



GB/T 13814 —

AWS A5.14 ERNiCrMo-2

EN ISO 14172 —

AK ERNiCrMo-2

Description: ERNiCrMo-2 is a nickel-based welding wire designed for joining nickel-chromium-molybdenum alloys and a wide range of corrosion-resistant materials. It offers excellent resistance to pitting, crevice corrosion and stress corrosion cracking, while also providing stable arc performance, smooth bead appearance and reliable mechanical properties. It is suitable for demanding service environments requiring long-term corrosion resistance and welding reliability.

Application: ERNiCrMo-2 is widely used in chemical processing, offshore engineering, flue gas desulfurization systems, seawater equipment, pressure vessels, heat exchangers, pulp and paper plants, and other severe corrosion environments. It is suitable for welding nickel-based alloys, stainless steels and dissimilar metals, and is also commonly applied in overlay welding and repair work where high corrosion resistance and structural stability are required.

Typical Chemical Composition(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.05-0.15	1.0	17.0-20.0	0.040	0.030	1.0	0.50	Rem.	0.50-2.50
Actual Result	008	0.69	18.52	0.015	0.015	0.20	0.20	Rem.	1.62
	Al	Ti	Cr	Nb+Ta	Mo	V	W	Zr	B
Requirement	—	—	20.5-23.0	—	8.0-10.0	—	0.20-1.0	—	—
Actual Result	—	—	22.13	—	9.50	—	0.60	—	—

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥660			
Actual Result	720			