

## CARBO CrMo 1 B

International standards	Material nu	Imber	1.7346				
	DIN EN ISC	O 3580-A	E CrMo1 B	12 H5			
	AWS A 5.5		E 8018-B2				
Approvals	TÜV, DB, C	CE					
Typical applications and characteristics	Basic coated CrMo alloy electrode for welding high-strength joints on low alloy tempered steels of up to 880 N /mm <sup>2</sup> . Suitable for welding creep-resistant CrMo steels in boiler and piping system construction. Resistant to high temperatures up to 500°C. Non-ageing welding deposit, resistant to alkaline solutions, heat- treatable and case-harden able. The electrode should be welded with a short arc, preferably on the + pole; for root layers weld on the – pole with an air gap. Preheating and post weld heat treatment of base materials to be carried out acc. to the steel manufacturer's instructions.						
Operating temperature	Room temp	perature up	to + 500° C				
Base materials	1.7218 25	7218 25 CrMo 4 1.7218 GS- 25 CrMo 4					
	1.7262 15	7262 15 CrMo 5 1.7321 GS- 20 MoCr 4					
	1.7321 20 MoCr 4 1.7354 GS- 22 CrMo 5 4						
	1.7321 20	INIOCT 4		1.7354 G	S- 22 CrMo 5 4		
	1.7335 13			1.7354 G	S- 22 CrMo 5 4		
				1.7354 G	S- 22 CrMo 5 4		
Mechanical properties	1.7335 13	S CrMo 4 4	Elongation	Impact	1 Annealed 30 min. 720°C		
of all-weld metal	1.7335 13 Tensile strength	S CrMo 4 4 Yield strength	Elongation	Impact strength	1 Annealed 30 min. 720°C 2.Tempered 30 min. 930°C		
	1.7335 13 <b>Tensile</b> <b>strength</b> R <sub>m</sub> N/mm <sup>2</sup>	Yield strength R <sub>eL</sub> N/mm <sup>2</sup>	A <sub>5</sub> %	Impact strength ISO–V J	1 Annealed 30 min. 720°C 2.Tempered 30 min. 930°C then 30 min 720°C		
of all-weld metal	1.7335 13 <b>Tensile</b> <b>strength</b> R <sub>m</sub> N/mm <sup>2</sup> 640	Yield strength R <sub>eL</sub> N/mm <sup>2</sup> 500	<b>A</b> <sub>5</sub> %	Impact strength ISO–V J 90	1 Annealed 30 min. 720°C 2.Tempered 30 min. 930°C then 30 min 720°C 1.		
of all-weld metal	1.7335 13 <b>Tensile</b> <b>strength</b> R <sub>m</sub> N/mm <sup>2</sup>	Yield strength R <sub>eL</sub> N/mm <sup>2</sup>	A <sub>5</sub> %	Impact strength ISO–V J	1 Annealed 30 min. 720°C 2.Tempered 30 min. 930°C then 30 min 720°C		

Weld metal analysis	С	Si	Mn	Cr	Мо
(typical, wt %)	0.07	0.7	0.9	1.1	0.5

**Current** = +(-) / ~ 65 V

Welding positions PA, PB, PC, PD, PE, PF,

Rebaking

1 h.  $350 \degree C + / - 10 \degree C$  (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
5,0 x 450	150 - 240	54	218	110,2	6,0	24,0

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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.