

# GEMET 503B

**ELECTRODE GIVING NICKEL-IRON DEPOSIT FOR WELDING.**

## IDENTIFICATION

Gemet 503B, ENiFeCI

## CLASSIFICATION

AWS/SFA 5.15 ENiFeCI, DIN 8573 ENiFeBG1

## DESCRIPTION

GEMET 503B is specially formulated fully basic graphite flux low heat in -put electrode designed to weld all weldable cast iron with superior strength that helps in verification of defects in heavy casting and for welding of cast iron to mild steel. Electrode has good welding properties with uniform beads. Deposits is machinable and crack proof. Deposited weld metal is less sensitive to hot cracking caused by pick up of impurities such as phosphorus which are often present in the iron castings. The electrode does not get red hot during welding and hence can be used to its full length without any wastage.

## WELD METAL ANALYSIS (RANGE) %

Ni
45 - 60

## MECHANICAL PROPERTIES (RANGE)

Alloy Basis	UTS (MPa)
Ni, Fe, C	400 - 500

## TYPICAL APPLICATIONS

Joining, repairing and surfacing of all cast iron components, viz. Engine heads, pumps casings, impellers, rope drums, machinery parts, ingot moulds, gears, transmission housings, spheroidal graphite (SG) cast iron, nodular or ductile iron or some alloy cast iron etc.

## PROCEDURE

Use shortest possible arc with minimum weaving.

## WELDING INSTRUCTIONS:

- Clean the area thoroughly.
- Vee angle of butt joint should be min 70°
- Remove the oxide film by grinding 10mm beside the Joint.
- Keep the arc short.

## PACKING PARAMETERS

Size (mm)	Length (mm)	Current Condition DC (+) Amps	Packing / Packet (kg)	Packing / Box (kg)
2.5	350	60 - 90	2	2 x 5=10
3.15 / 3.20	350	80 - 110	2	2 x 5=10
4	350	110 - 130	2	2 x 5=10