CARBO WELD
SCHWEISSMATERIALIEN GMBH

CARBO 4122 B

International standards

Material No.	1.4122
EN ISO 3581-A	E 17 1 B 22
DIN 8555	E 6-UM-50-CP

Approvals ---

Characteristics and typical applications

CARBO 4122 B is a basic coated electrode for plating and joining equal and similar ferritic Cr-steels and cast steels. Proper weldings are subject to the recommended heat treatment.
The electrode is specially suitable for sealing surfaces on water-, steam- and gas-valves for working temperatures up to 475 °C.
The deposit is scale resistant up to 800°C and can be tempered.

Operating temperature Room temperature up to 500° C

Base materials 1.4122 X35CrMo17

Recommendations for fabrication

Since ferritic steels tend to embrittlement caused by coarse grain development the heat input should be as low as possible.
For hardfacing on low alloyed base materials a preheating of 150^C-350°C subject to the thickness (on materials with higher strength 350°C) should be done.
Post weld treatment is not necessary but quench hardening to the desired hardness may be applied.

Mechanical properties of all-weld metal (typical values)

Tensile strength R_m N/mm²	**Yield strength $R_{p0,2}$ N/mm²**	**Elongation A_5 %**	**Hardness as welded HRc**
800	600	12	ca. 48

Weld metal analysis % (typical)

C	Si	Mn	Cr	Mo	Ni
0,35	0,5	0,5	16	1,1	+

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 300	50 - 80				4,0	16,0
3,2 x 350	80 – 110			29,7	5,0	20,0
4,0 x 350	100 – 160			45,0	5,0	20,0
5,0 x 450	150 – 200			90,3	6,0	24,0

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