

K-91TB3LS

For heat-resisting steel (2.25%Cr-1% Mo)

Classifications

AWS A5.29-10	: E91T1-G
AWS A5.36-12	: E91T1-C1PZ-G

Description

- It is designed for welding of 620MPa 2.25%Cr-1% 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)
- The weld metal contain about 2.25%Cr, 1%Mo, low carbon and has good crack and heat resistance
- It has excellent low temperature toughness at -20℃

Welding positions



Polarity & shielding gas

- CO₂: 100% CO₂ (15~25ℓ/min)
- DCEP (DC+)

Typical chemical composition of all-weld metal (%)

Shielding gas	C	Si	Mn	P	S	Cr	Mo
CO ₂	0.06	0.33	1.06	0.015	0.013	2.19	1.04

Typical mechanical properties of all-weld metal

	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J)		PWHT
				0℃	-20℃	
AWS A5.29	min. 540	620~760	min. 17			
EN ISO 17634-B	min. 530	620~820	min. 15			
Example (CO ₂)	658	726	21	139	120	690℃x1Hr

Notes on usage and welding condition

- Refer to page 211~213 for more information on usage
- Preheat at 160~190℃ and PWHT at 690℃

Package

Dia. (mm)	1.2	1.4	1.6
Spool (kg)	5, 12.5, 15, 20		
Pailpack (kg)	100 ~ 300		