Union NiMoCr

Solid wire, low-alloyed

Classifications

EN ISO 16834-A	AWS A5.28
G 69 6 M21 Mn4Ni1,5CrMo	ER100S-G / [ER100S-1(mod.)]

Characteristics and typical fields of application

Low-alloyed solid wire electrode for shielded arc welding of quenched and tempered and thermomechanically treated fine grained structural steels; for joint welding of wear resistant steels. For use with CO_2 and gas mixture. Outstanding toughnesss of the weld metal at low temperatures. For use in crane and vehicle manufacturing.

Base materials

S690QL1 (alform 700 M; aldur 700 QL1; Dillimax 690; N-A-XTRA 70; Weldox 700),
S620QL1 (Dillimax 620; N-A-XTRA 63),
S700MC (alform 700 M; Domex 700 MC; PAS 70)
ASTM A 514 Gr. F, H, Q ; A 709 Gr. 100 Type B, E, F, H, Q ; A 709 Gr. HPS 100W

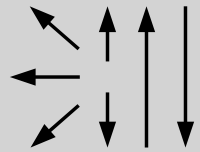
Typical analysis of solid wire (wt.-%)

	C	Si	Mn	Cr	Mo	Ni
wt-%	0.08	0.60	1.70	0.20	0.50	1.50

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	–60 °C
aw	CO_2	680	740	18	80	47	
aw	M21	720	780	16	100		47

Operating data



Polarity:	Shielding gas:	ø mm	Spool:
DC (+)	(EN ISO 14175) M21 und C1	0.8	B300
		1.0	B300
		1.2	B300

Approvals

TÜV (02760), DB (42.132.08), ABS, BV, DNV, GL, LR, VG 95132-1, CE