

CARBO TS 1

International standards

AWS A5.13	E CoCr-C		
DIN 8555	WS / G 20-UM-55-CTZ		

Approvals

Characteristics

CARBO TS 1 is a bare cobalt base rod for TIC-welding. The deposit is a cobalt base alloy of austenitic-ledeburitic structure with embedded CrW

carbides. It is the hardest of the standard Cobalt base alloys.

The weld metal is highly resistant to corrosion, impact, abrasive wear as

well as thermal shocks and heavy mechanical impact.

The deposits are only machinable by grinding

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 + 1000° C

Typical applications

Wear pads, rotary seal rings, pump sleeves, centre less grinder work rests

Mechanical properties of all-weld metal (typical values)

At Rt.	+ 600°C	+ 800°C	Melting-	Density
HRc	HRc	HRc	range °C	g/cm³
ca. 55	ca.44	ca. 34	1250-1290	8,7

Weld metal analysis

(typical, wt. %)

С	Si	Mn	Cr	W	Fe	Co	Others
2,2	1,2	1	30	12,5	3	Base	< 3

Current

= -

Welding positions

PA, PB, PC, PD, PE, PF

Gas types EN 439

I 1: Argon

Flux-cored wire equivalent

CARBO F- S1

Dia./Length	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
3,2 x 350	200	800	25,0	5,0	20,0
4,0 x 350	147	588	34,0	5,0	20,0
5,0 x 350	91	363	55,1	5,0	20,0

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