



GB/T 13814 —

AWS A5.14 ERNiMoCr-1

EN ISO 14172 —

# AK ERNiMoCr-1

**Description:** ERNiMoCr-1 is a nickel-molybdenum-chromium welding wire classified in AWS A5.14 and associated with UNS N10362. It is designed for matching corrosion-resistant Ni-Mo-Cr alloys and delivers excellent resistance to hydrochloric acid, sulfuric acid, pitting, and crevice corrosion, even with some oxidizing contaminants present.

**Application:** ERNiMoCr-1 is used for welding and repair of N10362 / HYBRID-BC1 type alloys in severe corrosive service. Typical uses include reaction vessels, heat exchangers, valves, pumps, piping, and storage tanks in chemical processing, pharmaceutical, food, petrochemical, agricultural, and power industries.

## Typical Chemical Composition(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.01	0.60	1.25	0.025	0.010	0.08	---	Rem.	---
Actual Result	0.005	0.20	0.96	0.015	0.002	0.02	---	Rem.	---
	Al	Ti	Cr	Nb+Ta	Mo	V	W	Zr	B
Requirement	0.50	---	13.8-15.6	---	21.5-23.0	---	---	---	---
Actual Result	0.10	---	14.25	---	22.30	---	---	---	---

## Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values ( J)
Requirement	≥725			
Actual Result	768			