LC-118

For highly efficient welding of 80kgf/mm^2 class high tensile strength steel

AWS A5.5 E11018-M
KS D 7006 E8016
JIS Z3211 E7618-N4M2

Applications

Welding of 80kgf/mm^2 class high tensile strength steel for pressure vessels, penstocks, offshore constructions and machinery.

Characteristics

LC-118 is an iron powder low hydrogen type electrode and provides good usability with direct current applications in all-positions.
The weld metal has good crack resistibility and X-ray soundness.

Notes on usage

(1) Dry the electrodes at 350~400℃ for about one hour before use.
(2) Store the electrodes at 100~150℃ after drying them with attention to keep away form moisture.
(3) 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.
(4) Keep the arc as short as possible.
(5) Preheat at 120~180℃. The temperature varies in accordance with plate thickness and steel kind.
(6) 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	1.58	0.32	0.011	0.008	1.80	0.30	0.40

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)
			-51℃
720(73)	820(84)	23	70(7)

Size & recommended current range (AC or DC +)

Dia. (mm)		3.2	4.0	5.0	6.0
L (mm)		350	400	400	400(450)
Amp.	F	90-130	135-185	190-250	250-320
	V&OH	80-120	110-170	-	-

• Tip Color : White