



SELECTARC Ferro-Ni

Ferro Nickel Electrode

Classification

AWS A 5.15 : ENiFe - Cl

DIN 8573

: E NiFe- 1 BG 13

ISO 1071 : E C NiFe - Cl 3

Characteristics

Graphite basic coated electrode with a Fe-Ni alloy deposit for joining and repairing nodular cast iron. Deposit is homogeneous and highly resistant against cracks. Particularly recommended for dissimilar welding of cast iron to steels and cast iron construction. Good bonding and flow of the weld metal.

Applications

Welding of defects in Foundries, Repairing of Engine blocks, Houses of tool machines, Gearbox, Reducing parts, Pump bodies, Cast pieces, Valve bodies. Welding of Grey cast iron, Malleable and Nodular cast iron.

Base materials

ASTM	DIN	NFA
A 48 class 25B to 60B	GG-15 to GG-40	FGL 150 to FGL 400
A536 Grade 60-80	GGG - 40 to GGG - 60	FGS 400 -12 to FGS 600 -3
	GTS - 35 to GTS - 65	MN350 - 10 to MN650 -3

Typical Weld Metal Composition (%)

C	Si	Mn	Ni	Cu	S	Al	Fe
1.00	1.80	0.65	57.00	0.10	0.018	0.09	base

All Weld Metal Mechanical Properties (Typical)

Conditions	UTS R _m (MPa)	Hardness (HB) AW
AW	410	210

Welding Current & Instructions

Electrode	ØxL (mm)	2.5 x 350	3.2 x 350	4.0 x 350	5.0 x 350
Current	(A)	60 - 70	90 - 100	130 - 150	160 - 170

Clean the weld area and free from grease (previous grinding of the joint). Apply a heat input to a minimum, weld with the lowest practical amperage. Keep the temperature low (<100°C), in order to reduce the risk of cracks in the base metal. Deposit short beads of about 6 cm and peen immediately. Restrike the electrode on the weld metal. Maintain Interpass temperature : < 100°C.



1G/PA



2F/PB



2G/PC



3G/PF



3G/PG



4G/PE

= + ~ 40 V

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