



GB/T 13814 —

AWS A5.14 ERNiCrFe-8

EN ISO 14172 —

AK ERNiCrFe-8

Description: ERNiCrFe-8 is a nickel-based welding alloy used for joining nickel alloys and dissimilar metals. It offers good resistance to corrosion, oxidation, and high-temperature exposure, while also providing stable weld performance, crack resistance, and reliable mechanical properties in demanding environments.

Application: ERNiCrFe-8 is widely used in industries such as petrochemical, power generation, heat treatment, and pollution control. It is suitable for welding high-temperature components, corrosion-resistant equipment, furnace parts, heat exchangers, and dissimilar joints requiring durability and long service life.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Cu	Ti
Requirement	0.08	0.50	1.0	0.015	0.030	14.0-17.0	≥70	0.50	2.0-2.75
Actual Result	0.04	0.25	0.30	0.005	0.001	15.26	72.10	0.10	2.55
	N	Fe	Al	Nb+Ta	Mo	B	Zr	Co	W
Requirement	—	5.0-9.0	0.40-1.0	0.70-1.20	—	—	—	—	—
Actual Result	—	6.25	0.62	0.95	—	—	—	—	—

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥860			
Actual Result	925			