

AKR407C

Description: Low hydrogen type coating of low alloy heat-resistant steel electrode for sodium, has good resistance to fatigue cracking of welded joint performance, excellent resistance to temper embrittlement and its mechanical properties of welded joint of high operating characteristics of an electrode, and suitable for field installation and construction, and compared to ordinary steel welding material, has the following characteristics: **1.** Deposited metal purity, impurities such as S and P is extremely low, $S < 0.10\%$, $P < 0.10\%$. **2.** Excellent low temperature toughness of deposited metal, $KVg(-30C) \geq 54J$. **3.** Excellent resistance to temper embrittlement of weld metal, X factor is very low.

Application: Used in the petroleum refining petrochemical, coal chemicals, steam turbine cylinder, thermal power, nuclear energy and other harsh conditions corrosive medium large, complex equipment ASME SA387 Gr. 22 Class 2 (12Cr2Mo1R) class steel plate welding.

Typical Chemical Composition(%):

	C	Mn	P	S	Si	Cr	Mo	Sb	As	Sn	X
Actual Result	0.07	0.69	0.006	0.003	0.2	2.25	1.05	0.001	0.003	0.001	7.2

Typical Mechanical Properties :

①=normal temperature ②=heat treatment $690^{\circ}C \times 8h$ ③=heat treatment $690^{\circ}C \times 26h$

$^{\circ}C$	Tensile strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
①	600	500	23	② 159 164 185
475	—	450	—	
①	550	460	25	③ 163 135 144
475	—	430	—	