

Characteristics and Applications:

KE8018-W2 is an iron powder low hydrogen type stick electrode designed for welding 590N/mm² grade low alloy steel in all position. Great anti-atmospheric corrosion and crack resistance can be secured by its chemical composition of the weld metal including Ni, Cu and Cr. KE8018-W2 is suitable for the welding of the same strength level steels for bridges, construction and vehicles.

Welding Position:

Typical Chemical Composition of All-Weld Metal:

Alloy wt%	C	Mn	Si	Ni	Cr	Cu	P	S
AWS	0.12	0.35-1.30	0.35-0.80	0.40-0.80	0.45-0.70	0.3-0.75	0.03	0.03
Tested	0.061	1.06	0.51	0.64	0.55	0.49	0.011	0.010

Mechanical Properties of All-Weld Metal:

Mechanical properties	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation (%)	Impace Value (J/°C)
AWS	460	550	19	27J/-20°C
Tested	560	615	25.5	167J/-20°C

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 160-200°C and keep corresponding interpass temperature while welding.
4. Keep short arc length when welding.
5. Because of excessive heat input, the impact value tends to be lower.
Therefore, choose proper heat input is very important.

Sizes Available and Recommended Parameter:

Dia/mm	2.6x350	3.2x350	4.0x400	5.0x400
F	70-100	100-140	140-180	180-230
Amp OH, V	60-90	90-130	120-160	-