



GB/T 13814 —

AWS A5.14 ERNiCrMo-11

EN ISO 14172 —

AK ERNiCrMo-11

Description: ERNiCrMo-11 is a nickel-chromium-molybdenum filler metal, also associated with Alloy G-30, for welding Ni-Cr-Mo base materials to themselves, steel, and other nickel-base alloys. It is used in GTAW and GMAW and is valued for reliable corrosion resistance and stable weld performance in demanding chemical service.

Application: ERNiCrMo-11 is widely used for welding G-30 alloy, joining nickel alloys to steel, and handling dissimilar welds in corrosive process equipment. It is also used on 6–7% molybdenum stainless steels and duplex grades, with common service in phosphoric acid, nitric acid, and pulp and paper applications.

Typical Chemical Composition(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.03	1.5	13.0-17.0	0.040	0.020	0.80	1.0-2.40	Rem.	5.0
Actual Result	0.010	0.50	15.20	0.015	0.015	0.40	1.65	Rem.	2.95
	Al	Ti	Cr	Nb+Ta	Mo	V	W	Zr	B
Requirement	—	—	28.0-31.5	0.30-1.50	4.0-6.0	—	1.50-4.0	—	—
Actual Result	—	—	29.84	0.78	5.60	—	3.10	—	—

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥590			
Actual Result	645			