FOR HEAT-RESISTING STEEL



Typical applications

K-81TB2 is formulated for butt and fillet welding of 1.25%Cr-0.5%Mo steels used for high pressure vessels, oil refining industries, steam pipes of boilers etc. (ASTM A182 Gr. F2,F11,F12; A193 Gr. B7; A234 Gr. WP11,WP12; A250 Gr. T11; A336 Gr. F11,F12 A356 Gr. 5,6,8,9; A387 Gr. 2,11,12; A389 Gr. C23; A672 Gr. H75, 80)

Characteristics on Usage

- ① Wire is a titania type of flux cored wire for all-position welding.
- ② The weld metal contains about 1.25Cr, 0.5%Mo and has good crack-resistance and heat-resistance.
- ③ It has excellent creep rupture strength, easy slag removal and good weld soundness.
- 4) The shielding gas should be used 100%CO2 for welding.
- ⑤ Preheat at 150~300℃ and postheat at 690℃.
- 6 Refer to page 150 for more information on usage.

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

Shielding Gas	C	Si	Mn	Cr	Мо
CO ₂	0.05	0.44	1.08	1.25	0.53

Typical mechanical properties of all-weld-metal

Shielding Gas	Y · P N/mm²{kgf/mm²}	T · S N/mm²{kgf/mm²}	EI (%)	PWHT
CO ₂	530 {54}	600 {61}	25	690℃ X1hr.

Sizes available and recommended currents (DC wire⊕)

Dia.	(mm)	1.2	1.6
Amp.	F H-Fil	120~340	200~450
	V	120~220	180~240

Package

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

Welding positions













Approved by