



"ELECTRODES" JSC Ihtiman

E - NiFe

Classification	BSS :	EN :
	DIN 8573-83 : E NiFe - BG 2+	AWS A 5.15 : E NiFe - Cl

Typical application and characteristics:

1. A medium coated electrode with basic-graphite coating and Fe-Ni core for welding and hardfacing gray cast iron with lamellar and spheroidal graphite without preheat. At "cold" welding of cast iron, low heat input is recommended (small electrode diameter, low current and no oscillations). Short weld seams are recommended (25-30 mm or 10xØ of the electrode). Immediately after deposition the weld seam should be uniformly hammered. Deposition of the next layer should be done after cooling the weld neighbor zone down to 50-60°C.

2. The FeNi type alloying provides the lowest tendency to crack-formation. When welding thick sections, preheating to 150°C - 300°C is advisable in order to minimize the probability of cracking. Optimal mechanical properties (closest to these of the base metal) are ensured by preheating above 300°C.

Welded materials:

Repairing welding of machine parts from gray cast iron.

Typical weld metal composition %	C	Ni	Fe
	1,00	53,00	Ocr.

Mechanical properties of all-weld metal:

< 250 HB 165 typical
Rm [N/mm²] ≥ 350

Welding parameters:	DC (+)				
	Ø [mm]	2,50	3,20	4,00	5,00
	I [A]	50 - 80	80 - 100	90 - 120	120 - 150

Size, Net weight, Packing data:	Diameter [mm]	2,50	3,20	4,00	5,00
	Length [mm]	250	350	350	350
	Weight per box [kg]	5,0 (1,0)	6,0 (1,0)	6,0 (1,0)	6,0 (1,0)
	Weight per cardbox [kg]	25 (16)	25 (16)	30 (16)	30 (16)
	Number of electrodes per box	433 (93)	214 (35)	140 (23)	30



IMPORTANT! To be dried 1 hour at 150°C
* Weight is warranted, number of electrodes is approximate. The opposite is optional!