

AK ER65SD

Characteristics and applications: AK-ER65SD is Ni Mo type high toughness low alloy steel gas shielded welding wire, all position welding process performance is excellent, arc stability, small spatter, beautiful weld shape, deposited metal has good mechanical properties. Suitable for 650MPa steel structure welding, commonly used in hydropower, construction machinery, lifting machinery, ships, bridges, pipelines and pressure vessels and other structures of the welding.

Note:

1. The protective gas is rich argon gas with a flow rate of 15-20L/min.
2. The impurities such as water, oil and embroidery must be removed from the welding area.
3. When the current is more than 250A, the wire dry elongation should be 20-25mm.

Chemical composition of deposited metal (mass fraction) :

	C	Si	Mn	S	P	Ni	Cu	Mo	Al	Ti
Actual Result	0.078	0.59	1.85	0.004	0.012	0.78	0.09	0.27	0.01	0.09

Mechanical properties of deposited metal:

	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)	Impact function (J)		Protective gas
				-20℃	-40℃	
Requirement	≥650	≥ 560	≥ 15	≥47	—	—
Actual Result	692	618	25.5	105	100	CO ₂
	745	678	25	113	100	Ar+20%CO ₂

Recommended parameters: (Polarity: DC)

Diameter/mm		1.0	1.2	1.6	—
Current (A)	F/H	80-250	100-300	170-390	—
	V/OH	70-160	80-180	—	—