


KE8018-C1

Classifications:

GB/T5118 E5518-C1
 AWS A5.5 E8018-C1
 A5.5M E5518-C1
 EN E 46 6 2N1 B 32
 ISO 2560 B-E5518-N5P

Characteristics and Applications:

KE8018-C1 is an iron powder and low hydrogen type stick electrode for all-position welding. In contribution of 2.5%Ni in the weld metal, KE8018-C1 can obtain good notch toughness with impact requirement down to -60°C. It is suitable for the welding of low temperature facilities, such as the steels of 2.5Ni, ASME SA203Gr.A.B.

Welding Position: 

Typical Chemical Composition of Weld Metal:

Alloy wt%	C	Mn	Si	Cr	Ni	Mo	P	S
AWS	0.12	1.25	0.80	--	2.00-2.75	--	0.03	0.03
KE8018-C1	0.080	0.97	0.62	0.09	2.58	0.01	0.014	0.008

Typical Mechanical Properties of Weld Metal:

Mechanical properties	Y.S.(MPa)	T.S.(MPa)	EL%	L.V.(J/°C)
AWS	460	550	19	±
KE8018-C1	505	592	29	±

Notes on Usage :

1. Dry the stick electrodes at 350-400°C for one hour before welding.
2. Be sure to remove moisture, oil and rust on the base metal.
3. Preheat treatment before welding at 90-110°C and try to keep low hydrogen situation during whole welding process.
4. Keep short arc length when welding.
5. To relieve stress, PWHT at 605-635°C.
6. Because of excessive heat input, the impact value tends to be lower. Therefore, choose proper heat input is very important.
7. Current type: DC or AC.

Sizes Available and Recommended Parameters:

Diameter(mm)	2.6x350	3.2x350	4.0x400	5.0x400
Current F.H	70-100	100-140	140-180	180-230
(Amp) OH,V	60-90	90-130	120-160	—