

Technical data sheet 210716	Cored welding wire CAST NIFE-G	
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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. Heat input is low which 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]	A5 [%]
420	290	6

TYPICAL ALL-WELD MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2%[MPa]	A5 [%]
470	350	15

Typical weld metal hardness: 180-200 HB

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 multiple pass welding in the flat or downhand position, the best penetration is obtained by pulling the torch at an angle of 70-80° to the axis of the joint.

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.

SHIELDING GAS

ISO 14175: M13 (Ar + 1 - 5% O₂)
M12 (Ar + 0.5 - 2.5% CO₂)
M21 (Ar + 15 - 25% CO₂)

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.