

AK E81T1-W2

Description: E81T1-W2 is a rutile-type flux cored arc welding (FCAW) wire designed for welding weathering steels and high-strength structural steels. It is primarily classified under AWS A5.29 and is widely used in infrastructure and structural fabrication where enhanced atmospheric corrosion resistance is required.

Application: Bridge Construction (Highway bridges、Railway bridges、Structural beams and girders) ; Structural Fabrication (Outdoor steel frameworks、Industrial buildings、Port and harbor structures) ; Coastal & Offshore Structures (Exposed structural components、Marine atmospheric zones)

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Mo	Cu
Requirement	0.12	0.35-0.80	0.50-1.30	0.03	0.03	0.45-0.70	0.40-0.80	---	0.30-0.75
Actual Result	0.060	0.52	0.95	0.002	0.013	0.50	0.58	---	0.45

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	550	470	≥19	≥27J(-30°C)
Actual Result	610	495	23	55