PRODUCT SPECIFICATION

Lastek 42 E

Crack free welding of thin walled cast iron

CLASSIFICATION

EN ISO 1071 : E C Ni-CI 1
AWS A5.15 : E Ni-CI

GENERAL DESCRIPTION

Nickel cored electrode for the repair of thin, delicate and complicated castings.
Very smooth deposits, which are fully machinable.
Suitable for vertical down and overhead welding.
Porosity free deposit.
Lastek 42E is welded with a weaving motion in the direction of travel. During the forward motion it burns out oil and grease, and during the backward motion a droplet is deposited on the previous deposit.

APPLICATIONS

All thin walled cast iron pieces.
Cracked pump-housing, water-cooling apparatus, pulleys, cast iron flanges and covers, impellers.
Surfacing of valves and valve seats.

Hardness: 130 - 170 HB

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

C :	0.75	**Mn :**	0.50	**Si :**	0.75	**Fe :**	2.00	**Ni :**	> 95.00
S :	0.02	**Cu :**	1.00						

MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm²	Tensile Strength N/mm²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
	≥ 370 MPa	≥ 18%	

GENERAL INFORMATION

Welding positions	All		
Shielding gas	NA		
Packing	5 kg in a plastic box		
Polarity	AC or DC, straight polarity (electrode negative)		
Diameter (mm)	2.5	3.2	4.0
Lenght (mm)	300	300	350
Approx. current (A)	40 - 75	70 - 100	80 - 120

Tips & tricks

For welding thin cast iron (e.g. 5 mm thick):
Drill a hole at the end of the crack. Prepare a groove with a grinding disk. Provide for a good support at the back of the cast iron in order to avoid vibrations while peening.
Weld approx. 8 mm wide with Lastek 42E by weaving in the direction of travel (electrode 2.5 mm) at 40-45 Amp. Peen immediately. Continue welding using the "backstep" technique. Never apply a sealing run at the back of the work piece.
Cool down as slowly as possible.