

KF111-K3M

Flux Cored Wire for Low Alloy and High Tensile Steel

Classifications:

AWS A5.29 E111T1-K3M
A5.29M E761T1-K3M
ISO 18276 B-T762T1-1M A-N3M2

Characteristics and Applications:

KF111-K3M is a kind of 760 MPa flux cored wire for low alloy high tensile steel using mixed gas. Nominal composition is 2%Ni and it can be welded in all positions. It exhibits good weldability, little smoke, stable arc, easy slag removal, good penetration and X-Ray inspection. It is suitable for bridges, port machinery, such as Hy-100, A514, Q690 and etc.,

Welding Position:

Typical Chemical Composition of All-Weld Metal:

Alloy wt%	C	Mn	Si	Cr	Ni	Mo	P	S	V
AWS	0.15	0.75-2.25	0.80	0.15	1.25-2.6	0.25-0.65	0.03	0.03	0.05
Tested	0.054	1.54	0.40	0.02	2.26	0.39	0.012	0.007	0.01

Mechanical Properties of All-Weld Metal:

Mechanical properties	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation (%)	Impact Value (J/°C)
AWS	680	760-900	15	27/-20
Tested	760	820	19	75/-40

Notes on Usage:

1. Electric current choice : DC+
2. Clean up water, rust, oil on the base metal sufficiently before welding.
3. Preheating the base metal at $150 \pm 15^\circ\text{C}$.
4. Use over Mixed gas (80% Argon + 20% CO₂).
5. It's necessary to cover the flux cored wire by canvas if it needs on wire feeder for one night.

Sizes Available and Recommended Parameter:

Dia/mm	1.2	1.4	1.6
Volt	24-32	24-36	25-40
Amp	150-300	170-360	200-400
Stick-Out(mm)	15-25	15-25	15-25
Gas Flow(l/min)	20-25	20-25	20-25