AK ER100SD

Characteristics and applications: AK-ER100SD is Ni-Cr-Mo type high toughness low alloy steel gas shielded welding wire, welding process performance is good, arc stability, small spatter, beautiful weld shape, deposited metal has good mechanical properties. Suitable for B950CF and the corresponding strength of steel structure welding. Commonly used in hydropower, construction machinery, lifting machinery, ships, bridges, hydropower, pipelines and pressure vessels and other structures of the welding.

NOTE:

1. protective gas AR + 20% CO2, the mixed gas, gas flow 15-20 L/min. Control arc length during welding to avoid welding defects such as blowhole.
2. When welding, it is advisable to control the length of dry extension of welding wire at 10-18mm. When the current is more than 250A, the dry elongation should be controlled in the range of 20-25mm.
3. and the impurities such as rust, oil and water should be thoroughly removed from the welding place.

Chemical composition of deposited metal (mass fraction) :

	C	Si	Mn	S	P	Ni	Mo	Cr	Cu	Ti
Molten metal Actual Result	0.094	0.45	1.76	0.004	0.008	2.85	0.54	0.57	0.10	0.05

Mechanical properties of deposited metal

	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)	Impact function(J)	Protective gas
Actual Result	1034	980	16	60J/-40℃	Ar+20% CO_2

Radiographic testing of deposited metals-level I recommended parameters:

Diameter/mm		0.8	1.0	1.2	1.6
Current （A）	F/H	50-200	80-250	120-280	170-390
	V/OH	50-200	80-250	120-240	——