

CARBO CrMo 5 B

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|-------------------------|--------------|-----------------|
| International standards | Material No. | 1.7373 |
| | EN 1599 | E CrMo5 B 42 H5 |
| | AWS A 5.5 | E 8018-B6 |
| | AWS A 5.4 | E 502-15 |

Approvals ---

Typical applications and characteristics

Basic coated CrMo alloy electrode for welding joints with good mechanical properties to low alloyed quenched and subsequently tempered steels up to 1275 N/mm².

Suitable for welding heat treatable, quenched and subsequently tempered steels as well as for tubes, resistant to caustic embrittlement for working temperatures up to 600°C.

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 | 1.7380 | 10CrMo9-10 | 1.7259 | 26CrMo7 |
| | 1.7375 | 12CrMo9-10 | 1.7273 | 24CrMo10 |
| | 1.7380 | GS-12 CrMo 9 10 | 1.7276 | 10CrMo11 |
| | 1.7379 | GS-18 CrMo 9 10 | 1.7281 | 16CrMo9-3 |
| | 1.8075 | 10CrSiMoV7 | | |

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 energy ISO-V J + 20°C | 1. Annealed 30 min. at 760°C 2. Tempered 30 min. at 950°C, then 30 min. at 760°C |
|--|---|--------------------------------|------------------------------------|---|
| 620 | 490 | > 17 | > 70 | 1. |
| 600 | 500 | > 17 | > 80 | 2. |

Weld metal analysis
(typical, wt %)

| C | Si | Mn | Cr | Mo |
|------|-----|-----|-----|-----|
| 0.06 | 0,5 | 1.0 | 5,1 | 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 | 234 | 935 | 21.4 | 5.0 | 20.0 |
| 3.2 x 350 | 95 - 150 | 138 | 552 | 36.2 | 5.0 | 20.0 |
| 4.0 x 350 | 130 - 190 | 91 | 364 | 54.9 | 5.0 | 20.0 |
| 5.0 x 450 | 150 - 240 | 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.