SC-81Ni2

AWS A5.29 E81T1-Ni2C
JIS Z3313 T55 6 T1-1 C A-N5 H5
EN ISO 17632-A T46 6 2Ni P C 1 H5

Applications

All position welding of offshore, shipbuilding, bridge construction machinery and vehicles.

Characteristics on Usage

① SC-81Ni2 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 100%CO_2 gas.

Welding Position	Current	Shielding Gas
 1G (PA) 2F (PB) 3G (PF.PG) 4G (PE)	DC +	CO_2

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni
0.05	0.27	1.35	0.010	0.010	2.20

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp. ℃ (˚F)	CVN-Impact Value J (ft · lbs)
610 (88,500)	640 (92,800)	25	-40 (-40)	100 (74)
			-60 (-76)	80 (59)

Approval

KR, ABS, LR, BV, DNV, GL, NK

I Packing(Including Ball Pac)

Dia. (mm)	1.2	1.4	Spool(kg)	12.5	15
(in)	.045	.052	(lbs)	28	33

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