

AK E80T5-Ni1M

Description: E80T5-Ni1M is a gas-shielded flux-cored arc welding wire (FCAW-G), mainly used for welding medium and high strength low alloy steel structures, and is particularly suitable for critical engineering structures that require good low-temperature impact toughness and high crack resistance.

Application: Marine and Offshore Engineering (Offshore Platform Structures, Marine Module Manufacturing, Offshore Support Structures); Bridges and Steel Structures (Heavy Steel Structures, High-Strength Steel Beam and Column Welding, Dynamic Load Structure Engineering); Pressure Vessels and Energy Equipment (Storage Tanks, Boiler Structures, Oil and Gas Equipment); Cryogenic Environment Engineering (Steel Structures for Cold Regions, Cryogenic Storage Tanks, LNG-Related Equipment Manufacturing)

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Mo	V
Requirement	0.05-0.12	0.30-0.50	1.20-1.40	0.03	0.03	—	0.80-1.10	0.10-0.35	—
Actual Result	0.063	0.35	1.23	0.002	0.013	—	0.92	0.16	—

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	550-690	470	≥19	≥27J(-50°C)
Actual Result	635	505	22	62