


Technical data sheet <small>011121MBA</small>	Coated SMAW Electrode WA CAST BI-NIFE-E	
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CLASSIFICATION

EN ISO 1071: E C NiFe-Cl 3
ASME IIC SFA 5.15 / AWS A 5.15: E NiFe-Cl

DESCRIPTION

- Basic coated SMAW electrode with a bimetallic ferro-nickel core wire
- Designed for welding grey, malleable, nodular and phosphorus cast iron.
- Suitable for highly restrained or thick-walled pieces
- Preheat is not necessary. Heat input is low which favours limited heat affected zone
- Easily machinable deposit
- Excellent weldability and good mechanical properties
- Complements Welding Alloys cored wire CAST NIFE

APPLICATIONS

- Joining and surfacing highly restrained spheroidal graphite cast iron, grey cast iron and malleable cast iron pieces.
- Also used to for dissimilar welds between cast iron and steel.
- Casings for pumps and valves, frames, machining errors on castings, crushers, gear housing etc.

Lamellar grey cast irons EN-GJL-100 to EN-GJL-350
Malleable cast irons EN-GJMB-350-10 to 650-2
Nodular cast irons EN-GJS-400-15 to EN-GJS-800-2

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Ni	Fe
1.3	0.3	0.8	55	Bal.

MINIMUM ALL-WELD MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	Hardness [HB]
350	250	6	165

TYPICAL ALL-WELD MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	Hardness [HB]
550	350	20	190

OPERATING CONDITIONS

Electrode ØxL [mm]	3.2 x 350	3.2 x 350	4.0 x 350
Current [A]	60 - 90	90 - 140	100 - 170
= -	~ 50V		

Alternating current favours welding in all positions.

Negative polarity is best reserved for applications involving high deposit rates on wide bevel joints or where access is difficult or visibility reduced.

For some applications, short beads should be welded and immediately peened to relieve internal stresses.

WELDING POSITIONS

EN ISO 6947: PA, PB, PC, PF, PD, PE
ASME IX: 1G, 1F, 2G, 2F, 3F, 3G, 4F, 4G

PACKAGING

Electrode ØxL [mm]	2.5 x 350	3.2 x 350	4.0 x 350
Weight/box [kg]	5	5	5
Electrodes/box	~250	~147	~104

Other packaging and other sizes: please contact us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.