

Standards

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

Characteristics and typical applications

CARBO F-4351 N 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, erosion and also capable of resisting pitting.

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/mm ²	Yield strength R _{p0,2} N/mm ²	Elongation A ₅ %	Impact strength ISO – V J + 20°C	Hardness HB
1100	700	15	> 40	300-600

Weld metal analysis (typical, wt. %)

C	Si	Mn	Cr	Ni	Mo	N
0,06	0,7	0,6	13	4,5	0,5	0,2

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	G	
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

Statements on composition and application are just for the applier's 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.