

LC-618

For highly efficient welding of 60kgf/mm² class high tensile strength steel

AWS A5.5 E9018-G
KS D 7006 E5816
JIS Z3211 E6218-G

Applications

Welding of 60kgf/mm² class high tensile strength steel for pressure vessels, penstocks, bridges, offshore constructions, vehicles and machinery.

Characteristics

LC-618 is a iron powder low hydrogen type electrode for all-position welding, which provides good notch toughness of weld metal at low temperature.

The usability and X-ray soundness of weld metal are good in all position welding.

Notes on usage

- (1) Dry the electrodes at 350~400°C for about one hour before use.
- (2) Adopt back step method or strike the arc on a small steel plate prepared for this particular purpose because arc striking on base metal is in danger of initiating cracking
- (3) Keep the arc as short as possible.
- (4) Preheat at 50~150°C before use.
- (5) Pay attention not to exceed proper heat-input because excessive heat-input causes deterioration of impact values and yield strength of weld metal.

Plate thickness(mm)	Preheat temp.(°C)
<10	-
10-25	50-100
>25	100-150

Typical chemical composition of weld metal (%)

C	Mn	Si	P	S	Ni	Mo
0.07	1.40	0.40	0.011	0.009	0.52	0.32

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)
			-30°C
570(58)	660(67)	23	160(16)

Size & recommended current range (AC or DC +)

Dia. (mm)	3.2	4.0	5.0	6.0	
	L (mm)	350	400	400(500)	450
Amp.	F	90-140	140-180	180-240	220-300
	V&OH	70-120	120-160	150-200	-

• Tip Color : Yellow