CARBO 4115 B

International standards

Material No.	1.4115
EN ISO 3581-A	E 17 Mo B 22
DIN 8555	E6-UM-200-PR

Approvals ---

Characteristics and typical applications

CARBO 4115 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, especially for sulphuric gases
The deposit is resistant to seawater, thin acids and scale resistant in air an oxidizing gases up to 950°C .
The deposits can be tempered.

Operating temperature Room temperature up to 450° C

Base materials 1.4122 (G)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 HB 30	Hardness HRc annealed
700	500	15	ca. 200	ca.43

Weld metal analysis % (typical)

C	Si	Mn	Cr	Mo
0,2	< 0,5	0,7	16	1,2

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	50 – 80	263	1053	15,2	4,0	16,0
3,2 x 350	80 – 110	167	667	30,0	5,0	20,0
4,0 x 350	100 – 160	110	440	45,5	5,0	20,0
5,0 x 450	150 – 200	66	263	91,3	6,0	24,0

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