

# BASOWELD 2CrMo

Electrodes MMA [SMAW]

Creep resistant steels

<b>CLASSIFICATION:</b>  EN ISO 3580-A : E CrMo2 B 42 H5 DIN 8575 : E CrMo2 B 20+ AWS A-5.5 : E 9018-B3	<b>APPROVALS:</b>  UDT	<b>APPLICATION:</b>  Power generation industry Petrochemical and chemical industry
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- Basic low hydrogen electrode with Cr and Mo alloy for welding 10CrMo9-10 steels.
- Recommended for welding creep resistant steels working in temperatures up to 600°C.
- Suitable for quenched and tempered steels and also steels for cementation and nitriding.
- Very good first and next striking, stable, concentrated arc.
- Less spatters, good slag release.
- Crack resistant joint.

**Recommendations:**

- Keep the arc as short as possible.
- To prevent cracking, use a starting plate or back arc method at the start of welding.

**Application**

Pipelines, power boilers

**Base material**



DIN/W.Nr	DIN	ASTM/UNS	PN
1.7380	10CrMo9-10	A182 F22, A182 T22	10H2M
1.7337	16CrMo4-4	A182 F12	
1.7262	15CrMo5		18HGM
1.7258	24CrMo5		25HM, 20HM
1.7350	22CrMo4-4		
1.7357	GS-17CrMo5-5	A217 WC6	
1.7015	15Cr3	A1031 Gr.5015	
1.7131	16MnCr5	A1031 Gr.5115	
1.7147	20MnCr5	A1031 Gr.4820	
1.8075	10CrSiV7		
1.7707	30CrMoV9	A1031 Gr.4340	
1.7379	GS-18CrMo9-10		
1.7383	11CrMo9-10		
1.7375	12CrMo9-10		
1.7385	6CrMo9-10		

**Typical chemical composition %**

<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>Cr</b>	<b>Mo</b>
0,06	0,40	0,75	2,40	1,0

**Typical mechanical properties**

<b>Yield strength Re [N/mm2]</b>	>400
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<b>Tensile strength Rm [N/mm<sup>2</sup>]</b>	>500
<b>Elongation A5 [%]</b>	>18
<b>Impact energy Kv [J]</b>	47J (20°C) /
<b>Hardness</b>	Build-up weld 250[HB] /
<b>Coating type</b>	basic
<b>Heat treatment</b>	Annealing after welding at a temperature of at least 700-750[°C] for 1[h], then cooling in the furnace to 300[°C] in still air.
<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>	Preheating and interpass temperature 200-350[°C] Tempered bainite structure after heat treatment.

#### Welding parameters and packing

∅	Length [mm]	Welding current [A]	Weight of packet [kg]	Weight of carton [kg]	Pcs/1 kg
2,5	350 /	65-95	4,0	12,0	45
3,2	350 /	100-130	4,0	12,0	27
4,0	450 /	130-180	5,5	16,5	15
5,0	450 /	180-240	5,5	16,5	10

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