

ULTRA E91T-1

FLUX CORED WIRE

AWS A5.29: E91T1-B3C/M
High Strength, Low Alloy Flux Cored Wire

CLASSIFICATION:

- AWS A5.29: E91T1-B3C/M
- Low alloy flux cored wire for high tensile applications
- Ideal for creep resistance and high temperature service
- CO₂ or Ar+CO₂ gas shielding

TYPICAL APPLICATIONS:

- Power plant piping
- Boiler tubes
- Pressure vessels
- Refineries
- Oil & gas transmission pipelines

KEY FEATURES:

- Excellent mechanical strength at elevated temperatures
- Low hydrogen weld deposit
- Good impact strength
- Crack resistance and creep resistance
- Smooth arc and low spatter

TYPICAL CHEMICAL COMPOSITION OF UNDILUTED WELD METAL WT (%):

C – 0.08	Mn – 1.2	Si – 0.5	Cr – 2.25	Mo – 1.0		
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MECHANICAL PROPERTIES OF ALL WELD METAL:

UTS (MPa)	YS (MPa)	Elongation (%)	Impact (J) at -29°C
620	520	26	60

PARAMETERS & PACKING DATA:

Diameter (mm)	Amperage Range (A)
1.2/1.6	140-300

DCEP(Electrode Positive)

Use 1-2 volts lower when using mix shielding gas
Available in Vacuum Pack of 15 kg wire layer wounded on Plastic Spool.
Use with proper preheat and post-weld heat treatment as per WPS.



DCEP

Electrode Positive

All positions except vertical down



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mix shielding gas**