Selectarc Fonte Fe3

Cast Iron Electrode
For hot welding

Classification

AWS A 5.15 : "ECI-B"
ISO 1071 : E C FeC-GF 3

DIN 8573 : E FeC-G-BG 42

Description & Applications

Graphite basic coated electrode for hot welding nodular cast iron with a colour and structure matching deposit. Stable arc, can weld over hot slag, good bonding and flow of the weld metal.

Main applications: Used to weld defects in foundries.

Base materials

Nodular cast iron:

ASTM	DIN	NFA
A536 Grade 60-40-28	GGG-40	FGS 400-12
	GGG-40.3	FGS 370-17
	GGG-50	FGS 500-7
A536 Grade 80-55-06	GGG-60	FGS 600-3
A536 Grade 100-70-03	GGG-70	FGS 700-2

Typical Weld Metal Composition (%)

C	Si	Mn	Fe
3.0	3.2	0.3	Rem.

All Weld Metal Mechanical Properties

$R_{p0,2}$ (MPa)	R_m (MPa)	A_5 (%)	Hardness
320	450	15	220 HB

After PWHT 900℃/2h + 700℃/4h

Welding Current & Instructions

Electrode	ØxL (mm)	3,2x350	4,0x450	5,0x450	6,0x450
Current	(A)	110	150	180	250

Prepare the casting defect to be repaired, preheat the piece to 550-650℃, keep this temperature durin g welding, use a current as high as possible, without overheating the electrode. Assure that sufficient base metal is melted to get a good bonding. When welding over the hot slag don't move to fast with the arc to avoid trapped slag. After welding a PWHT, 2h at 900℃ followed by 4h at 700℃ and slow cooling in the furnace, insures a colour matching deposit and a regular hardness, even in the heat affected zone.

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