



GB/T 13814 —

AWS A5.11 ENiCrFe-7

EN ISO 14172 —

# AK ENiCrFe-7

**Description:** ENiCrFe-7 is a nickel-chromium-iron filler metal associated with Alloy 52 and Alloy 690 welding. It is valued for excellent resistance to stress-corrosion cracking, oxidation, and aggressive high-temperature environments, making it a strong choice for critical welds that demand long-term metallurgical stability.

**Application:** It is widely used in nuclear, power generation, and process industries for welding Alloy 690 and related nickel alloys. It is also suitable for corrosion-resistant overlaying on low-alloy or stainless steels and for dissimilar joints requiring resistance to pure water, oxidative acids, and high-temperature attack.

## Typical Chemical Composition(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.05	5.0	7.0-12.0	0.030	0.015	0.75	0.50	Rem.	---
Actual Result	0.04	4.20	10.23	0.015	0.010	0.50	0.10	Rem.	---
	Al	Ti	Cr	Nb+Ta	Mo	V	W	La	B
Requirement	0.50	0.50	28.0-31.5	1.0-2.5	0.50	---	---	---	---
Actual Result	0.10	0.20	29.65	1.90	0.10	---	---	---	---

## Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values ( J)
Requirement	≥550		30	
Actual Result	610		34	