KX-706T

FLUX CORED ARC WELDING
CONSUMABLE FOR WELDING OF 490MPa
HIGH TENSILE STEEL
(NON SLAG TYPE)

KISWEL

Rev.0

Description & Application

- It is designed for welding of 490MPa high tensile steel with outstanding mechanical properties
- Typical applications include machineries, shipbuilding, offshore structures, bridges and general fabrications
- Wire is a metal type of flux cored wire for all position welding
- It feature good penetration, high resistance to porosity, good wetting behavior as well as low hydrogen contents
- KX-706T is intended for semi-automatic, automatic, single- and multiple pass welding

Classification

- AWS A5.18 : E70C-6M
- AWS A5.36 : E71T15-M21A2-CS1 H4
- EN ISO 17632 A : T46 2 M M21 1 H5
- EN ISO 17632 B : T49 3 T15-1MA H5

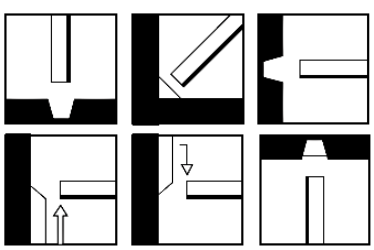
Typical Chemical Composition of Weld Metal(%)

Item	C	Si	Mn	P	S
AWS A5.18 E70C-6M	≤0.12	≤0.90	≤1.75	≤0.03	≤0.03
KX-706T	**0.05**	**0.55**	**1.46**	**0.012**	**0.021**

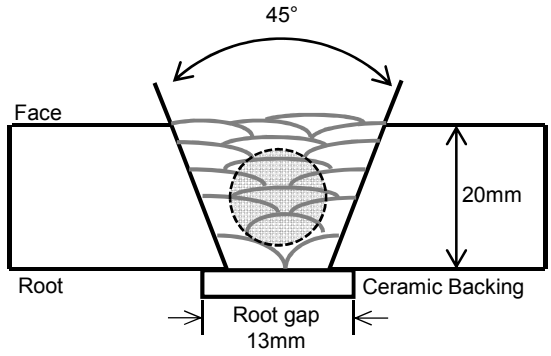
Shielding Gas

- **Ar + 15~25%CO_2 (15~25ℓ/min)**

Welding position



All Weld Metal Test Specimen



Base metal	A516-70
Diameter	1.2 mm
Welding position	1G
Welding current(A)	240
Arc voltage(V)	25
Heat input	13 kJ/cm

Typical Mechanical Properties of Weld Metal

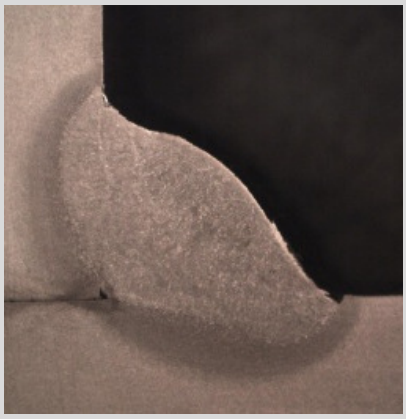
	Y.S (MPa)	T.S (MPa)	El. (%)	IV (J) (Joule @ Temp)	Shielding Gas	PWHT
AWS E70C-6M	min. 400	min. 480	min. 22	≥ 27 @ -30℃		AW
KX-706T (1G)	**475**	**587**	**29**	**48 @-30℃**	**Ar+20%CO_2**	**AW**

Typical Operating Procedures

Dia (mm)	Welding Conditions		Feed speed (m/min)	Deposition Efficiency(%)	Deposition Rate (Kg/Hr)
	Current (amps)	Voltage (volts)			
1.2	200	23	6.9	90-92	3.0
	250	26	11.5	93-95	4.5
	300	31	12.9	95-96	5.2
1.4	250	28	8.9	93-95	4.9
	300	31	10.2	95-96	6.1
	330	34	12.8	95-96	7.7
1.6	300	31	7.5	92-94	5.5
	350	33	8.1	93-95	6.1
	400	36	9.2	93-95	8.0

■ Main features of KX-706T

■ Bead appearance & Cross-sectional weld bead

Conventional (Flat & Horizontal position only)	KX-706T (All position)
 	 *Welding parameter 160~180A 22~24V 

Conventional (2F)	 240~260A / 28~29V
KX-706T (2F)	 240~260A / 28~29V

■ Packaging





■ Size and Weight

Dia. (mm)	1.2,1.4,1.6
Weight (kg)	5, 12.5, 15, 20
Pail pack(kg)	100~350

■ Approval

CWB
E497T15-M21A2-CS1-H4 (1.2~1.4mm only)

■ Handling and Storage

- **Once Flux cored wire picked up moisture, it cannot be dried at high temperature, unlike covered electrode.**
- **If a wire was left in a wire feeder in a high-temperature high- humidity atmosphere in summer season, a wet environment in rainy season or a dew fall environment at night in winter was unpacked, the wire should be kept in an area of low humidity.**

  ※ Temp. below 30℃ relative humidity below 60%

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The Management System of KISWEL LTD, 704, Gongdan-ro, Seongsan-gu, Changwon-si, Gyeongnam 51544, Republic of Korea, 70, Saebyeok-ro 63beon-gil, Sasang-gu, Busan 47018, Republic of Korea has been approved by Lloyd's Register Quality Assurance to : IATF 16949:2016, ISO 14001:2015, applicable to : Manufacture of solid welding wires & rods, flux cored wires, submerged arc welding wires & fluxes, stainless steel welding wires & rods and covered electrodes.
More information : www.kiswel.com

