

**Standards**                      DIN 8555                      E 20-UM-300-CKTZ

**Approvals**                      ---

**Characteristics**                      AC-weldable hardfacing electrode with an alloyed core and a recovery of 160 %. The deposit is a cobalt base alloy of high tenacity as well as extreme corrosion- and heat resistance. The weld metal is highly resistant to impact and is work-hardening up to 45 HRC. 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 + 300° C

**Typical applications**                      Due to its above-mentioned characteristics CARBO S 21 is particularly recommended for use on all work pieces which are subject to corrosion, impact wear as well as high temperatures or thermal shocks.

Hardness of all-weld metal ( typical values )	At Rt.	+ 300°C	work hardened	Melting-point	Density
	HRC	HB	HRC	g/cm <sup>3</sup>	
	ca. 30	ca. 280	ca. 45	1250°C	8,3

Weld metal analysis (typical, wt. %)	C	Si	Mn	Cr	Mo	Ni	Co	Fe
		0,3	0,9	1	28	5,5	3	Base

**Current**    = + / ~ 42 V

**Welding positions**    PA, PB, PC

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

**Flux-cored wire equivalent**    CARBO F- S 21

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

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