



GB/T 13814 —

AWS A5.14 ERNiCrMo-1

EN ISO 14172 —

AK ERNiCrMo-1

Description: ERNiCrMo-1 is a nickel-chromium-molybdenum welding wire classified under AWS A5.14. It is designed for Ni-Cr-Mo alloy welding and offers a balanced combination of corrosion resistance, sound weldability, and stable mechanical performance, making it suitable for demanding chemical and industrial service.

Application: ERNiCrMo-1 is mainly used for welding nickel-chromium-molybdenum base materials and for cladding steel by GTAW or GMAW. It is suitable for corrosion-resistant overlays, repair work, and components used in aggressive chemical processing and other severe service environments.

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	1.69	19.62	0.015	0.015	0.20	2.30	Rem.	1.65
	Al	Ti	Cr	Nb+Ta	Mo	V	W	Zr	B
Requirement	—	—	21.0-23.5	1.75-2.5	5.5-7.5	—	1.0	—	—
Actual Result	—	—	22.48	1.96	6.25	—	0.52	—	—

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥590			
Actual Result	630			