



AK ERNiCrCo-1

GB/T 13814 —

AWS A5.14 ERNiCrCo-1

EN ISO 14172 —

Description: ERNiCrCo-1 is a nickel-based welding wire designed for high-temperature service. It offers excellent resistance to oxidation, thermal fatigue, and creep, while providing stable mechanical properties and reliable weld performance in demanding heat-resistant alloy applications.

Application: ERNiCrCo-1 is mainly used for welding heat-resistant nickel alloys in power generation, petrochemical, and high-temperature industrial equipment. It is suitable for components such as furnace parts, boilers, turbines, and other assemblies exposed to prolonged elevated temperatures.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Cu	Ti
Requirement	0.01-0.06	1.0	1.0	0.015	0.030	23.5-25.5	Rem.	0.50	0.80-2.5
Actual Result	0.020	0.45	0.56	0.005	0.015	24.2	Rem.	0.10	1.25
	N	Fe	Al	Nb+Ta	Mo	B	Zr	Co	
Requirement	—	3.0	0.5-2.0	0.50-2.5	2.0	—	—	15.0-22.9	
Actual Result	—	1.96	1.45	1.20	0.50	—	—	18.65	

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥1070			
Actual Result	1128			