

AK ER90S-B9

Description: AK-ER90S-B9 is a heat-resistant steel gas shielded welding wire containing Cr9%-Mo1%-Ni0.7%-VNb. The weld metal has good mechanical properties and good all-position welding performance. Usually, during welding, the weld metal needs to be preheated and maintained at a temperature of 200-300° C between passes, and then tempered at 735-765° C after welding.

Application: Used for welding improved 9Cr1Mo type (such as T/P91, F9, etc.) heat-resistant steel with a working temperature of 600-650 °C, such as steam pipes of high temperature and high pressure boilers, superheater pipes, furnace pipes of petroleum cracking units, etc. Manual tungsten Extreme argon arc welding primer and full argon welding.

Typical Chemical Composition(%):

	C	Mn	P	S	Si	Cr	V	Mo	Ni
Requirement	0.07-0.13	1.2	0.010	0.010	0.15-0.5	8.0- 10.5	0.15-0.30	0.85- 1.2	0.8
Actual Result	0.084	1.06	0.008	0.004	0.21	8.4	0.01	1.06	0.67

Typical Mechanical Properties :

	Tensile strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥ 620	≥410	≥ 16	
Actual Result	720	510	18	