

LC-700

For welding of 70kgf/mm² class high tensile strength steel

AWS A5.5 E10016-G
KS D 7006 E7016
JIS Z3211 E6916-G

Applications

Welding of 70kgf/mm² class high tensile strength steel (WES HW63, ASTM A514 etc.) for pressure vessels, penstocks, bridges, offshore constructions and industrial machinery.

Characteristics

LC-700 is low hydrogen type electrode for all-position welding.

Its usability and X-ray soundness are very good.

It provides weld metal of good notch toughness and of high crack resistibility.

Notes on usage

- (1) Dry the electrodes at 350~400°C for about one hour before use and store the electrodes at 100~150°C after drying them with attention to keep away from moisture.
- (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 100~150°C. The temperature to be applied varies in accordance with plate thickness and kind of steel to be welded.
- (5) Pay attention not to exceed proper heat-input because excessive heat-input causes deterioration of impact values and yield strength of weld metal.

Typical chemical composition of weld metal (%)

C	Mn	Si	P	S	Ni	Cr	Mo
0.08	1.49	0.61	0.009	0.005	1.52	0.21	0.21

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
660(67)	770(78)	25	130(13)

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	250-320
	V&OH	50-80	80-115	110-170	150-200	-

• Tip Color : Blue black