

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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