

AK ER309

Description:

ER309 is an austenitic stainless steel welding wire formulated for joining dissimilar steels and welding stainless steel to carbon steel. It offers high crack resistance, reliable strength, good oxidation resistance, and stable arc performance in demanding fabrication and repair work.

Application Scenario:

ER309 is commonly used for buffer layers, cladding, transition joints, and repair welding between stainless and mild steels. It is suitable for petrochemical equipment, structural fabrications, furnace parts, and maintenance jobs requiring strong, crack-resistant dissimilar metal welds.

Typical Chemical Composition(%):

	C	Cr	Ni	Mo	Mn	Si	P	S	Cu
Requirement	0.12	23.0-25.0	12.0-14.0	0.75	1.0-2.5	0.30-0.65	0.030	0.030	0.75
Actual Result	0.08	23.56	13.25	0.50	1.67	0.45	0.010	0.010	0.40

Typical Mechanical Properties:

	Tensile strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	550		30	
Actual Result	625		35	