

SC NiFe

Nickel electrode

Classification

AWS A 5.15: E NiFe-C1

DIN 8573: E NiFe- 1 BG11

Description and applications

Graphite basic coated electrode with a Ferro-Nickel alloy deposit for joining and repairing nodular cast iron. Deposit homogeneous and highly resistant against cracks. Particularly recommended for dissimilar welding of cast iron to steels and constructions of cast iron. Good bonding and flow of the weld metal. Defect in foundries, repairing of engine blocks, houses of tool machines, gearboxes, reducing parts, pump bodies, cast pieces, valve bodies.

Base materials

Grey cast iron, malleable and nodular cast iron

ASTM

A48 class 25B to 60B

A536 Grade 60-80

DIN

GG-15 to GG-40

GGG-40 to GGG-60

GTS-35 to GTS-65

NFA

FLG 150 to FLG 400

FGS 400-12 to FGS 600-3

MN350-10 to MN650-3

All weld metal mechanical properties (typical)

Tensile Strength Rm (N/mm²)

> 480

Hardness

190 HB

Typical weld metal chemical composition(%)

Ni

50%

FE & OTHERS

BALANCE

Amperes (A)

2.50

60

3.15

80

4.00

120

Welding instruction

Reduce the heat input to a minimum, keep temperature low (maxi temperature 70°C) in order to reduce the risk of cracks in the base metal. Depose short beads of about 3 cm and peen immediately. Reignite on the weld metal. Weld on clean and exempt from grease surfaces (previous grinding of the joint).



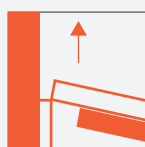
1G/PA



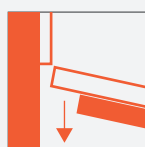
2F/PB



2G/PC



3G/PF



3G/PG



4G/PE

