

# K-81TA1

**AWS E81T1-A1**  
**JIS YFM-C**  
**KS YFM-C**

FOR HEAT-  
RESISTING STEEL

## Typical applications

K-81TA1 is formulated for butt and fillet welding of 0.5%Mo steels used for high pressure vessels, oil refining industries, steam pipes of boilers etc.(ASTM A161 T-1; A182 F1; A204 Gr. A, B; A234 Gr. WP1; A336 Gr. F1; A352 Gr. LC1; A356 Gr. 2; A426 Gr. CP1,CP15; A533 Gr.A1)

## Characteristics on Usage

- ① Wire is a titania type of flux cored wire for all-position welding.
- ② The weld metal contains about 0.5%Mo and has good crack-resistance and heat-resistance.
- ③ K-81TA1 has very efficient welding due to higher deposition rate particularly.
- ④ The shielding gas should be used 100%CO<sub>2</sub> for welding.
- ⑤ Preheat at 100~200°C and postheat at 620°C.
- ⑥ Refer to page 150 for more information on usage.

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

Shielding Gas	C	Si	Mn	P	S	Mo
CO <sub>2</sub>	0.024	0.55	1.21	0.016	0.013	0.53

## Typical mechanical properties of all-weld-metal

Shielding Gas	Y · P	T · S	EI	PWHT
	N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	N/mm <sup>2</sup> {kgf/mm <sup>2</sup> }	(%)	
CO <sub>2</sub>	531 {54}	610 {62}	25	620°C×1hr

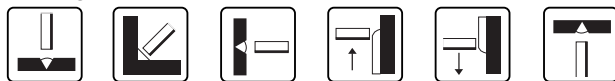
## Sizes available and recommended currents (DC wire⊕)

Dia.	(mm)	1.2	1.4
Amp.	F	140~360A	200~460A
	H-Fil	140~360A	200~460A
	V	140~260A	180~260A

## Package

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

## Welding positions



Approved by