

Classifications

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

Characteristics and field of use

Medium alloy 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 CO₂ and gas mixture. Outstanding toughness 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)

Typical analysis in %

C	Si	Mn	Cr	Mo	Ni
0.08	0.6	1.7	0.2	0.5	1.5

Mechanical properties of the weld metal

Heattreatment	Shielding gas	0.2%-Yield strength	Tensile strength	Elongation (L ₀ =5d ₀)	Impact values CVN		
		MPa	MPa	%	J	-40 °C	-60 °C
U	CO ₂	680	740	18	□80	47	-
U	M21	720	780	16	100	-	47

Approvals

TÜV (No. 02760), DB (No. 42.132.08), ABS, BV, DNV, GL, LR

Wire diameter [mm]	Current type	Shielding gas (EN ISO 14175)	
0.8	DC (+)	M21	C1
1.0	DC (+)	M21	C1
1.2	DC (+)	M21	C1

Other spool types on request.

