



GB/T 13814 ——

AWS A5.14 ERNiCrFe-5

EN ISO 14172 ——

AK ERNiCrFe-5

Description: ERNiCrFe-5 is a nickel-base welding wire for Inconel 690 and similar alloys. It offers good resistance to oxidation, corrosion, and stress-corrosion cracking, while providing stable weld metal performance and reliable strength in high-temperature and demanding service conditions.

Application: ERNiCrFe-5 is used for welding Inconel 690, Inconel 601, and Incoloy 800, as well as selected dissimilar joints between nickel alloys, stainless steel, and carbon steel. It is widely applied in nuclear, chemical, and high-temperature industrial equipment requiring corrosion-resistant welds.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Cu	Ti
Requirement	0.08	0.35	1.0	0.015	0.030	14.0-17.0	≥70	0.50	---
Actual Result	0.04	0.20	0.62	0.010	0.015	15.30	73.60	0.20	---
	N	Fe	Al	Nb+Ta	Mo	B	Zr	Co	W
Requirement	---	6.0-10.0	---	1.50-3.0	---	---	---	---	---
Actual Result	---	7.50	---	1.85	---	---	---	---	---

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥550			
Actual Result	620			