



GB/T 13814 —

AWS A5.14 ERNiCr-7

EN ISO 14172 —

AK ERNiCr-7

Description: ERNiCr-7 is a nickel-chromium alloy welding wire designed for joining nickel-based alloys and dissimilar metals in demanding environments. It offers good oxidation resistance, stable welding performance, and reliable mechanical properties, making it suitable for high-temperature and corrosion-resistant welding applications.

Application: ERNiCr-7 is commonly used in petrochemical, power generation, heat treatment, and heavy industry. It is suitable for welding nickel alloys, stainless steels, and dissimilar metals, as well as for furnace parts, high-temperature equipment, and components exposed to oxidation, thermal cycling, and corrosive service conditions.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Cu	Ti
Requirement	0.03	0.30	0.50	0.015	0.020	36.0-39.0	Rem.	0.30	0.25-0.75
Actual Result	0.015	0.20	0.36	0.008	0.010	36.90	Rem.	0.10	0.40
	Co	Fe	Al	Nb+Ta	Mo	B	Zr		
Requirement	1.0	1.0	0.75-1.20	0.25-1.0	0.50	0.003	0.02		
Actual Result	0.52	0.45	1.02	0.85	0.30	0.001	0.01		

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥690			
Actual Result	765			