SC-81Ni2M

AWS A5.29/ ASME SFA5.29 E81T1-Ni2M
JIS Z3313 T55 6 T1-1 M A-N5 H5
EN ISO 17632-A T46 6 2Ni P M 2 H5

Applications

Offshore, Shipbuilding, Bridge construction machinery and vehicles.

Characteristics on Usage

① SC-81Ni2M is a titania type flux cored wire for all position welding.
② It provides excellent notch toughness at low temperature.
③ It provides an exceptionally smooth and stable arc with a fast freezing slag system.

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 electoredes 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(All-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
0.05	0.24	1.15	0.010	0.010	2.25

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp. ℃ (˚F)	CVN-Impact Value J (ft · lbs)
580 (84,100)	620 (89,900)	24.8	-50 (-58) -60 (-76)	110 (81) 90 (66)

Approval

LR, BV, DNV

I Packing(Including Ball Pac)

Dia. (mm)	1.2	1.4	Spool(kg)	12.5
(in)	.045	.052	(lbs)	28

Sizes Available and Recommended Currents (Amp.)

Size mm (in)	1.2	1.4
F	130~300	160~330
V-up,OH	170~230	190~250
V-down	150~300	170~330