

Supercored 81-K2

TYPE : Rutile

AWS A5.29 / ASME SFA5.29 E81T1-K2C
JIS Z3313 T55 6 T1-1 C A-N3 H5
EN ISO 17632-A-T 46 6 1.5Ni P C 1 H5

Applications

Supercored 81-K2 is used for the welding of low temperature service steels in the construction of LPG and LNG storage tanks.

Characteristics on Usage

Supercored 81-K2 is a titania type flux cored wire designed for all position welding with CO₂ shielding gas.

Notes on Usage

- ① Proper preheating(50~150° C)(122~302°F) and interpass temperature must be used in order to release hydrogen which may cause cracking in weld metal when electrodes are used for medium and heavy plates.
- ② One-side welding defects such as hot cracking may occur with wrong welding parameter such as high welding speed.
- ③ Use 100% CO₂ gas.

Welding Position



1G 2F 3G 4G
(PA) (PB) (PF) (PE)

Current

DC +

Shielding Gas

CO₂

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni
0.04	0.35	1.35	0.012	0.011	1.50

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	Temp. °C (°F)	CVN-Impact Value J (ft · lbs)
540 (78,400)	620 (90,000)	28	-30 (-22)	110 (81)
			-60 (-76)	60 (44)

Approval

KR, ABS, BV, DNV, GL, LR,
NK, CCS, RINA, MRS, CWB
CE

I Packing

Dia. (mm) 1.2 1.4 1.6
(in) .045 .052 1/16

Spool(kg) 12.5 15 20
(lbs) 28 33 44

Sizes Available and Recommended Currents (Amp.)

Size mm (in)	1.2 (.045)	1.6 (1/16)
F & HF	250~300	300~350
V-up, OH	170~230	200~250
V-down	250~300	300~350