FOR HIGH TENSILE	
STRENGTH STEEL	

AWS E91T1-Ni1 JIS YFW-C602R K-91T KS YFW-C602R

Typical applications

K-91T is designed for welding of 630MPa high tensile steel for low temperature service. It is a superior choice for all-position work with many high-strength low alloy Is, such as steeASTM A302, A572, A575, A734

Characteristics on Usage

- (1) Wire is a titania type of flux cored wire for 630MPa class tensile strength steel welding.
- ② K-91T is recommended for single-and multiple-pass welding in all position with 100% CO₂ shielding gas.
- (3) It makes good low temperature toughness after PWHT at low temperatures down to -40 $^\circ\!C.$
- (d) It is characterized by welder appeal, with a smooth stable arc, low smoke and spatter levels.
- ⑤ In case of heavy plate welding, preheat at 50~150℃.
- 6 Refer to page 150 for more information on usage.

Typical chemical composition of all-weld-metal (%)										
Shielding Gas	С	Si	Mn	Р		S	Ni			
CO2	0.027	0.42	1.37	0.01	3 (0.012	0.93			
Typical mechanical properties of all-weld-metal										
PWHT	Y · P N/mm²{kgf/mm²}		T ⋅ S N/mm²{kgf/mm²}		EI (%)	Charpy V-notch J {kgf \cdot m} (-30°C)				
As welded	650	{66}	725 {7	5 {74} 22		130 {13}			130 {13}	
620℃*2hr.	610	{62}	670 {6	8}	26	60 {6}			60 {6}	
Sizes available and recommended currents (DC wire⊕)										
Dia.	(m	m)	1.2							
	F 160~300									
Amp.	H-	Fil	160~320							
	\	/	160~240							
Package										
Dia. (mm) 1.2 1.4 1.6										
Spool (kg)	ipool (kg) 5, 12.5, 15, 20									
Welding positions										
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Approved by

174