

International standards	Material No.:	1.5424
	EN 499 EN 1599	E Mo B 42 H 5
	AWS A 5.5	E7018-A-1

Approvals TÜV, DB, CE

Typical applications and characteristics Basic coated Mo alloy electrode for welding piping-, boiler- and fine grain structural steels. Generally suitable for joint welding of refractory low alloy structural steels up to 460 N/mm² minimum yield strength as well as creep-resistant Mo-steels. Non-ageing weld metal, tough also at low temperature. Hot-crack proof and suitable for service temperatures up to 500°C.

CARBO Mo B should be welded with a short arc, preferably on the + pole; for root layers weld on the – pole with an air gap. Preheating is usually not necessary.

Preheating is recommended when welding steels containing more than 0.22 % C and for sheets thicker than 20 mm.

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

Base materials DIN EN 10025 S235JRG1. S235JRG2. S235JRG3. S275JR. S275J2G3. S460N

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 460

DIN 17172 StE 210. 7 – StE 360.7 TM

DIN 17155 H I. HII. 17 Mn 4. 19 Mn 6. 16 Mo 3

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 +/- 0° C
	600	490	25	> 125

Weld metal analysis (typical, wt %)	C	Si	Mn	Mo
	0.07	0.6	0.9	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	234	935	21.4	5.0	20.0
3.2 x 350	100 - 150	138	552	36.2	5.0	20.0
4.0 x 450	140 - 200	85	340	70.6	6.0	24.0
5.0 x 450	190 - 250	54	218	110.2	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.