





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

**böhler**welding byvoestalpine

Classifications

 EN ISO 18275-A
 AWS A5.5 / SFA-5.5
 AWS A5.5M

 E 62 4 Mn1NiMo B 4 2 H5
 E10018-D2 H4
 E6918-D2 H4

## Characteristics and typical fields of application

Basic coated MnNiMo alloyed electrode.

Very low H2-content < 5 ml/100 g; extremely high resistance to cracking and high toughness at temperatures as low as -40°C. For creep resistant steels and cast steel grades, valves and oil tools according to sour gas specification; postweld heat treatment: stress relieving according to parent metal.

#### **Base materials**

G30CrMoV6-4, GS-30CrMoV6-4 Steels acc. ASTM A 487-4Q: AISI 4130

# **Typical analysis**

	C	Si	Mn	Ni	Mo
wt%	0.09	0.3	1.9	0.9	0.4

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

Condition	Yield strength R <sub>p0.2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact energy ISO	-V KV J	
	MPa	MPa	%	20°C	-40°C	-50°C
u	650 (≥ 620)	770 (690 - 890)	20 (≥ 18)	120	70 (≥ 47)	60
S	630	730	21	130	70	60

u untreated, as welded

#### Operating data



Polarity	DC+
Electrode identification	FOX NiMo / E 62 4 Mn1NiMo B / E10018-D2
Redrying	300-350°C/2h

Dimension mm	Current A
2.5 × 350	70 – 100
3.2 × 350	100 – 150
4.0 × 450	140 – 200
5.0 × 450	180 – 250

Choose preheating, interpass temperature and post weld heat treatment (PWHT) as required by the base material.

## **Approvals**

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s stress released at 635°C/4h