

International standards	AWS A5.13	ECoCr-A
	DIN 8555	E 20-UM-40-CTZ

Approvals ---

Characteristics CARBO S 6 is an AC-weldable hardfacing electrode with an alloyed core and a recovery of 160%. The deposit is a cobalt base alloy of austenitic-ledgeburitic structure with embedded CrW carbides. The weld metal is highly resistant to corrosion, impact, abrasive wear as well as thermal shocks and heavy mechanical impact. Good aptitude for polishing and machining.

Welding instructions Working temperature should be kept between 400° and 600°C, depending on base material and type of construction. Slow cooling, if necessary oven cooling, is recommended for low alloyed and austenitic steels. Subsequent heat treatment (stress relief at 700°C approx.) is not necessary, except on large structures.

Operating temperature From room temperature up to + 600° C

Typical applications Due to its above-mentioned characteristics CARBO S 6 is particularly recommended for use on steam valves, hot shear blades, hot pressing dies, pumps for high-temperature liquids, etc.

Mechanical properties of all-weld metal (typical values)	At Rt. HRc	+ 300°C HRc	+ 600°C HRc	Melting- range °C	Density g/cm³
	ca. 42	ca. 35	ca. 29	1280-1390	8,3

Weld metal analysis (typical, wt. %)	C	Si	Mn	Cr	W	Fe	Co	Others
	1	0,9	1	28	4,5	3	Base	< 3

Current = + / ~ 42 V

Welding positions PA, PB, PC

Rebaking 1 h, 350 +/- 10 °C (if required)

Flux-cored wire equivalent CARBO F- S 6

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
2,5 x 350	50 - 60	145	580	34,5	5,0	20,0
3,2 x 350	90 - 130	84	336	59,5	5,0	20,0
4,0 x 350	120 - 170	62	247	81,0	5,0	20,0
5,0 x 350	150 - 200	38	152	131,2	5,0	20,0

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.