

# GEMET 504

**GRAPHITE-BASIC COATED ELECTRODE FOR CAST IRON COLD WELDING.**

## IDENTIFICATION

Gemet 504, ENiCI

## CLASSIFICATION

AWS/SFA 5.15: ENiCI

## DESCRIPTION

Gemet 504 has excellent welding properties. The easily controllable flow permits spatterfree welding in all position and with minimal amperage. The weld deposit and the transition zones are machinable.

## WELD METAL ANALYSIS (RANGE) %

C	Fe	Si	S	Fe	Ni	Cu	Al
2.0 max	2.5 max	4.0 max	0.03 max	8.0 max	85 min	2.5 max	1.0 max

## MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	YS (MPa)
276 - 488	262 - 414
Eln %	Hardness BHN
3 - 6	135 - 218

## TYPICAL APPLICATIONS

Cold welding of grey and malleable cast iron, cast steel and for joining these base metals to steel, copper and copper alloys, especially for repair and maintenance.

## WELDING INSTRUCTIONS:

- Depending on the wall thickness, the preparation is made in U-or double U-form.
- The casting skin has to be removed on both sides of the welding area. Hold the electrode vertically with a short arc. Thin passes are buttered, their width not more than twice the diameter of the core wire.
- To avoid over-heating, the beads should not be longer than 10 times the electrode diameter.
- Remove the slag immediately after welding and then peen the deposit carefully.
- Reignite on the weld deposit and not on the base metal.

## PACKING PARAMETERS

Size (mm)	Length (mm)	Current Condition DC (-) / AC Amps	Packing / Packet (kg)	Packing / Box (kg)
2.5	350	60 - 80	2	2 x 5=10
3.15 / 3.20	350	80 - 100	2	2 x 5=10

4	350	110 - 140	2	2 x 5=10
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