GB/T 13814 ——

AWS A5.14 ERNiCrMo-13

EN ISO 14172——

AK ERNiCrMo-13

Description: ERNiCrMo-13 is a low-carbon, low-silicon nickel-chromium-molybdenum alloy designed for high corrosion resistance, strong weld integrity, and thermal stability. Its tungsten-free chemistry helps reduce grain-boundary precipitation during welding and hot forming, while supporting excellent weldability with low hot-cracking sensitivity.

Application: ERNiCrMo-13 is suitable for chemical processing equipment in both oxidizing and reducing environments. It is commonly used for corrosion-resistant welds, overmatching weld metal on 6–7% Mo superaustenitic steels, surfacing of carbon and low-alloy steels, and dissimilar joining between nickel alloys, stainless steels, and steels.

Typical Chemical Compostion(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.010	0.50	1.50	0.015	0.010	0.10	0.50	Rem.	0.30
Actual Result	0.004	0.20	0.90	0.010	0.002	0.02	0.10	Rem.	0.10
	Al	**Ti**	**Cr**	**Nb+Ta**	**Mo**	**V**	**W**	**Zr**	**B**
Requirement	0.10-0.4	——	22.0-24.0	——	15.0-16.5	——	——	——	——
Actual Result	0.25	——	23.65	——	15.50	——	——	——	——

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥760			
Actual Result	810			