

# LC-300N

For welding of aluminum-killed steel for low-temperature service

AWS A5.1 E7016-1  
KS D7006 E5016  
JIS Z3211 E4916-1

## Applications

Welding of LPG tankers, LPG storage tanks equipment for low-temperature service, and off-shore structures to be used at low-temperature districts.

## Characteristics

- (1) LC-318NH is a low hydrogen type covered electrode to be used in all-position welding of aluminum-killed steel for low-temperature service and with good crack resistibility.
- (2) It provides excellent notch toughness at -45°C and good usability in direct current welding.

## Notes on usage

- (1) Welding heat input must be controlled in order to get required impact value, since notch toughness tends to be decreased by excessive heat input.
- (2) Preheat at 50~100°C is needed depending upon the kind of steel and its thickness.
- (3) Adopt back step method or strike the arc previously on a small steel piece to prevent blowholes at the arc striking in a groove.
- (4) Dry the electrodes at 350-400°C for about one hour before use.

## Typical chemical composition of weld metal (%)

C	Mn	Si	P	S
0.05	1.51	0.51	0.011	0.005

## Typical mechanical properties of weld metal

YP N/mm <sup>2</sup> (kfg/mm <sup>2</sup> )	TS N/mm <sup>2</sup> (kfg/mm <sup>2</sup> )	EL %	IV (J)
			-45°C
505	593	31	112

## Size & recommended current range (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	80-115	100-170	150-200

\*Approval : -