

<b>Standards</b>	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 almost vertically with a short arc.

<b>Hardness and recommendations for heat treatment</b>	<b>HRc as welded</b>	<b>Annealing: 5 h</b>	<b>Hardening oil - air</b>
	ca. 59	780°C – 820° C	1000°C – 1050° C

<b>Weld metal analysis (typical. wt %)</b>	<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>Cr</b>
	0,45	1,75	0,4	9

**Current** = + / ~ 50 V

**Welding positions** PA. PB. PC. PD. PE

**Rebaking** 1 h. 350 °C + (if required)

**Flux-cored wire equivalent** CARBO F- 600

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

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