

CARBO 4820 AC

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|--------------------------------|--------------|----------------|
| International standards | Material No. | 1.4820 |
| | EN 1600 | E 25 4 R 12 |
| | DIN 8556 | E 25 4 MP R 23 |

Approvals --

Typical applications and characteristics CARBO 4820 AC is an AC-weldable fully core-wire alloyed electrode for fabrication-welding on equal or similar, corrosion and heat-resistant steels and steel-castings.
The weld-deposit is on equal base-material scale-resistant and, by reason of its low nickel-content, resistant against attack of sulphurous gases at higher temperatures up to 1150°C. When welding CARBO 4820 AC low heat-input should be guaranteed as alloys of such chemistry are sensitive to embrittlement at 600-800°C.
The interlayer-temperature must not exceed 300°C.

Operating temperature From room temperature up to + 1150° C

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|-----------------------|--------|--------------|--------|----------------|
| Base materials | 1.4340 | GX40CrNi27-4 | 1.4745 | GX40CrSi23 |
| | 1.4710 | GX30CrSi6 | 1.4746 | X8CrTi25 |
| | 1.4711 | X10CrSi6 | 1.4762 | X10CrAl24 |
| | 1.4722 | X10CrSi13 | 1.4776 | GX40 CrSi29 |
| | 1.4723 | X10 CrAl13 | 1.4821 | X20CrNiSi25-4 |
| | 1.4740 | GX40CrSi17 | 1.4822 | GX40CrNi24-5 |
| | 1.4741 | X2CrAlTi18-2 | 1.4823 | GX40CrNiSi27-4 |
| | 1.4742 | X10CrAl18 | | |

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|---|--|---|-----------------------------------|--------------------|
| Mechanical properties of all-weld metal (typical values) | Tensile strength R_m N/mm² | Yield strength R_{p0,2} N/mm² | Elongation A₅ % | hardness HB |
| | 700 | 500 | 20 | Ca. 180 |

| | | | | | |
|--|----------|-----------|-----------|-----------|-----------|
| Weld metal analysis (typical, wt %) | C | Si | Mn | Cr | Ni |
| | 0,06 | 1,0 | 0,7 | 25 | 4,7 |

Current = + / ~ / 50 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 300 | 60 - 80 | 222 | 889 | 18,0 | 4,0 | 16,0 |
| 3,2 x 350 | 80 - 100 | 145 | 580 | 33,7 | 5,0 | 20,0 |
| 4,0 x 350 | 120 - 150 | 95 | 381 | 52,8 | 5,0 | 20,0 |

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.