

Flux-Cored Welding Wire



GJ-E71T-5C

CO2 Gas-Shielded Flux-Cored Wire

(Basic-type carbon steel for FCAW)

- ▶ AWS A5.20 E71T-5C
- ▶ EN ISO 17632-A-T46 4 P C1 1

Product description

GJ-E71T-5C is a basic-type flux-cored wire designed for use with 100% CO2 shielding gas, strictly complying with AWS A5.20 E71T-5C. The basic slag system provides excellent crack resistance and impact toughness, making it ideal for highly restrained joints and critical structural applications.

Key Advantages

- ▶ Superior Crack Resistance: Basic slag system with low hydrogen content provides excellent resistance to cold cracking in restrained joints.
- ▶ Excellent Toughness: Produces weld metal with superior Charpy impact properties at sub-zero temperatures.
- ▶ High Deposition Rate: Suitable for high-current flat and horizontal welding with good metal recovery and efficiency.

Application Guide

- ▶ With 100% CO2: For welding highly restrained structural joints, heavy plate fabrication, and pressure vessel construction.
- ▶ For shipbuilding and offshore: Suitable for critical structural welds requiring high integrity and crack resistance.
- ▶ For thick plate welding: Excellent performance on heavy-section joints with deep penetration and good gap tolerance.

Flux-Cored Welding Wire

● Main constituents

Elements	C (Carbon)	Mn (Manganese)	Si (Silicon)	S (Sulfur)	P (Phosphorus)
AWS Requirement	≤0.12	≤1.75	≤0.90	≤0.030	≤0.030
Typical Actual Value	0.06	1.30	0.35	0.008	0.010

● Typical Mechanical Properties of Deposited Metal

The mechanical properties of E71T-5C are tested as all-weld metal with 100% CO₂ shielding gas (DC+ polarity).

Test Item	Yield Strength	Tensile Strength	Elongation	Impact Value@ -30°C
AWS A5.20 Requirement	≥400 MPa	480 - 660 MPa	≥22%	≥27 J
Typical Actual Result	460 MPa	560 MPa	25%	100 J

● Reference Welding Parameters

Wire Diameter	1.0 mm (0.040")	1.2 mm (0.045")	1.4 mm (0.055")	1.6 mm (1/16")
Amperage	80 - 180	140 - 300	180 - 340	200 - 400
Voltage	18 - 24	22 - 32	24 - 34	26 - 36