CARBO WELD
SCHWEISSMATERIALIEN GMBH

CARBO F-S 306

Standards

DIN 8555	MF 20-GF-35-CTZ

Characteristics

CARBO F-S 306 deposits a cobalt-based alloy with an austenitic, ledeburitic structure, bearing Cr- + Nb- + W-carbides. The alloy has a high mechanical loading capacity. Apart from strong corrosion, abrasion and impact load it also withstands extreme temperature changes as well as metal-to-metal friction. Due to its high ductility the weld deposit is machinable with hard metal tools. The alloy can be applied crack-free.

Typical applications

Hot forging tools, hot galvanizing tools, high temperature fluid pumps, hot shearing knives, hot pressing dies, steam valves.

Working temperature

From room temperature up to + 800° C

Hardness of all-weld metal
(typical values **)**

HRc 20 ° C	HB 200 ° C	HB 400 ° C	HB 600 ° C	HB 800 ° C
36 – 38	280	220	180	110

Weld metal analysis
(typical, wt. %)

C	Si	Mn	Cr	Ni	Mo	Co	Nb	W	Fe
0,6	1,3	1	25	5,5	0,5	Base	7	2,7	< 5

Gas types EN 439

M13: 99% Argon with 1% Oxygen

Current

= +

Current intensity

DIA (mm)	DIA (inch)	Volt	Amps	Delivering form
1,2	3/64	16 – 23	80 - 200	
1,6	1/16	18 – 27	100 - 260	
2,0	5/64	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 = **Flux cored wire self shielding**
G = **Flux cored wire for shielded arc welding**
S = **Flux cored wire for submerged arc welding**

Coils, weight

B/BS 300 = 15 kg B 450 = 30 kg pay off pack = 150 / 300 kg

Rev. 000