

CARBO CrMo 5 AC

International standards

| Material No. | 1.7373 |
|-------------------|--------------|
| DIN EN ISO 3580-A | E CrMo5 R 12 |
| AWS A 5.5 | E 8018 |
| AWS A 5.4 | E 502-16 |

Approvals

Typical applications and characteristics

AC-weldable 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.

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/mm² | Yield strength R _{eL} N/mm² | Elonga- tion A ₅ % | Impact energy ISO-V J + 20°C | Annealed 30 min.at 760°C 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 %)

| | JI | IVIII | GI | IVIO |
|------|-----|-------|-----|------|
| 0.06 | 0,7 | 1.0 | 5,1 | 0,5 |

Current

 $=+ (-) \sim /65 \text{ V}$

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 | 279 | 1117 | 17,9 | 5,0 | 20,0 |
| 3,2 x 350 | 95 - 150 | 166 | 662 | 30,2 | 5,0 | 20,0 |
| 4,0 x 350 | 130 - 190 | 109 | 437 | 45,8 | 5,0 | 20,0 |
| 5,0 x 450 | 150 - 240 | 65 | 261 | 92,0 | 6,0 | 24,0 |

Rev. 001/11