K-81TK2 AWS E81T1-K2 JIS YFL-C506R KS YFL-C506R

FOR LOW TEMPE
RATURE SERVICE STEEL

Typical applications

K-81TK2 is designed for welding of 590MPa high tensile steel for low temperature service. Butt and fillet MAG welding of offshore structures, LNG and LPG carriers and storage tank, etc.

Characteristics on Usage

- 1 Wire is a titania type of flux cored wire for all-position welding.
- ② The weld metal contains about 1.5%Ni and has good impact value at low temperatures down to -60 $^{\circ}$ C.
- ③ It provides excellent usability with stable arc, low spatter levels and deposition rate.
- (4) It has good porosity resisitance and is applicable for fillet welding of inorganic zinc-primer coated steels
- (5) The shielding gas should be used 100%CO₂ for welding.
- 6 Refer to page 150 for more information on usage.

Typical chemical composition of all-weld-metal (%)

Shielding Gas	C	Si	Mn	Ni
CO ₂	0.03	0.46	1.45	1.5

Typical mechanical properties of all-weld-metal

Shielding Gas	Υ·Ρ	T·S		Charpy V-notch
	N/mm²{kgf/mm²}	N/mm²{kgf/mm²}	(%)	J {kgf ⋅ m} (-60°C)
CO ₂	610 {62}	660 {67}	25	60 {6}

Sizes available and recommended currents (DC wire⊕)

Dia.	(mm)	1.2	1.6
Amp.	F / H-Fil	120~340	200~450
	V	120~320	180~240

Package

Dia.	(mm)	1.2	1.4	1.6
Spool	(ka)		5, 12.5, 15, 20	

Welding positions













Approved by

ABS, BV, DNV, GL, KR, LR, NK, JIS, KS