

*Flux Cored Arc
Welding*

KX-706T Technical Report

MCW

2017.01.20

1. Description

- It is designed for welding of 490MPa high strength steels
- KX-706T is **all-positional** welding, high deposition efficiency and very stable arc with spray
- It is generally used for single side welding
- This wire has good toe wetting & low slag

2. Specification

- AWS A5.18-15 : E70C-6M
- AWS A5.36-15 : E70T15-M21A3-CS1 H4
- EN ISO 17632-B : T49 3 T15-0MA H5



3. Chemical Composition of Weld metal

Unit : wt%

	C	Si	Mn	P	S	Ni
AWS A5.18 : E70C-6M	≤0.12	≤0.9	≤1.75	≤0.03	≤0.03	≤0.5
KX-706T	0.05	0.39	1.54	0.01	0.01	1.10

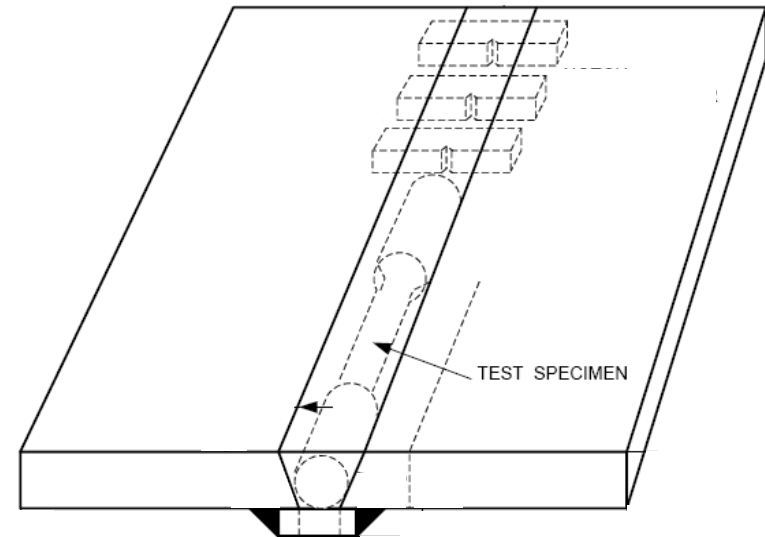
※ Shielding Gas : Ar + 20% CO₂

4. Typical Mechanical Properties of all-weld-metal

Product Name	Y/S (MPa) ≥400	T/S (MPa) ≥480	EI (%) ≥22	Charpy V-Notch Impact Value (J)	Shielding Gas
				-30°C ≥27	
KX-706T	459	587	28.8	48	Ar + 20% CO₂

5. Typical Welding Parameters

- **Base Metal : ASTM A516-70**
 - 300L×150W×20t, Groove angle = 45°,
Root Gap = 13mm
- **DCEP, Ar + 20% CO₂**
- **Welding condition(1.2Ø)**



Amp.	240
Volt.	28
Inter pass temp. [°C]	150±15

6. Picture of weld-bead

Welding Position	2F	Welding Position	3G
Welding Parameter	240~260A, 28~29V	Welding Parameter	160~180
