜV (00926), DB (42.132.09), DNV, GL, WIWEB, VG 95132-1, CE