



GB/T 13814 —

AWS A5.11 ENiMo-8

EN ISO 14172 —

AK ENiMo-8

Description: ENiMo-8 is an Inconel-type nickel alloy electrode classified under AWS A5.11. It is designed to provide excellent strength and toughness at cryogenic temperatures, and AC operation helps reduce arc blow, making it practical for demanding low-temperature tack and repair welding.

Application: It is primarily used for tack and repair welding of 9% Ni steel in cryogenic service. This makes it suitable for low-temperature tanks, vessels, and related structures where weld metal must retain strength and impact toughness under severe cold conditions.

Typical Chemical Composition(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.1	1.50	10.0	0.020	0.015	0.75	0.50	≥60	---
Actual Result	0.05	0.90	6.35	0.015	0.010	0.52	0.20	72.36	---
	Al	Ti	Cr	Nb+Ta	Mo	V	W	La	B
Requirement	---	---	0.50-3.50	---	17.0-20.0	---	2.0-4.0	---	---
Actual Result	---	---	2.74	---	18.52	---	2.69	---	---

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥650		25	
Actual Result	725		28	