# LPA-118 For welding of low temperature services and 1%Ni steel

## **Applications**

Welding of 1%Ni steel used low temperature services of 55kgf/mm<sup>2</sup> class high tensile strength steel such as ASTM A588 and A242 steels.

## Characteristics

LPA-118 is an iron powder low hydrogen type electrode for all-position welding. Notch toughness at low temperature (-40 $^{\circ}$ C) is excellent, because it contains more Ni compared with other electrodes.

#### Notes on usage

- (1) Dry the electrodes at 350 $\sim$ 400  $^\circ \!\! C$  for about one hour before use.
- (2) Keep the arc as short as possible.
- (3) Adopt backstep method or strike the arc on a small steel plate prepared for this particular purpose to prevent blowholes at the arc starting.
- (4) Preheat at 50 $\sim$ 100°C depending on the kind of steel and its thickness.

## Typical chemical composition of weld metal (%)

С	Mn	Si	Р	S	Ni
0.07	0.89	0.37	0.010	0.004	1.00

#### Typical mechanical properties of weld metal

YP	TS	EL	IV J (kgf-m)
N/mm²(kgf/mm²)	N/mm²(kgf/mm²)	%	-40℃
530(54)	600(61)	30	130(13)

### Size & recommended current range (AC or DC +)

Dia. (mm)		2.6	3.2	4.0	5.0	5.5
L (mm)		350	350	400 450	400 450	450
Amp.	F	60-100	90-130	130-190	200-240	230-270
	V&OH	50-80	70-130	100-170	160-210	-

Tip Color : Black