

AK E110T5-K4

Description: E110T5-K4 is a high-strength flux cored arc welding (FCAW) wire designed for welding high-strength low-alloy (HSLA) steels where superior tensile strength and excellent impact toughness are required. It belongs to the 110 ksi class (≈ 760 MPa) and is widely used in demanding structural applications including heavy fabrication, offshore steel structures, mining equipment, and pressure-bearing components.

Application: E110T5-K4 is widely used for welding high-strength steel in: Heavy Structural Fabrication (Steel bridges、High-rise steel frameworks、Load-bearing structural members) ; Offshore & Marine Structures (Jacket foundations、Offshore platforms、Support beams) ; Heavy Machinery & Equipment (Mining haul trucks、Excavators and loaders、Cranes and lifting gear) ; Pressure and Load-Bearing Components (Pressure vessels、Pipe headers and chokes)

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Mo	V
Requirement	0.15	0.80	1.20-2.25	0.03	0.03	0.20-0.60	1.75-2.60	0.20-0.65	0.03
Actual Result	0.08	0.46	1.65	0.001	0.015	0.48	2.35	0.36	0.01

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	760-900	680	≥ 15	$\geq 27J(-51^{\circ}C)$
Actual Result	810	720	20	55