CARBO ◆ WELD
SCHWEISSMATERIALIEN GMBH

CARBO NiFe 55

International standards	DIN 8573	E NiFe-1 – BG 11
	AWS A 5.15	ENiFe-CI

Approvals   ---

Typical applications and characteristics

Basic-graphite special coated electrode with a recovery of 160 %.
Suitable for joining and repairing all types of grey cast iron, also for joining cast iron with steel, but especially for the repair of big parts.
The weld metal alloy essentially contains 55 % Ni and + 45 % Fe.
This electrode excels by very high crack-resistance and high tensile-strength of the weld metal. Even in refined zones the seam is still machinable.

Operating temperature   same as base material

Welding instructions/ Base materials

Thoroughly clean the surface of the work-piece make sure it is exempt from grease (previous grinding). When welding on cast iron, heat input should as low as possible (low amperage). The bead must not be wider than twice the core wire diameter and not be longer than ten times the core wire diameter. To limit internal stress of the base metal, peening of the beads is recommended after each pass.
On principle, "CARBO NiFe 55" should be welded on DC +. This is particularly important for crack-sensitive base materials in order to keep heat input as low as possible.
Welding on DC – or AC is possible but not recommended for all applications.

Weld metal analysis (typical, wt. %)

C	Si	Mn	Ni	Fe
1	1	1	46-50	Rest

Current   = + / - , ~ / 50 V

Welding positions   PA, PB,

Rebaking   1 h, 120 °C + / - 10 °C (if required)

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000	kg/ packet	kg/ carton
2,5 x 300	55 - 60				5,0	20,0
3,2 x 350	60 - 80				5,0	20,0
4,0 x 350	90 - 120				5,0	20,0
5,0 x 450	120 - 140				6,0	24,0

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