

BASOWELD CrMo

Electrodes MMA [SMAW]

Creep resistant steels

CLASSIFICATION:	APPROVALS:	APPLICATION:
EN ISO 3580-A : E CrMo1 B 42 H5 DIN 8575 : E CrMo1 B 20+ AWS A-5.5 : E 8018-B2	UDT	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.
13CrMo4-5	1.7335
25CrMo4	1.7214, 1.7218
16MnCr5	1.7131
GS-25CrMo4	1.7128
GS-17CrMo5-5	1.7355
15Cr3	1.7015
20MnCr5	1.7147
16CrMo4-4	1.7337
11CrMo5-5	1.7339
15CrMo5	1.7262
24CrMo5	1.7258
22CrMo4-4	1.7350
42CrMo4	1.7225
16CrMoV4	1.7728
GS-22CrMo5-4	1.7354

Typical chemical composition %

C	Si	Mn	Cr	Mo
0,05	0,40	0,75	1,10	0,50

Typical mechanical properties

Yield strength Re [N/mm²]	>355
Tensile strength Rm [N/mm²]	>510
Elongation A5 [%]	>20
Impact energy Kv [J]	>47] (20°C) /
Hardness	Build-up weld app. 190[HB] /
Coating type	basic
Heat treatment	Preheating and interpass temperature minimum 200°C, for thicker elements up to 300°C. Maintain throughout welding and for some time after the process is complete.

Hydrogen content	<5 ml/100 g
Welding current	
Welding positions	
Redrying	300 - 350°C / 2 h
Additional description	Tempered bainite structure after heat treatment. Metal-to-metal wear resistant weld deposit and high impact strength. Recommendations: Keep a short arc.
Remarks	Post-weld heat treatment is required. Tempering at 660-700[°C]. Tempering time depends on the thickness of the element.

Welding parameters and packing

Ø	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	48
3,2	350 /	100-130	4,0	12,0	27
4,0	450 /	140-180	5,5	16,5	15
5,0	450 /	180-230	5,5	16,5	10

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