



GB/T 13814 —

AWS A5.11 ENiMoCr-1

EN ISO 14172 —

# AK ENiMoCr-1

**Description:** ENiMoCr-1 is a nickel-based welding electrode characterized by its excellent corrosion resistance and high-temperature performance. It is particularly well-suited for welding alloys containing chromium and molybdenum, and is widely utilized in the repair of pipelines and equipment operating in high-temperature and corrosive environments. The electrode's superior fluidity and high tensile strength make it ideal for demanding industrial applications.

**Application:** ENiMoCr-1 is primarily employed in the petroleum, chemical, and power generation industries for the welding of high-temperature and high-pressure pipelines; it is especially suitable for joining equipment fabricated from chromium- and molybdenum-bearing materials. Furthermore, it is extensively used in the repair of boilers, heat exchangers, and steam pipelines, effectively providing protection against damage caused by high temperatures and corrosive environments.

## Typical Chemical Composition(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.02	0.60	1.25	0.030	0.015	0.20	---	Rem.	---
Actual Result	0.01	0.40	0.85	0.015	0.010	0.10	---	Rem.	---
	Al	Ti	Cr	Nb+Ta	Mo	V	W	La	B
Requirement	0.50	---	13.8-15.6	---	21.5-23.0	---	---	---	---
Actual Result	0.20	---	14.26	---	22.50	---	---	---	---

## Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values ( J )
Requirement	≥720		25	
Actual Result	763		28	