CARBO F-4351

Standards

Material No.	1.4351
EN 1600	E 13 4
AWS A 5.4	E410NiMo
DIN 8555	MF5-GF-400-KRTZ

Characteristics and typical applications

CARBO F-4351 is a tubular wire for plating and joining equal and similar ferritic Cr-steels and cast steels.
The alloy is highly suitable for welding on tough, corrosion resistant continuous-cast rolls and also wear parts from the steel industry and Large machinery. Apart from corrosion resistance, it also has a further capability in protecting against cavitation and erosion.

Typical applications

Bridge store; depositions to thick areas of water, steam and gas fittings for operating temperatures to 450° C; rope pouring roles; on alloying buffer layers

Base materials

1.4008 GX8CrNI13 1.4313 X4CrNi13-4 1.4313 GX5CrNi13-4

Recommendations for fabrication

Preheating and heat treatments as necessary for ferritic Cr-steels are not necessary

Mechanical properties of all-weld metal (typical values)

Tensile strength R_m N/mm²	Yield strength $R_{p0,2}$ N/mm²	Elongation A_5 %	Impact strength ISO – V J + 20°C	Hardness HB
1100	700	15	> 40	ca. 410

Weld metal analysis (typical, wt %)

C	Si	Mn	Cr	Ni	Mo
0,06	0,7	0,6	13	4,5	0,5

Gas types EN 439

I1, M13: Argon and 99% Argon with 1% Oxygen

Current

= +

Current intensity

DIA (mm)	DIA (inch)	Volt	Amps	Delivering form		
1,2	3/64	19 - 22	120 - 220			
1,6	1/16	20 - 26	160 - 260	**O**	**G**	
2,0	5/64	22 - 27	220 - 280	**O**	**G**	
2,4	3/32	24 - 28	260 - 340	**O**	**G**	
2,8	7/64	25 - 29	300 - 400	**O**		**S**
3,2	1 / 8	26 - 30	320 - 460			**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