GB/T 13814 ENi 6182

AWS A5.14 ERNiCrFe-7A

EN ISO 14172- ENi 6182

AK ERNiCrFe-7A

Description:ERNiCrFe-7A Nickel-Chromium-Iron Alloy Welding Wire is mainly used for TIG welding of Inconel alloy 690. The metal cladding has a good overall performance, radiation, pure water environment with excellent resistance to stress corrosion cracking. This alloy wire could be used for anti-corrosion, anti-oxidizing acid corrosion surfacing layer on low alloy steel, welding dissimilar metals. The applications include surface as well as clad side welding. Interpass temperature of 150℃ should be respected. It was developed to meet the changing needs of the nuchear industry, the higher chromium level providing greater resistance to stress-corrosion cracking in the nuclear, pure water environment. The Wire performs better resistance to weld solidification and weld-metal liquation cracking against other nickel-based filler metals.

Typical Chemical Compostion(%):

	C	Si	Mn	S	P	Fe	Ni	Cr	Nb +Ta	Al
Requirement	0.04	0.50	1.0	0.015	0.020	7.0-11.0	Rem.	28.0-31.5	0.5-1.0	1.10
Actual Result	0.028	0.11	0.15	0.002	0.001	9.80	59.03	29.80	0.86	0.25

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥ 590			
Actual Result	680			