

CARBO 4115 B

International standards	Material No.	1.4115
	EN 1600	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/mm ²	Yield strength R _{p0,2} N/mm ²	Elongation A ₅ %	Hardness	
	700	500	15	HB 30	HRc annealed
				ca. 200	ca.43

Weld metal analysis % (typical)	C	Si	Mn	Cr	Mo
	0,2	0,7	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

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.