

Flux Cored Welding Wire

K-71TSRM

For 490MPa low temperature service steel (PWHT)

Classifications

EN ISO 17632-A:2015 : T42 4 P M21 1 H10 AWS A5.20-2005(R2015): E71T-12MJ H8
 EN ISO 17632-B:2015 : T49 4 T1-1M21 AP-N1-U H10 AWS A5.36-2016 : E71T1-M21A/P4-CS2-H8
 JIS Z 3313-2009 : T49 4 T1-1 M AP-N1-U H10 KS D 7104-2012 : YFL-A504R

Description

- It is designed for welding of 490MPa low temperature steels (NACE/API steel)
- Typical applications include railcar, automotive machinery, shipbuilding, bridges, heavy equipment etc
- Wire is a titania type of flux cored wire for all-position welding
- It feature excellent mechanical properties, easy slag removal, low spatter generation, and good impact value at low temperatures down to -40°C in the PWHT conditions

Welding positions



Polarity & shielding gas

- Mix: Ar+20% CO₂ (15~25ℓ/min)
- DCEP (DC+)

Typical chemical composition of all-weld metal (%)

| Shielding gas | C | Si | Mn | P | S | Ni |
|---------------|------|------|------|-------|-------|------|
| Mix | 0.03 | 0.50 | 1.50 | 0.008 | 0.010 | 0.42 |

Typical mechanical properties of all-weld metal

| | Y.S (MPa) | T.S (MPa) | El. (%) | IV (J) | | Remarks |
|-----------------|--------------|--------------|------------|--------|-------|-----------|
| | | | | -30°C | -40°C | |
| AWS A5.20 | min. 390 | 490~620 | min. 22 | | ≥ 27 | |
| EN ISO 17632-B | min. 390 | 490~670 | min. 18 | | ≥ 47 | |
| Example AS-weld | 580 | 610 | 27 | 128 | 85 | |
| (Mix) PWHT | 560 | 600 | 27 | 74 | 55 | 620°Cx2Hr |

Notes on usage and welding condition

- Refer to page 219~221 for more information on usage
- In order to prevent crack at low temperatures, preheat and maintain interpass temperature at 100~200°C

Package

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