



GB/T 13814 —

AWS A5.11 ENi-1

EN ISO 14172 —

# AK ENi-1

**Description:** ENi-1 is a high-purity nickel electrode designed for welding commercially pure nickel and selected dissimilar joints. It offers smooth arc stability, clean weld deposits, good crack resistance, and dependable corrosion performance, especially in caustic and neutral service environments.

**Application:** It is widely used for Nickel 200 and Nickel 201 equipment, piping, tanks, and repair work in chemical and alkali service. It is also suitable for joining nickel to steel or stainless steel where a ductile, corrosion-resistant weld deposit and reliable all-position operation are required.

## Typical Chemical Composition(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.10	0.75	0.75	0.030	0.020	1.25	0.25	≥92	---
Actual Result	0.02	0.50	0.50	0.010	0.001	0.85	0.20	93.52	---
	Al	Ti	Cr	Nb+Ta	Mo	V	W	La	B
Requirement	1.0	1.0-4.0	---	---	---	---	---	---	---
Actual Result	0.53	2.69	---	---	---	---	---	---	---

## Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values ( J)
Requirement	≥410		20	
Actual Result	465		26	