

CARBO F-S 25



DIN EN 14700

T ZCo 1-300-CKTZ

General characteristics

CARBO F-S 25 deposits a cobalt-based alloy with an austenitic structure. This alloy contains approximately 10 % nickel for matrix stability during elevated temperature service. It is resistant to hot corrosion, impact, wear and extreme temperature shocks and oxidation. The alloy is machinable by hard faced tools. CARBO F-S 25 is used for gas turbine components, on steam and chemical valves and on equipment handling hot steel, such as tong bits, shear blades, pumps for high temperature liquids.

Working temperature from room temperature up to +900°C

Typical applications

Hot forging tools, aerospace industry, turbo charger buckets, parts subject to high operating temperatures in combination with all types of wear such as impact, pressure, corrosion, erosion.

Weld metal analysis (typical, wt %)

	C	Si	Mn	Cr	Co	W	Ni	Fe		
Gew-%	0,1	0,9	1,0	20,0	Basis	15,0	10,0	<3,0		

Mechanical properties of all-weld metal (typical values)

Meltingrange:	1300°C	Hardness at Rt.	ca. 285 HB
Density g/cm ³ :	8,3	Hardness at +300°C	ca. 140 HB
		Hardness after work hardend	ca. 45 HRC

Operating data

Current: =+

Gas typs EN ISO 14175: M13: 99% Argon with 1% Oxygen

Dia (mm)	DIA (inch)	Volt	Amps	Delivering form
1,2	3/64	16 - 23	80 - 20	G *
1,6	1/16	18 - 27	100 - 260	G *
2,0	4/64	19 - 28	120 - 320	G *
2,4	3/32	19 - 29	160 - 380	G *
2,8	7/64	20 - 30	180 - 400	S *

Delivering form

O * = gasless (open arc), G * = gas shielded, S * = Submerged Arc

Coil "BS 300" = 15 kg

Coil "BS 450" = 25 kg

Drums = 300 kg

Statements on composition and application are just for the appliers information. Statements on mechanical properties always refer to the all-weld-metal according to valid standards. Carbo-Weld may change the characteristics of its products without notice. We recommend the applier to check our products for their special application autonomously.