Supercored 81-K2MAG

TYPE : Rutile

AWS A5.29 / ASME SFA5.29 E81T1-K2M
JIS Z3313 T55 6 T1-1 M A-N3 H5
EN ISO 17632-A-T 46 6 1.5Ni P M 2 H5

Applications

Supercored 81-K2MAG is suitable for single or multipass MAG welding application for LNG, LPG tank, etc. and for all low temperature service steel.

Characteristics on Usage

Supercored 81-K2MAG is an all position flux cored wire for low temperature service steel. Excellent mechanical properties and low temperature impact toughness. Smooth arc characteristics and very low spatter level.

Notes on Usage

① Proper preheating(50~150˚C)(122~302℉) 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 Ar+20~25% CO_2 gas.

Welding Position	Current	Shielding Gas
 1G (PA) 2F (PB) 3G (PF) 4G (PE)	DC +	Ar+20~25% CO_2

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni
0.03	0.35	1.25	0.012	0.010	1.55

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp. ℃ (℉)	CVN-Impact Value J (ft · lbs)
590 (85,600)	610 (88,500)	27	-30 (-22)	110 (81)
			-60 (-76)	70 (52)

Approval

ABS, BV, DNV, GL, LR, MRS, TÜV, CE, DB

Packing

Dia. (mm)	1.2	Spool(kg)	12.5	15	20
(in)	.045	(lbs)	28	33	44

Sizes Available and Recommended Currents (Amp.)

Size mm(in)	1.2 (.045)
F & HF	250~300
V-up,OH	170~230
V-down	250~300