

Classifications: AWS A5.5 E7016-A1 A5.5M E4916-A1

EN ISO 3580 B-E4916-1M3

Characteristics and Applications:

KE7016-A1 is a low hydrogen type stick electrode whose chemical composition contains 0.5% Mo in the weld metal so as to secure the higher strength and good corrosion resistance. It is suitable for the welding of boiler and heat exchangers, such as plates of ASYM A204 and A335-P1 of pipes.

Welding Position:

Typical Chemical Composition of All-Weld Metal:

Alloy wt%	С	Mn	Si	Cr	Мо	Р	S
AWS	0.12	0.90	0.60		0.40-0.65	0.03	0.03
Tested	0.07	0.68	0.48	0.15	0.53	0.015	0.011

Mechanical Properties of All-Weld Metal:

Mechanical properties	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation (%)	Impace Value (J/℃)
AWS	390	490	25	
Tested	510	582	29	174/R.T

Notes on Usage:

- 1. Dry the stick electrodes at 350-400°C for one hour before welding.
- 2. Preheating and interpass temperature at 90 110°C and try to keep low hydrogen situation during whole welding process.
- 3. Keep short arc length when welding.
- 4. To relieve stress. PWHT at 605 635°C.
- 5. Polarity: DC or AC.

Sizes Available and Recommended Parameter:

Diameter (mm)	3.2 x 350	4.0 x 400	5.0 x 400
Current F	90 - 130	140 - 190	190 - 240
(Amp) OH, V	80 - 120	120 - 160	–

