



GB/T 13814 ——

AWS A5.14 ERNiCrFe-7

EN ISO 14172 ——

AK ERNiCrFe-7

Description: ERNiCrFe-7 is a nickel-chromium-iron welding alloy, commonly corresponding to Alloy 52 type filler metal. It is designed for welding nickel-based alloys and dissimilar metals, offering excellent resistance to stress corrosion cracking, oxidation, and high-temperature service, with stable weld quality.

Application: ERNiCrFe-7 is widely used in nuclear, power generation, and process industries for welding Alloy 690 and related nickel alloys. It is also suitable for dissimilar joints between nickel alloys, stainless steels, and low-alloy steels, as well as for corrosion-resistant overlay applications.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Cu	Ti
Requirement	0.04	0.50	1.0	0.015	0.020	28.0-31.5	Rem.	0.30	1.0
Actual Result	0.02	0.26	0.25	0.005	0.001	29.60	Rem.	0.10	0.55
	N	Fe	Al	Nb+Ta	Mo	B	Zr	Co	W
Requirement	——	7.0-11.0	1.10	0.10	0.50	——	——	——	——
Actual Result	——	8.26	0.85	0.06	0.20	——	——	——	——

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥550			
Actual Result	595			