

LC-600

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

AWS A5.5 E9016-G
KS D 7006 E5816
JIS Z3211 E6216-G

Applications

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

Characteristics

LC-600 is an extra 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. As the hydrogen content of the weld metal is especially low, the crack resistibility is good.

Notes on usage

- (1) Dry the electrodes at 350~400°C 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
0.08	1.10	0.52	0.014	0.006	0.56	0.23

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)	670(68)	28	150(15)

Size & recommended current range (AC or DC +)

Dia. (mm)	2.6	3.2	4.0	5.0	6.0	
	L (mm)	350	350	400	400	450
Amp.	F	55-85	90-130	130-180	180-240	250-310
	V&OH	50-80	80-115	110-170	150-200	-

• Approval : DNV, GL

• Tip Color : Green