

Joining cast iron to steel

CLASSIFICATION

EN 1071 (E C Ni-Fe 1 1)
A5.15 (E NiFe-CI)

GENERAL DESCRIPTION

Ferronickel cored electrode for welding grey, nodular and alloyed cast iron. Due to the higher tensile strength and ductility, satisfactory welds can be made on heavy or highly stressed sections. Lastek 41E can be used for joining cast iron to steel and to stainless steel. The special formula allows high currents without fear of the coating turning red. The possibility to use straight polarity without danger of cracking guarantees full penetration and very strong welds also on the steel side. Thanks to the pulsating arc, Lastek 41E can be used in all positions (vertical down and up, overhead). Fully machinable; Sound and dense deposit.

TYPICAL USE

Repairing heavy sections of grey and alloyed cast irons, SG iron, meehanite.
Machine bases, motor blocks, gear cases, cast iron dies, pumps.
Repairing casting defects with good colour match.
Hardness: 150-180 HB

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

C	Mn	Si	Ni	S	Cu	Fe
< 1.0	< 1.0	< 2.0	45.0 - 60.0	< 0.03	< 1.0	Balance

MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
	> 400 MPa	> 20%	

General information

- Welding positions:** All
- Shielding gas:** NA
- Dia (x length) (mm):** 2.5 - 3.2 (x 300) / 4.0 (x 350)
- Packing:** 5 kg in plastic box
- Polarity:** AC or DC, straight polarity (electrode negative)
- Tips & tricks:** The pulsating arc of Lastek 41E provides a phase where only heat is created and a phase where a droplet is projected on the cast iron. During a forward motion in the direction of travel, the heat of the arc in phase one burns out any oil or grease of the work piece. During the following backward motion the droplet is deposited mainly on the previous deposit. 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.