

# K-71TLF

For 490MPa high tensile steel

## Classifications

EN ISO 17632-A:2015	: T 42 2 P C1 1 H5
	: T 46 2 P M21 1 H10
EN ISO 17632-B:2015	: T 49 2 T1-1C1A-U H5
	: T 49 2 T1-1M21A-U H10
JIS Z 3313-2009	: T 49 2 T1-1C/M A-U H10
AWS A5.20-2005(R2015)	: E71T-1C/-M
AWS A5.36-2016	: E71T1-C1A0-CS1-H4
	: E71T1-M21A0-CS1-H8
D 7104-2012	: YFW-C(A)50DR

## Approvals – C1 (100% CO<sub>2</sub>)

ABS	: E71T-1M
BV	: 3S,3YS,H10
DNV	: III YMS (H10)
LR	: 3YS H10
KR	: 3YSG(C)H10
NK	: KSW53G(C)H10
RINA	: 3Y S
Other	: CCC, RS, CWB, JIS, TUV, DB

## Approvals – M21 (Ar 80% + CO<sub>2</sub> 20%)

ABS	: 3YSA H10
BV	: 3S,3YS
DNV	: III YMS
LR	: 3YS No
RINA	: 3Y S H10

## Description

- 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 titania type of flux cored wire for all-position welding
- It provides low fume generation and has good impact strength at low temp

## Welding positions



## Polarity & shielding gas

- DCEP (DC+)
- CO<sub>2</sub>: 100% CO<sub>2</sub> (15 – 25 l/min)
- Mix: Ar 80% + CO<sub>2</sub> 20%

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

Shielding Gas	C	Si	Mn	P	S
CO <sub>2</sub>	0.03	0.38	1.35	0.015	0.010

## Typical mechanical properties of all-weld metal

	Yield Strength	Tensile Strength	Elongation	Impact Value (J)		Remarks
	(MPa)	(MPa)	(%)	-20 °C	-30 °C	
AWS A5.20	Min. 390	490-670	Min. 22	≥ 27		
EN ISO 17632-B	Min. 390	490-670	Min. 18	≥ 47		
Example	520	570	28	80	50	CO <sub>2</sub>

## Notes on usage and welding condition

- Refer to KISWEL welding handbook page 219-221 for more information on usage

## Package

Diameter (mm)	1.2, 1.4, 1.6
Spool (kg)	5, 12.5, 15, 20
Pailpack (kg)	100 - 300