AK J80SD

GB/T 32533 E7815-G

AWS A5.5 E11015-G H4

Characteristics and Applications: AK-J80SD is an ultra-low hydrogen low alloy electrode with high strength and toughness. It has excellent welding performance, low temperature impact toughness and crack resistance of deposited metal. It is suitable for the welding of spiral case and 800MPA base metal of pressure pipeline in water power equipment, and the welding of marine engineering ship and oil pipeline with the same strength.

Note:

1. The electrode is baked at 380 ° C for 1 ~ 2 hours before use, and then put into 100 ~ 150 ° C incubator.
2. must be removed before the welding surface of water, oil, rust and other impurities.
3. Arc-starting and return transportation technology or arc-starting plate should be used to strengthen arc.
4. according to the plate thickness and steel grade, using different temperature for appropriate preheating.
5. Apply short arc and narrow weld bead during welding.

Chemical composition of deposited metal (mass fraction) :

	C	Si	Mn	S	P	Ni	Mo	Cr
Requirement	0.10	0.60	≥ 1.30	0.015	0.020	≥2.00	0.60	0.60
Actual Result	0.038	0.21	1.68	0.004	0.006	2.77	0.39	0.43

Note: In order to meet the requirements of group G alloy, the undiluted weld metal s hall be at least conducive to a minimum value in this table

	Tensile strength (MPa)	Yield strength(MPa)	Elongation (%)	Impact Function (J)
GB/NB	≥780	≥690	≥ 13	≥27J/-40C
AWS	≥760	≥670	≥ 15	——
Actual Result	868	785	18.5	115

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		——	3.2*350	4.0*400	5.0*400
Current (A)	F/H	——	90-130	140- 170	180-220
	V/OH	——	80- 115	130- 150	——