

LN-300

For welding of 3.5% Ni steel

AWS A5.5 E8016-C2
KS D 7023 DL5016-10AP3
JIS Z3211 E4916-N7APL

Applications

Welding of 3.5% Ni steel used for LNG tankers, LNG storage tanks and ethylene production equipments to be used at about -100°C.

Characteristics

LN-300 is an all positions extra low hydrogen type electrode for 3.5% Ni steel to be used at low temperature (lowest -100°C)

Good notch toughness of weld metal at low temperature is obtained because the weld metal contains about 3.5% Ni.

Notes on usage

- (1) Pay attention not to exceed proper heat-input because excessive heat-input causes deterioration of impact values of weld metal.
- (2) Preheat at 50~100°C and postheat at 600~620°C. The preheat temperature varies in accordance with the plate thickness and the kind of steels.
- (3) Dry the electrodes at 350~400°C for about one hour before use.
- (4) Adopt back step method or strike the arc on a small steel plate prepared for this particular purpose to prevent blowholes at the arc starting.
- (5) Keep the arc as short as possible.

Typical chemical composition of weld metal (%)

C	Mn	Si	P	S	Ni
0.04	0.42	0.32	0.010	0.009	3.53

Typical mechanical properties of weld metal

YP N/mm ² (kgf/mm ²)	TS N/mm ² (kgf/mm ²)	EL %	IV J (kgf-m)		PWHT
			-75°C	-100°C	
550(66)	620(63)	31	100(10)	70(7)	620°C×1hr SR

Size & recommended current range (AC or DC +)

Dia. (mm)	2.6	3.2	4.0	5.0	
	L (mm)	350	350	400	400
Amp.	F	55-85	90-130	130-180	180-240
	V&OH	50-80	80-120	110-170	150-200

• Tip Color : Pink