

# LPA-100

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

AWS A5.5 E8016-G  
JIS Z3211 E5516-GAP  
KS D7023 DL5016-4AP1

## Applications

Welding of aluminum-killed steel for low temperature used for LPG tankers and LPG storage tanks.

## Characteristics

LPA-100 is an all-position extra low hydrogen type electrode for aluminum-killed steel to be used at low temperature.

The weld metal contains about 1.6%Ni.

Notch toughness of weld metal at low temperature (-40 ~ -50°C) is stable and good.

## Notes on usage

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

## Typical chemical composition of weld metal (%)

C	Mn	Si	P	S	Ni
0.06	1.10	0.54	0.010	0.010	1.65

## Typical mechanical properties of weld metal

YP N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	TS N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	EL %	IVJ (kgf-m)		PWHT
			-30°C	-46°C	
530(54)	620(63)	30	140(14)	110(11)	-
500(51)	600(61)	31	150(15)	120(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
Amp.	F	55-85	90-130	130-180	180-245
	V&OH	50-80	80-115	100-170	150-200

• Tip Color : Yellow