

CARBO Mo AC

International standards	Material number	1.5424
	DIN EN ISO 2560-A	E 46 0 Mo R 12
	AWS A 5.5	E 7013-G

Approvals TÜV, CE

Typical applications and characteristics

CARBO Mo AC is a rutile coated Mo-alloy electrode, suitable for welding pipe and boiler steels as well as fine grain structural steels. Generally used for joining creep resistant low-alloy structural steels of 420 N/mm² minimum yield strength, as well as creep resistant molybdenum-steels. The weld metal is non-ageing and tough also at low temperatures, hot crack proof and suitable for service temperatures up to 500°C. Preheating not necessary in general. Preheating is recommended before welding steels of more than 0.22 % C-content and on metal sheets from 20 mm thickness onwards.

Operating temperature +/- 0 up to + 550 °C

Base materials

DIN EN 10025 S235JRG1, S235JRG2, S235JRG3, S275JR, S275J2G3, S420N
DIN EN 10028-2 P235GH, P265GH, P295GH, P355GH
DIN EN 10028-3 P275N, P275NH, P275NL2, P355N, P355NH, P355NL1
DIN 17100 St 37-2, St 44-2, St 52-3, ST 50-2
DIN 17175 St 35.8, St 45.8, 17 Mn 4, 19 Mn 5, 15 Mo 3
DIN 17102 StE 255 – StE 420, WStE 255 – WStE 420
DIN 17172 StE 210. 7 – StE 360.7 TM
DIN 17155 H I, HII, 17 Mn 4, 19 Mn 6, 15 Mo 3

Mechanical properties of all-weld metal (typical values)	Tensile strength R_m N/mm²	Yield strength R_{eL} N/mm²	Elongation A₅ %	Impact strength ISO –V J +/- 0° C
	600	490	25	> 47

Weld metal analysis (typical, wt %)	C	Si	Mn	Mo
	0.07	0.8	0.9	0.5

Current = - / ~ 50 V

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

Rebaking 1 h, 110 °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	263	1053	19.0	5.0	20.0
3.2 x 350	100 – 150	156	625	32.0	5.0	20.0
4.0 x 450	140 – 200	97	387	62.0	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.