



GB/T 13814 ——

AWS A5.14 ERNiFeCr-2

EN ISO 14172 ——

# AK ERNiFeCr-2

**Description:** ERNiFeCr-2 is a nickel-iron-chromium welding alloy, commonly used for welding Alloy 718, 706, and X-750. It offers high strength, good ductility, and age-hardenable weld metal, making it suitable for demanding applications involving elevated or cryogenic temperatures.

**Application:** ERNiFeCr-2 is widely used for high-strength aircraft parts, liquid rocket components, and other critical aerospace weldments. It is especially suitable for joining Alloy 718, 706, and X-750 in applications requiring reliable performance under high stress, heat, or cryogenic service conditions.

## Typical Chemical Composition(%):

	C	Si	Mn	S	P	Cr	Ni	Cu	Ti
<b>Requirement</b>	0.08	0.35	0.35	0.015	0.015	17.0-21.0	50.0-55.0	0.30	0.65-1.15
<b>Actual Result</b>	0.03	0.20	0.25	0.001	0.001	20.10	52.65	0.10	0.80
	N	Fe	Al	Nb+Ta	Mo	B	Zr	Co	W
<b>Requirement</b>	——	Rem.	0.20-0.80	4.75-5.50	2.80-3.30	0.006	——	——	——
<b>Actual Result</b>	——	Rem.	0.50	5.10	3.20	0.002	——	——	——

## Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
<b>Requirement</b>	≥1140			
<b>Actual Result</b>	1195			