

Thermanit NiMo 100

Stick electrode, low-alloyed, basic

Classifications					
EN ISO 18275-A	AWS A5.5	AWS A5.5M			
E 62 4 Mn1NiMo B 4 2 H5	E10018-D2 H4	E6918-D2 H4			

Characteristics and typical fields of application

Basic covered MnNiMo alloyed electrode.

Very low H_2 -content ≤ 4 ml/100 g; extremely high resistance to cracking and high toughness at temperatures as low as -40 °C (-40 °F).

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

GS-30CrMoV64,

Steels acc. ASTM A 487-4Q; AISI 4130

Typical analysis of all-weld metal						
	С	Si	Mn	Мо	Ni	
wt%	0.09	0.3	1.9	0.4	0.9	

Mechanical properties of all-weld metal – typical values (min. values)						
Heat- treatment	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	−50 °C
AW	650 (≥ 620)	770 (690 – 890)	20 (≥ 18)	120	70 (≥ 47)	60
Sr 635°C/4h	630	730	21	130	70	60

Polarity:	Re-drying:	Electrode ID:	ø mm	L mm	Amps A
DC (+)	300 – 350 °C	NiMo 100/	3.2	350	100 – 150
	/ 2 h	10018-D2/	4.0	450	140 – 200
		E 62 4 Mn1NiMo B	5.0	450	180 – 250
	•		DC (+) 300 – 350 °C NiMo 100/ / 2 h 10018-D2/	DC (+) 300 – 350 °C NiMo 100/ 3.2 / 2 h 10018-D2/ 4.0	DC (+) 300 – 350 °C NiMo 100/ 3.2 350 / 2 h 10018-D2/ 4.0 450

Welding instruction

Preheating, interpass temperature, and post weld heat treatment as required by the base metal.

Approvals

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