LC-800

For welding of 80kgf/mm² class high tensile strength steel

AWS A5.5 E11016-G
KS D 7006 E8016
JIS Z3211 E7616-G

Applications

Welding of 80kgf/mm² class high tensile strength steel for pressure vessels, penstocks, bridges, offshore constructions, industrial machinery and construction machinery.

Characteristics

LC-800 is a low hydrogen type electrode for all-position welding and provide good X-ray soundness, notch toughness and crack resistibility.

Notes on usage

(1) Dry the electrodes at 350~400℃ for about one hour before use. Store the electrodes at 100~150℃ after drying, keeping them 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 120~180℃. 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.
(6) Immediate post heating at 150~200℃ after welding is effective to prevent cracking.

Typical chemical composition of weld metal (%)

C	Mn	Si	P	S	Ni	Cr	Mo
0.07	1.49	0.63	0.009	0.006	1.84	0.24	0.43

Typical mechanical properties of weld metal

YP N/mm²(kgf/mm²)	TS N/mm²(kgf/mm²)	EL %	IV J (kgf-m)
			-30℃
730(74)	830(85)	22	120(12)

Size & recommended current range (AC or DC +)

Dia. (mm)		2.6	3.2	4.0	5.0
L (mm)		300	350	400	400
Amp.	F	55-85	90-130	130-180	180-240
	V&OH	50-80	80-115	110-170	150-200

• Tip Color : Purple