



GB/T 13814 —

AWS A5.11 ENiCrMo-1

EN ISO 14172 —

AK ENiCrMo-1

Description: ENiCrMo-1 is a nickel-based welding electrode designed for applications requiring excellent resistance to heat and corrosion. It is particularly effective for welding dissimilar metals, such as stainless steel and high-alloy steels, in environments exposed to high temperatures and aggressive chemicals.

Application: ENiCrMo-1 is widely used in the petrochemical, power generation, and chemical industries for welding critical components like heat exchangers, pressure vessels, and high-temperature piping systems. It is ideal for repairs in harsh environments where resistance to both high temperatures and corrosive conditions is essential.

Typical Chemical Composition(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.05	1.0-2.0	18.0-21.0	0.040	0.030	1.0	1.50-2.50	Rem.	2.50
Actual Result	0.01	1.40	20.57	0.015	0.015	0.50	1.69	Rem.	1.52
	Al	Ti	Cr	Nb+Ta	Mo	V	W	La	B
Requirement	—	—	21.0-23.5	1.75-2.50	5.5-7.5	—	1.0	—	—
Actual Result	—	—	22.54	1.96	6.38	—	0.30	—	—

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥620		20	
Actual Result	685		23	