

CARBODUR 650

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Standards	DIN 8555	E 6- UM - 60 GP						
	DIN EN 14700	E Fe6						
Approvals								
Characteristics	CARBODUR 650 is an AC-weldable universal hard surfacing electrode with 120 % recovery for rebuilding of machine parts subject to combined wear from abrasion and impact. Suitable for deposits on mild steel, steel castings and manganese steel. The pure weld deposit is only machinable by grinding. The electrode has a soft but intensive welding character, a fine-structured seam surface and excellent slag-removal properties. On high-carbon and crack-sensitive base materials, should be preheated to 200° – 300° C, depending on their composition and thickness. On highly crack-sensitive base materials and manganese steel, a buffer layer of CARBO 4370 MPR or CARBODUR MnCr is recommended.							
Typical applications	Rollers, dredger chains, conveyors, hammers, dredger equipment, mining and earth-moving equipment							
Operating temperature								
Welding instructions	Guide electrode almos	t vertically with a short are	с.					
Welding instructions Hardness and recommendations	Guide electrode almos HRc as welded	t vertically with a short are Annealing: 5 h	c. Hardening oil - air					
Hardness and	HRc	Annealing:	Hardening					
Hardness and recommendations for heat treatment Weld metal analysis	HRc as welded ca. 59 C Si Mn	Annealing: 5 h	Hardening oil - air					
Hardness and recommendations for heat treatment	HRc as welded ca. 59	Annealing: 5 h 780°C – 820° C	Hardening oil - air					
Hardness and recommendations for heat treatment Weld metal analysis	HRc as welded ca. 59 C Si Mn	Annealing: 5 h 780°C – 820° C Cr	Hardening oil - air					
Hardness and recommendations for heat treatment Weld metal analysis (typical. wt %)	HRc as welded ca. 59 C Si Mn 0,45 1,75 0,4	Annealing: 5 h 780°C – 820° C Cr	Hardening oil - air					
Hardness and recommendations for heat treatment Weld metal analysis (typical. wt %) Current	HRc as welded ca. 59 C Si Mn 0,45 1,75 0,4 = + / ~ 50 V PA. PB. PC. PD. PE	Annealing: 5 h 780°C – 820° C Cr	Hardening oil - air					
Hardness and recommendations for heat treatment Weld metal analysis (typical. wt %) Current Welding positions	HRc as welded ca. 59 C Si Mn 0,45 1,75 0,4 = + / ~ 50 V PA. PB. PC. PD. PE	Annealing: 5 h 780°C – 820° C Cr 9	Hardening oil - air					

Dia./Length	Amperage (A)	Pcs./ packet	Pcs./ carton	kg / 1000	kg / packet	kg / carton
2,5 x 350	80 – 100	167	667	30,0	5,0	20,0
3,2 x 350	110 - 160	99	394	50,7	5,0	20,0
4,0 x 450	150 - 200	61	243	98,8	6,0	24,0
5,0 x 450	160 - 240	39	156	154,3	6,0	24,0

Rev. 001/12

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.