CARBO CrMo 1 AC

International standards

Material number	1.7346
DIN EN ISO 3580-A	E CrMo1 R 12
AWS A 5.5	E 8013-G

Approvals ---

Typical applications and characteristics

AC-weldable CrMo alloy electrode for welding high-strength joints on low alloy tempered steels of up to 880 N /mm².
Suitable for welding creep-resistant CrMo steels in boiler and piping system construction. Resistant to high temperatures up to 500°C.
Non-ageing welding deposit, resistant to alkaline solutions, heat-treatable and case-harden able.
The electrode should be welded with a short arc, preferably on the + pole; for root layers weld on the – pole with an air gap.
Preheating and post weld heat treatment of base materials to be carried out acc. to the steel manufacturer's instructions.

Operating temperature Room temperature up to + 500° C

Base materials

1.7218 25 CrMo 4
1.7262 15 CrMo 5
1.7321 20 MoCr 4
1.7335 13 CrMo 4 4
1.7218 GS- 25 CrMo 4
1.7321 GS- 20 MoCr 4
1.7354 GS- 22 CrMo 5 4

Mechanical properties of all-weld metal (typical values)

Tensile strength R_m N/mm²	**Yield strength** R_{eL} **N/mm²**	**Elongation** A_5 **%**	**Impact strength ISO–V J**	1 Annealed 30 min. 720°C 2.Tempered 30 min. 930°C then 30 min 720°C
640	500	24	90	1.
530	370	26	120	2.

Weld metal analysis (typical, wt %)

C	**Si**	**Mn**	**Cr**	**Mo**
0.07	0.7	0.9	1.1	0.5

Current = +(-) / ~ 65 V

Welding positions PA, PB, PC, PD, PE, PF,

Rebaking 1 h. 350 °C + / - 10 °C (if necessary)

Dia./Length	**Amperage (A)**	**Pcs./packet**	**Pcs./carton**	**kg / 1000**	**kg / packet**	**kg / carton**
2,5 x 350	70 - 110	279	1117	17,9	5,0	20,0
3,2 x 350	95 - 150	166	662	30,2	5,0	20,0
4,0 x 350	130 - 190	109	437	45,8	5,0	20,0
5,0 x 450	150 - 240	65	261	92,0	6,0	24,0

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