

<b>International standards</b>	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

<b>Mechanical properties of all-weld metal</b> ( typical values )	<b>At Rt. HRc</b>	<b>+ 600°C HRc</b>	<b>+ 800°C HRc</b>	<b>Melting- range °C</b>	<b>Density g/cm<sup>3</sup></b>
	ca. 55	ca.44	ca. 34	1250-1290	8,7

<b>Weld metal analysis</b> (typical, wt. %)	<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>Cr</b>	<b>W</b>	<b>Fe</b>	<b>Co</b>	<b>Others</b>
	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- S 1

<b>Dia./Length</b>	<b>Pcs./packet</b>	<b>Pcs./carton</b>	<b>kg/1000</b>	<b>kg/packet</b>	<b>kg/carton</b>
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