AK J100SD

Characteristics and Applications: AK-J100SD is a high strength steel electrode with low hydrogen sodium coating. DC reverse connection can be used for all-position welding. Excellent welding process performance, low hydrogen diffusion in weld, with excellent low-temperature toughness and crack resistance. Mainly used for B950CF and the corresponding strength level of hydraulic pressure pipeline welding and installation.

Note:

1. The welding rod must be baked at 380 ° C for 1-2 hours before use, and put into 100- 150 ° C incubator,
2. welding should be thoroughly removed the surface of the weld rust, oil, moisture and other impurities.
3. After welding, 180 ° C ~ 250 ° C hydrogen elimination treatment was carried out (holding time was decided by plate thickness) .
4. Use short arc and narrow pass during welding.

Chemical composition of deposited metal (mass fraction) :

	C	Si	Mn	S	P	Ni	Mo	Cr	V
Actual Result	0.04	0.16	1.90	0.004	0.008	3.07	0.52	0.96	0.01

Mechanical properties of deposited metal

		Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)	Impact function(J)
Actual Result	**Welding state**	1005	869	18.5	85J/-40℃
	Heat treatment 550℃x10h	1010	936	20	62

Diffused hydrogen content of molten metal: ≤4.0mL/100g(mercury method or thermal conductivity method)
Molten metal X-ray detection requirements: Grade I
Recommended parameters: (Polarity: DC)

Diameter/mm		2.5*300	3.2*350	4.0*400	5.0*400
Current （A）	**F/H**	70- 100	90-130	140- 170	170-210
	V/OH	60-90	80- 120	130- 150	——