

Characteristics and Applications:

KE9018-B3 is an iron powder low hydrogen type stick electrode for the use of 2.25% Cr-1%Mo heat resistant steels. It also has good creep-resistant property in working condition at 550°C. Stable arc and less spatter can be secured in all position welding. It is suitable for the welding of high temperature and high pressure pipes, chemical machines, apparatus used in cracking of petroleum and etc which operating temperature is below 550°C. Such as A335-P22 pipe, A387 Gr.22 steel plate.

Welding Position:

Typical Chemical Composition of All-Weld Metal:

Alloy (wt%)	C	Mn	Si	Cr	Mo	P	S
AWS Spec.	0.05-0.12	0.90	0.80	2.00-2.50	0.90-1.20	0.03	0.03
Tested	0.07	0.75	0.35	2.28	1.05	0.011	0.013

Mechanical Properties of All-Weld Metal:

Mechanical properties	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation (%)	Impace Value (J/°C)
AWS Spec.	530	620	17	
Tested	575	675	19.5	160 J/R.T.

Notes on Usage:

1. Dry the stick electrodes at 350-400°C for one hour before welding.
2. Preheat treatment before welding at 160-200°C and keep corresponding interpass temperature while welding.
3. Keep short arc length when welding.
4. To relieve stress. PWHT at 690± 15°C.
5. Polarity :DC or AC.

Sizes Available and Recommended Parameter:

Dia/mm	3.2x350	4.0x400	5.0x400
F	90-140	140-190	190-240
V&OH	80-120	120-160	