

LC-318NH

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

AWS A5.1 E7018-1 H4R
KS D7006 E5016
JIS Z3211 E4918-1 H5

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 an iron powder Extra 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) Pay attention not to exceed heat-input because excessive heat-input causes deterioration of impact values of weld metal.
- (2) Dry the electrodes at 350-400°C for about one hour before use.
- (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) Keep the arc as short as possible.

Typical chemical composition of weld metal (%)

C	Mn	Si	P	S
0.05	1.25	0.24	0.011	0.010

Typical mechanical properties of weld metal

YP N/mm ² (kfg/mm ²)	TS N/mm ² (kfg/mm ²)	EL %	IV (J)	PWHT
			-45°C	
490	560	32	128	A.W
470	540	33	140	620°C*1hr

Size & recommended current range (DC±)

Dia. (mm)		2.6	3.2	4.0	5.0
L (mm)		350	350	400	400
Amp.	F	60-100	90-130	130-190	200-240
	V & OH	50-80	70-130	100-170	160-210

*Approval : ABS, DNV GL, BV, LR