PRODUCT SPECIFICATION

Modi Lastek 40 E

Pore free welding of dirty cast iron

GENERAL DESCRIPTION

Nickel cored electrode with a special coating for welding grey and malleable cast iron. It has a "pulsating" way of welding. There is alternately a phase where the arc only creates "heat" without deposit (oil and grease are burned out of the base metal during forward motion) and a phase (backwards motion) where a droplet on the cast iron is projected. In this last phase, the slag is pushed backwards and a very large area around the molten pool stays visible, permitting easy control of porosity on contaminated or oil soaked cast iron. Due to the pulsating properties (controlled heat input) and the possibility to use the negative pole for the first pass (slower cooling rate and thus less hardening of the heat affected zone), a soft, machinable and dense deposit without undercutting is easily obtained.

APPLICATIONS

Recommended for welding cast iron that has to be leak-tight and machinable, such as cracked motor blocks, pump housings, gear wheels, rebuilding the bed of a lathe, valve seats.

Hardness: 130 - 160 HB

CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

C : < 1.00	Si : < 2.00	Ni : > 94.00	Fe : 3.00	Cu : < 2.50

MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm²	Tensile Strength N/mm²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
	≥ 320 MPa	≥ 18%	

GENERAL INFORMATION

Welding positions	All		
Shielding gas	NA		
Packing	5 Kg in a plastic box		
Polarity	AC or DC (See Tips & Tricks)		
Diameter (mm)	2.5	3.2	4.0
Length (mm)	300	300	350
Approx. current (A)	75	100	125

Tips & Tricks

For the first pass on cast iron, Modi Lastek 40E is welded on the negative pole with a weaving technique (weaving forwards and backwards in the direction of travel)
Following passes can be welded on the positive pole to increase travel speed.
Peen the deposit after every pass to reduce stress build-up.

The information in this document is based on intensive tests and is accurate to the best of our knowledge. Do note that these values are only typical values for tests in accordance to prescribed standards. The suitability of the product should always be confirmed by qualification tests before use in any application. The information can be changed without previous notice.