

K-91TB3

AWS E91T1-B3
JIS YF2CM-C
KS YF2CM-C

**FOR HEAT-
RESISTING STEEL**

Typical applications

K-91TB3 is formulated for butt and fillet welding of 2.25%Cr-1.0%Mo steels used for high pressure vessels, oil refining industries, steam pipes of boilers etc. (ASTM A182 Gr. F21,F22,F22a; A193 Gr. B16; A213 Gr. T22; A250 Gr. T22; A336 Gr. F21,F22 A356 Gr. 10; A387 Gr. 21,22; A389 Gr. C24; A542 Gr. 2A, 2B; A691 Gr. 12)

Characteristics on Usage

- ① Wire is a titania type of flux cored wire for all-position welding.
- ② The weld metal contains about 2.25Cr, 1.0%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 200~350°C and postheat at 690°C.
- ⑥ Refer to page 150 for more information on usage.

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

Shielding Gas	C	Si	Mn	Cr	Mo
CO ₂	0.05	0.51	1.18	2.25	1.00

Typical mechanical properties of all-weld-metal

Shielding Gas	Y · P	T · S	EI	PWHT
	N/mm ² {kgf/mm ² }	N/mm ² {kgf/mm ² }	(%)	
CO ₂	630 {64}	680 {69}	24	690°C X 1hr.

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