# LPA-200 For welding of aluminum-killed steel for low-temperature and 2.5%Ni steel

 AWS
 A5.5
 E8016-C1

 KS
 D 7023
 DL5016-6AP2

 JIS
 Z3211
 E5516-N5APL

# **Applications**

Welding of aluminum-killed steel and 2.5%Ni steel used for machinery and equipments for low temperature.

## Characteristics

LPA-200 is an all position extra low hydrogen type electrode for aluminum-killed steel and 2.5%Ni steel used for machinery and equipments for low temperature (lowest -60°C) is obtained because the weld metal contains about 2.5%Ni.

LPA-200 also provides good X-ray soundness and good usability.

#### 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. The temperature varies in accordance with the plate thickness and steel kind.
- (3) Dry the electrodes at  $350 \sim 400$  °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 (%)

С	Mn	Si	Р	S	Ni
0.06	0.89	0.45	0.011	0.006	2.41

## Typical mechanical properties of weld metal

YP	TS	EL	IV J (kgf-m)		DAUE
N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	%	<b>-50</b> ℃	- <b>60</b> ℃	PWHT
500(51)	610(62)	30	150(15)	120(12)	-
480(49)	580(59)	32	170(17)	130(13)	620℃×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 : Orange