

## Classifications

EN ISO 18275-A	AWS A5.5 / SFA-5.5	AWS A5.5M
E 89 4 Mn2Ni1CrMo B 4 2 H5	E12018-G	E8318-G
	(E12018M mod.)	(E8318M mod.)

## Characteristics and typical fields of application

Basic coated NiCrMo alloyed electrode for welding of high strength steels (typical yield strength 890 MPa)  
 Low hydrogen content <5 ml/100 g (HD) in the weld metal. For high strength fine grained structural steels.  
 Suitable for bridge building, steel and crane construction; the weld metal is insensitive to cold cracking.

## Base materials

Quenched and tempered fine grained structural steels up to 890 MPa yield strength.  
 High strength fine grained structural steels S890Q, S890QL, aldur 900 Q, aldur 900 QL, HY 130

## Typical analysis

	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.08	0.40	1.45	0.80	2.20	0.50

## 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 work ISO-V KV J	
	MPa	MPa	%	20°C	-40°C
u	930 ( $\geq 890$ )	1000 (980 - 1180)	17	90	47

u untreated, as welded

## Operating data

	Polarity	DC +	Dimension mm	Current A
	Electrode identification	E 12018-M/SH Ni 2 K 130	3.2 × 350	90 – 140
	Redrying	300-350°C/2h	4.0 × 350	140 – 190
			4.0 × 450	140 – 190
			5.0 × 450	170 – 240

## Approvals

CE