



GB/T 13814 —

AWS A5.14 ERNiCr-4

EN ISO 14172 —

AK ERNiCr-4

Description: ERNiCr-4 is a nickel-chromium based solid welding wire containing a high proportion of Ni, Cr and Mo, and small amounts of Nb, Ti and other elements to improve the crack resistance and high-temperature performance of the weld metal.

Application: ERNiCr-4 is mainly used for: welding of nickel-based heat-resistant alloys, such as Inconel 600, Inconel 601, and Incoloy 800/800HT; welding of dissimilar metals, such as nickel-based alloys with carbon steel, nickel-based alloys with low-alloy steel, and stainless steel with nickel-based alloys; and surface surfacing for equipment resistant to high-temperature corrosion or oxidation environments.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Cu	Ti
Requirement	0.01-0.10	0.20	0.20	0.015	0.020	42.0-46.0	Rem.	0.50	0.30-1.0
Actual Result	0.06	0.12	0.06	0.008	0.010	44.5	Rem.	0.10	0.63

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥620	≥380	30	
Actual Result	690	420	35	