

Standards

Material No.	1.3912
DIN 17006	Ni 36

Characteristics

CARBO F-NiFe 36 is a nickel alloyed tubular wire. The content of 36 % Ni is significant, because at this Ni content an iron alloy has the lowest possible thermal expansion rate. Steel with this composition does not extent up to 200°C. This physical property makes the alloy suitable for the welding of cast iron parts and all applications where tension of shrinkage should be avoided.

Typical applications

Cast iron parts, cast steel
The weld deposit contains approximately 60% Ni and 40% Fe. It is machinable. Used for joining and repairing nearly all types of cast iron.

Welding instructions

Thoroughly clean the surface of the work-piece. When welding on cast iron, heat input should as low as possible (low amperage). To limit internal stress of the base metal, hammering of the beads is recommended after each pass.

Mechanical properties of all-weld metal (typical values)

Hardness HB
ca. 150

Weld metal analysis (typical, wt. %)

C	Si	Mn	Ni	Fe
0,1	0,4	2,5	35-37	Balance

Gas types EN 439

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

Current

= +

Current intensity

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

Delivering form

G = Flux cored wire for shielded 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.