

**Technical data sheet**

011121MBA

**Cored welding wire  
CAST NIFE-G****CLASSIFICATION**

EN ISO 1071: T C Z NiFe-1 M

**DESCRIPTION**

- Metal cored wire for semi-automatic gas shielded metal arc welding.
- Designed for welding grey, malleable, nodular and phosphorus cast iron.
- Welding of highly restrained or thick-walled pieces
- Preheat is not necessary
- Low heat input favours limited heat affected zone

**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.

**Examples**

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
0.5	2.5	0.5	60	Bal.

**MINIMUM ALL-WELD MECHANICAL PROPERTIES**

Rm [MPa]	Rp0.2%[MPa]	As [%]
420	290	6

**TYPICAL ALL-WELD MECHANICAL PROPERTIES**

Rm [MPa]	Rp0.2%[MPa]	As [%]
470	350	15

Typical weld metal hardness: 180-200 HB

**SHIELDING GAS**

EN ISO 14175: M13 (Ar + 1 - 5% O<sub>2</sub>)  
 M12 (Ar + 0.5 - 2.5% CO<sub>2</sub>)  
 M21 (Ar + 15 - 25% CO<sub>2</sub>)

**OPERATING CONDITIONS**

Diameter [mm]	Current type	Current [A]	Voltage [V]	Stick-out [mm]	Gas flow [l/min]
1.2	DC+	80 - 200	17 - 25	12 - 25	10 - 20
1.6	DC+	90 - 250	18 - 27	12 - 25	10 - 20

Recovery: 98 %

For fillet welds, the best bead appearance is obtained by pushing the torch at an angle of 60-70° to the axis of the joint. Pulsed current optimises welding performance over a wide range of parameters with minimum heat input and also facilitates positional work.

**WELDING POSITIONS**

EN ISO 6947: PA, PB  
 ASME IX: 1G, 1F, 2F

**PACKAGING**

Diameter	1.2 mm	1.6 mm
Standard packaging	EN ISO 544 / ASME IIC SFA 5.2M: BS300 spool	
Weight	15 kg	

Other packaging and other diameters: 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.