



GB/T 5293 —
 AWS A5.17 EM11K
 EN ISO 14171 —

AK EM11K

Description

EM11K is a submerged arc welding wire formulated with low carbon, medium manganese, and high silicon to achieve a practical balance of strength and toughness. It performs well across varying dilution conditions and is a strong choice for demanding structural welding applications that require dependable mechanical performance and process stability.

Application Scenario

EM11K is suitable for structural steel fabrication, heavy equipment components, and projects that require a balanced combination of weld strength and toughness. It is particularly useful in structural applications and code-driven work, including jobs aligned with demanding fabrication standards where consistent submerged arc weld quality is essential.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Ni	Cr	Mo	Cu
Requirement	0.07-0.15	0.65-0.85	1.0-1.50	0.030	0.025	---	---	---	0.35
Actual Result	0.09	0.74	1.26	0.010	0.015	---	---	---	0.20

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	---	---	---	27J(-40°C)
Actual Result	605	460	28	106