CARBO TS 12

International standards

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

Approvals ---

Characteristics

CARBO TS 12 is a bare rod for TIG welding.
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. HRc	+ 300°C HRc	+ 600°C HRc	Melting-range °C	Density g/cm³
ca. 48	ca. 37	ca. 32	1280-1320°C	8,7

Weld metal analysis (typical, wt. %)

C	Si	Mn	Cr	W	Fe	Co	Others
1,4	1	1	287	8,5	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 12

Dia./Length	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
2,5 x 350	333	1333	15,0	5,0	20,0
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	78,7	5,0	20,0