

LC-300NS

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

AWS A5.5 E7016-G
KS D 7023 DL5016-6AP0
JIS Z3211 E4916-N1APL

Applications

Welding of 50kgf/mm² class aluminum-killed steel for low temperature used for offshore constructions, LPG tankers and LPG storage tanks.

Characteristics

LC-300NS is an extra low hydrogen type electrode for all-position welding of aluminum-killed steel used at low temperature and provides good usability.

Weld metal is 0.5%Ni-Ti-B type, and has better notch toughness at -60°C and CTOD properties at temperature down to -30°C.

Notes on usage

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

Typical chemical composition of weld metal (%)

C	Mn	Si	P	S	Ni	Ti	B
0.07	1.28	0.38	0.012	0.008	0.47	0.018	0.002

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
			-45°C	-60°C	
500(51)	610(62)	29	160(16)	130(13)	-
481(49)	579(59)	31	147(15)	118(12)	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(450)
Amp.	F	55-85	90-130	130-180	180-240
	V&OH	50-80	80-115	110-170	150-200

• Approval : ABS, DNV, LR

• Tip Color : Yellow