AK J707

GB/T 32533 E6915-GP

AWS A5.5 E10015-G

Characteristics and applications: AK-J707 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. It is mainly used for welding of 700MPa high strength steel structure steel, also used for welding of bridge, boiler and other related parts with the same strength.

Note:

1. The electrode must be baked at 380 ° C for one hour before use.
2. Impurities such as water, oil and embroidery must be removed from the surface of the welding parts.
3. Short arc narrow pass welding, the maximum swing should not exceed three times the line diameter.

Note:

In order to meet the requirements of group G alloy, undiluted weld metal shall be at least conducive to a minimum of this table, with additional chemical composition negotiated between the supplier and the buyer)

Chemical composition of deposited metal (mass fraction) :

	C	Si	Mn	S	P	Ni	Mo
Requirement	0.15	0.80	≥ 1.00	0.030	0.030	≥0.50	≥0.20
Actual Result	0.084	0.42	1.59	0.003	0.014	1.04	0.23

Mechanical properties of deposited metal:

		Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)	Impact function (J)
GB/NB		≥690	≥600	≥ 14	——
AWS		≥690	≥600	≥ 16	——
Actual Result	**Welding state**	774	649	23.5	75
	Heat treatment 620±15℃x1h	752	649	24	80

Diffused hydrogen content of deposited metal: ≤ 5.0mL/100g(mercury method or thermal conductivity method)

X-ray detection requirements for deposited metal: 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- 180	170-220
	V/OH	60-90	80- 120	130- 170	——