

CARBO S 12

International standards

AWS A5.13	ECoCr-B		
DIN 8555	E 20-UM-50-CTZ		

Approvals

Characteristics

AC-weldable hardfacing electrode with an alloyed core and a recovery of 160 %. The deposit is a cobalt base alloy of austenitic-ledeburitic 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.

.The deposit is only machinable by hard faced tools.

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

Hardfacing of cutting edges of long knifes and other tools used in the wood, plastic, paper, carpet and chemical industry.

Mechanical properties of all-weld metal (typical values)

At Rt.	+ 300°C	+ 600°C	Melting-	Density
HRc	HRc	HRc	range °C	g/cm³
ca. 48	ca. 37	ca. 32	1280-1320°C	8,7

Weld metal analysis (typical, wt. %)

С	Si	Mn	Cr	W	Fe	Со	Others
1,4	1	1	287	8,5	3	Base	< 3

Current

 $= + / \sim 42 \text{ V}$

Welding positions

PA, PB, PC

Rebaking

1 h, $350 + / - 10 \,^{\circ}\text{C}$ (if required)

Flux-cored wire equivalent

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Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
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

Recv. 000