



Stick electrode, low-alloyed, basic coated, high-strength

ISSI		

EN ISO 18275-A	AWS A5.5 / SFA-5.5	AWS A5.5M
E 69 5 Mn2NiCrMo B 4 2 H5	E11018-G	E6918-G
	(E11018M mod.)	(E6918M mod.)

Characteristics and typical fields of application

Basic coated NiCrMo alloyed electrode for welding of high strength steels (typical yield strength 690 MPa).

Low hydrogen content < 5 ml/100 g (HD) in the weld metal; very low moisture pickup during long term storage. For high strength fine grained structural steels, for cast steel qualities; weld metal insensitive to cold cracking.

Base materials

Quenched and tempered fine grained structural steels up to 690 MPa yield strength.

High strength fine grained structural steels S620QL - S690QL, S620QL1, S690QU, aldur 700 Q, aldur 700 QL, aldur 700 QL1, HY 100

Typical analysis

	С	Si	Mn	Cr	Ni	Mo
wt%	0.06	0.20	1.60	0.38	1.85	0.40

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy ISO-V KV J	
	MPa	MPa	%	20°C	-50°C
u	700 (≥ 690)	750 (760 - 960)	18 (≥ 17)	120	≥ 47
S	690	740	19	120	47

u untreated, as welded

s stress released at 580 °C / 2 h / furnance down to 300 °C

Operating data

**	Polarity	DC+ (DC - for root pass only)	Dimension mm	Current A
	Electrode		2.5 × 350	70 – 100
	identification	12018-M2	3.2×350	90 – 140
	Redrying	300-350°C/2h	3.2 × 450	90 – 140
			4.0 × 450	140 – 190

 5.0×450

Approvals

TÜV (00548), DB (10.014.98) ABS, BV, DNV, WIWEB, CE

180 - 250