

# GEMET 503 B



Electrode giving nickel-iron deposit for welding.

CLASSIFICATION : AWS/SFA 5.15 ENiFeCl, DIN 8573 ENiFeBG1

**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. Electrodes has good welding properties with uniform beads. Deposits is machinable and crackproof. 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.

## 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 min700
- Remove the oxide film by grinding 10mm beside the Joint.
- Keep the arc short.

TECHNICAL DATA		Chemical Composition
ALLOY BASIS UTS (N/mm <sup>2</sup> )	Ni,Fe,C 400-500	Ni (%)
		45-60

## CURRENT CONDITION / PACKING SPECIFICATION :

SIZE (mm)	LENGTH (mm)	DC(+) AMPS	PACKING PER CARTON (KG.)
2.50	350	60-90	2 x 5 = 10

3.15/3.20	350	80-110	$2 \times 5 = 10$
4.00	350	110-130	$2 \times 5 = 10$