

## BASOWELD Mo

Electrodes MMA [SMAW]

Creep resistant steels

CLASSIFICATION:	APPROVALS:	APPLICATION:
EN ISO 3580-A : E Mo B 42 H5 DIN 8575 : E Mo B 26 AWS A-5.5 : E 7018-A1	UDT TUV	Power generation industry Constructions & Engineering Petrochemical and chemical industry

- Basic low hydrogen electrode with Cr and Mo.
- For welding heat-resistant and creep-resistant steels, working in temperatures up to 570°C.
- Weld metal resistant to sulfur, e.g. in crude oil at temperatures of 250-450 [°C]
- Resistant to hydrogen in some applications.
- Can be used for the production of pressure vessels for NH3 up to 450[°C]
- Electrode with very good primary and secondary ignition, stable, well focused arc.
- Low spatter and good slag release, crack resistant joint, creep resistance for the life of the joint.

### Base material

DIN	W.Nr.	ISO
St52-3, S355J2	1.0570	S355D
22Mo4	1.5419	
		GE240 to GE300
St45.8, P255G1TH	1.0405	
		L320 to L415NB
StE415.7TM	1.8973	L320MB-L415MB
16Mo3, 15Mo3	1.5415	16Mo3, F26
		S255NH to S500NH
		S255NL to S500NL
16Mo5	1.5423	
10MnMo4-5	1.5424	
11MnMo4-5	1.5425	
St 35.8	1.0305	
17Mn4	1.0426	P295GH, PT490
19Mn5	1.0482	PT480GH
19Mn6	1.0473	P355GH, PH29
St 50-2	1.0050	Fe490
ZStE 380, H360LA	1.0550	380Y
15NiCuMoNb5S	1.6369	
20MnMoNi4-5	1.6311	
17MnMoV6-4	1.5403	
GP240GH	1.0619	

### Typical chemical composition %

C	Si	Mn	Mo
0,05	0,40	0,75	0,50

### Typical mechanical properties

Yield strength Re [N/mm <sup>2</sup> ]	>355
Tensile strength Rm [N/mm <sup>2</sup> ]	>510 typ. >630

<b>Elongation A5 [%]</b>	>20
<b>Impact energy Kv [J]</b>	>47J (20°C) / >47J (-40°C) /
<b>Hardness</b>	after welding 210HB / after treatment 190HB /
<b>Coating type</b>	basic
<b>Heat treatment</b>	Heat treatment is usually carried out in the range of 630-670[°C]. In the case of materials up to 20 [mm] thick, some steel grades do not require treatment.
<b>Hydrogen content</b>	<5 ml/100 g
<b>Welding current</b>	
<b>Welding positions</b>	
<b>Redrying</b>	300 - 350°C / 2 h
<b>Additional description</b>	The structure of the weld metal after heat treatment is ferrite in acicular form with the addition of tempered bainite. Interstitch heating temperatures are usually in the range of 100-250[°C].

#### **Welding parameters and packing**

<b>Ø</b>	<b>Length [mm]</b>	<b>Welding current [A]</b>	<b>Weight of packet [kg]</b>	<b>Weight of carton [kg]</b>	<b>Pcs/1 kg</b>
2,5	350 /	70-95	4,5	13,5	48
3,2	350 /	100-130	4,5	13,5	27
4,0	350 /	140-180	4,0	12,0	15
5,0	450 /	180-230	5,5	16,5	10

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