

# AK ER309LNb

**Description:** ER309LNb is a niobium-stabilized stainless welding wire developed for overlay welding and corrosion-resistant cladding on carbon and low-alloy steels. It is commonly selected when a 347-type overlay is required and offers reliable crack resistance and stable weld performance in stainless build-up work.

**Application Scenario:** ER309LNb is widely used for cladding pressure vessels, reactors, boilers, and transition layers on process equipment made from carbon or low-alloy steel. It is suitable for surfacing jobs where a stainless, stabilized overlay is needed for heat and corrosion service.

**Typical Chemical Composition(%):**

	C	Cr	Ni	Mo	Mn	Si	P	S	Nb
<b>Requirement</b>	0.03	23.0-25.0	12.0-14.0	0.75	1.0-2.5	0.30-0.65	0.030	0.030	10*C-0.2-1.0
<b>Actual Result</b>	0.01	23.65	13.52	0.50	1.58	0.40	0.015	0.015	0.50

**Typical Mechanical Properties:**

	Tensile strength (MPa)	Yield Stress( MPa)	Elongation (%)	Impact Values (J)
<b>Requirement</b>				
<b>Actual Result</b>	670		31	