

Flux-Cored Welding Wire



GJ-E71T-1M

Mixed Gas-Shielded Flux-Cored Wire
(Rutile-type carbon steel for FCAW)

- ▶ AWS A5.20 E71T-1M
- ▶ EN ISO 17632-A-T46 2 P M1 1

Product description

GJ-E71T-1M is a rutile-type flux-cored wire designed for use with 75-80% Ar/balance CO₂ mixed shielding gas, strictly complying with AWS A5.20 E71T-1M. The mixed gas provides a softer, more stable arc with reduced spatter and fumes, delivering excellent all-position welding performance.

Key Advantages

- ▶ Ultra-Low Spatter: Mixed gas shielding combined with rutile flux formulation produces extremely low spatter levels.
- ▶ Reduced Fumes: Lower fume generation compared to CO₂-shielded wires, improving workplace environment.
- ▶ All-Position Excellence: Optimized slag system enables smooth vertical-up and overhead welding with beautiful bead shape.

Application Guide

- ▶ With 75-80% Ar/balance CO₂: For shipbuilding, offshore structures, and heavy steel construction requiring high-quality finishes.
- ▶ For structural steel fabrication: Including workshop prefabrication, field erection, and precision welding of carbon steels.
- ▶ For thin-to-medium plate: Excellent performance on gauge steel and automotive chassis components with minimal distortion.

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● 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	0.05	1.40	0.45	0.010	0.012

● Typical Mechanical Properties of Deposited Metal

The mechanical properties of E71T-1M are tested as all-weld metal with 75-80% Ar/balance 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	480 MPa	570 MPa	26%	120 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 - 30	24 - 32	26 - 34