

KSF-71T8-Ni1

Self-Shielded Flux Cored
wires for X70 Pipelines

Classifications:

AWS A5.29 E71T8-Ni1
A5.29M E491T8-Ni1
ISO 17632 B-T493T8-1NA-N2

Characteristics and Applications:

KSF-71T8-Ni1 is a 490MPa self-shielded flux cored wire used for welding high strength steels and atmospheric corrosion-resistant steel, such as ocean platform, storage tanks and X70 pipelines requiring low temperature toughness. Its deposited metal contains 0.80% Ni so as to secure excellent low temperature toughness and good crack resistance. In addition, few spatter, smooth welding beads, easy slag removal and stable arc can be obtained.

Welding Position:

Typical Chemical Composition of All-Weld Metal:

Alloy wt%	C	Mn	Si	Cr	Ni	Mo	P	S	Al
AWS	0.12	1.50	0.80	0.15	0.80-1.10	0.35	0.03	0.03	1.8
Tested	0.057	0.79	0.11	0.04	0.88	0.01	0.008	0.002	0.79

Mechanical Properties of All-Weld Metal:

Mechanical properties	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation (%)	Impact Value (J/°C)
AWS	400	490 - 620	20	27/-30
Tested	435	525	27	150/-30

Notes on Usage:

1. Polarity : DC+
2. Clean up water, rust, oil on the base metal sufficiently before welding.
3. Excellent mechanical properties can be obtained by preheating base metal on $150^{\circ}\text{C} \pm 15^{\circ}\text{C}$ and maintaining $150^{\circ}\text{C} + 15^{\circ}\text{C}$ inter pass temperature.
4. Keeping the stick-out around 15-20mm.
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	1.6	2.0
Volt	16-20	16-20
Amp	180-230	180-260
Stick-out(mm)	10-20	10-20