

AK ER312

Description: The wire is a 29%Cr-9%Ni austenitic-ferritic duplex stainless steel wire. The duplex structure is maintained even when diluted by a large amount of austenite-forming elements, and therefore has high crack resistance. Can be welded in all positions.

Application: Commonly used for welding cast alloys of similar composition, but can also be used for carbon steel and stainless steel (especially high nickel stainless steel)

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Ni	Mo	Cr	Cu
Requirement	0.15	0.30-0.65	1.0-2.5	0.03	0.03	8.0-10.5	0.75	28.0-32.0	0.75
Actual Result	0.061	0.46	1.78	0.008	0.013	8.57	0.07	29.81	0.09

Typical Mechanical Properties:

	Tensile strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	—		—	—
Actual Result	680		30	—