

Welding of aluminum castings

GENERAL DESCRIPTION

Coated electrode for repairing cast aluminium and joining aluminium sheets.
Good bond on the base metal.
Porosity free deposit.

APPLICATIONS

Repair of motor blocks, pump housing, pulleys, gear boxes.
Construction of silos, tanks and other constructions.
Repair of casting defects.

Hardness: 50 - 60 HB

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

Si : 11.80	Cu : 0.044	Fe : 0.45	Zn : 0.08	Ti : 0.13
Mg : 0.04	Mn : 0.04	Al : 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)
150 MPa (Max)	250 MPa (Max)	≥ 6 %	

GENERAL INFORMATION

Welding positions	All, except vertical down		
Shielding gas	NA		
Packing	5 Kg in a plastic box		
Polarity	DC, reverse polarity (electrode positive)		
Diameter (mm)	2.5	3.2	4.0
Length (mm)	350	350	350
Approx. current (A)	50 - 70	60 - 80	90 - 110

Tips & Tricks

Keep the electrode perpendicular to the work piece.
Weld with a short arc to avoid overheating (and possible burn through) and keep the amperage as low as possible. If necessary, lower the amperage during welding.
Thick pieces: preheat to 150-200 °C (300-400 °F).
The diameter of the electrodes is more or less equal to the wall thickness of the piece.
The flux-residues should be thoroughly removed with warm water and soap, to avoid corrosion.
The electrodes should be kept dry, or they can be dried before welding at a temperature of 150 °C (300 °F).

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.