

GB/T 13814 ——

AWS A5.11 ENiCr-4

EN ISO 14172 ——

ENiCr-4

Description: ENiCr-4 is a nickel-chromium welding electrode developed for severe high-temperature duty. It provides strong resistance to oxidation, hot corrosion, and sulfur-bearing atmospheres, while producing durable, crack-resistant weld metal for components exposed to prolonged thermal and corrosive stress.

Application: It is commonly used for furnaces, oil-fired boilers, reformer towers, heat exchangers, tube hangers, supports, dampers, and spacers in refinery, petrochemical, marine, and power plant service. It is also suitable for joining or overlaying Ni-Cr and Ni-Fe-Cr components working at elevated temperatures.

Typical Chemical Composition(%):

	C	Mn	Fe	P	S	Si	Cu	Ni	Co
Requirement	0.10	1.50	1.0	0.020	0.020	1.0	0.25	Rem.	——
Actual Result	0.04	1.33	0.62	0.015	0.015	0.71	0.20	Rem.	——
	Al	Ti	Cr	Nb+Ta	Mo	V	W	La	B
Requirement	——	——	48.0-52.0	1.0-2.5	——	——	——	——	——
Actual Result	——	——	50.36	1.68	——	——	——	——	——

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥760			
Actual Result	825			