

International standards	Material number	1.7346
	EN 1599	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	1.7218	GS- 25 CrMo 4
	1.7262	15 CrMo 5	1.7321	GS- 20 MoCr 4
	1.7321	20 MoCr 4	1.7354	GS- 22 CrMo 5 4
	1.7335	13 CrMo 4 4		

Mechanical properties of all-weld metal (typical values)

Tensile strength R _m N/mm ²	Yield strength R _{eL} N/mm ²	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

Rev. 000

Statements on composition and application are just for the applier's information. Statements on mechanical properties always refer to the all-weld-metal according to valid standards. Carbo-Weld may change the characteristics of its products without notice. We recommend the applier to check our products for their special application autonomously.