CARBO WELD
SCHWEISSMATERIALIEN GMBH

CARBO CrMo 91 B

International standards

DIN EN ISO 3580-A	E CrMo91 B 42 H5
AWS A 5.5	E9015-B9

Approvals ---

Typical applications and characteristics

Basic coated electrode with low hydrogen content for welding high temperature martensitic, creep resistant 9-12 % chromium steels such as P91 and T91 in all positions except vertical down.
The deposits have good toughness properties even under long term stresses and high creep rupture strength.
Preheating and interpass temperature 250-350°C, after welding annealing 750°C/> 2h.

Operating temperature Room temperature up to + 650 °C

Base materials

1.4904 X10CrMoVNb9-1
1.7386 X12CrMo9-1
1.7389 GX12CrMo10-1

Mechanical properties of all-weld metal (typical values)

Tensile strength R_m N/mm²	Yield strength R_{eL} N/mm²	Elongation A_5 %	Impact energy ISO–V J + 20°C
760	650	> 17	> 70

Weld metal analysis (typical, wt %)

C	Si	Mn	Cr	Mo	Ni	V	Nb	N
0,1	0,35	0,8	9,0	1,0	0,7	0,2	0,05	0,04

Current =+

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

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