

## Classifications

EN ISO 16834-A	AWS A5.28
G 79 5 M21 Mn4Ni1,5CrMo	ER110S-G

## Characteristics and typical fields of application

Low-alloyed solid wire electrode for shielded arc welding of quenched and tempered fine grained structural steels. Outstandingly tough weld metal at low temperatures when deposited with gas mixture.

Good deformability; outstanding mechanical properties even at higher electric heat input per unit length of weld. Good resistance to cold cracking due to high purity of the wire surface. For use in crane and vehicle manufacturing.

## Base materials

S690QL (aldur 700 QL; Dillidur 690; N-A-XTRA 70; Weldox 690);  
S700MC (alform 700 M; Domex 700MC; PAS 70); und höherfeste Rohrgüten (S770QL);  
ASTM A 514 Gr. F, H, Q; A 709 Gr. 100 Type E, F, H, Q; A 709 Gr. HPS 100W

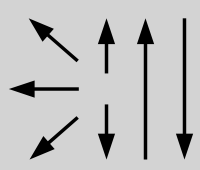
## Typical analysis of solid wire (wt.-%)

	C	Si	Mn	Cr	Mo	Ni
wt-%	0.09	0.7	1.70	0.30	0.60	1.85

## 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	-50 °C
aw	CO <sub>2</sub>	720	770	17	80	
aw	M21	790	880	16	90	47

## Operating data

	<b>Polarity:</b> DC ( + )	<b>Shielding gas:</b> (EN ISO 14175) M2, M3, C1	<b>ø mm</b> 1.0 1.2	<b>Spool:</b> B300 B300
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## Approvals

DB (42.132.21), CE