

# CARBO Mo AC

<b>International standards</b>	Material number	1.5424
	DIN EN ISO 3580-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/mm<sup>2</sup> 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

<b>Mechanical properties of all-weld metal</b> (typical values)	<b>Tensile strength</b> R <sub>m</sub> N/mm <sup>2</sup>	<b>Yield strength</b> R <sub>eL</sub> N/mm <sup>2</sup>	<b>Elongation</b> A <sub>5</sub> %	<b>Impact strength</b> ISO –V J +/- 0° C
	600	490	25	> 47

<b>Weld metal analysis</b> (typical, wt %)	<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>Mo</b>
	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

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