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|--------------------------------|---------------|------------------|
| International standards | Material No.: | 1.5424 |
| | EN ISO 3580-A | E Mo B 4 2 H 5 |
| | AWS A 5.5 | E7018-A-1 |
| | (EN 1599) | (E Mo B 4 2 H 5) |

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

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|--|---|--|---------------------------------------|---|
| 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 |

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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.