Selectarc Bimetal-NiFe

"Bimetal" Electrode
For Cast Iron Welding

Classification

AWS A 5.15 : ENiFe-CI
ISO 1071 : E C NiFe-CI 3
DIN 8573 : E NiFe-1 BG 21

Description & Applications

Graphite-basic coating and «Bimetal» core wire with high electrical conductivity. The «Bimetal» core wire authorises very important fusion speeds with direct current as well as with alternative current without any risk of overheating the electrode (phenomenon often noticed with conventional Ferro-Nickel electrodes)

Main applications: For repair and construction welding on all cast iron types and dissimilar joints between cast iron and steels.

Base materials

Grey cast iron, malleable and nodular cast iron :

ASTM	DIN	NFA
A48 Class 25B-60B	GG-15 to GG-40	FGL 150 to FGL 400
A536 Grade 60-100	GGG-40 to GGG-70	FGS 400-12 to FGS 700-3
	GTS-35 to GTS-65	MN 350-10 to MN 650-3
A439 Type D-2	GGG-NiCr20-2	S-NC20-2

Typical Weld Metal Composition (%)

C	Si	Mn	Ni	Fe
1.3	0.8	0.3	55.0	Rem.

All Weld Metal Mechanical Properties

$R_{p0,2}$ (MPa)	R_m (MPa)	A_5 (%)	Hardness
>300	500-600	>15	Approx. 190 HB

Welding Current & Instructions

Electrode	ØxL (mm)	2,5x350	3,2x350	4,0x350
Current	(A)	80	120	145

Alternative current favours the welding in all positions. The polarity + is essentially reserved when an important deposit speed on large chamfers is searched, or on areas with difficult access (reduced visibility of the joint). For some applications, it's recommended to depose short beads followed by immediate hammering to release stresses.

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