LC-128

For highly efficient welding of 90kgf/mm^2 class high tensile strength steel

AWS A5.5 E12018-M JIS Z3211 E8318-N4C2M2

Applications

Welding of 90kgf/mm² class high tensile strength steel for penstocks, pressure vessels and machinery.

Characteristics

LC-128 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 $350\sim400^{\circ}$ for about one hour before use.
- (2) Store the electrodes at 100~150°C after drying them with attention to keep away from 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 150~200°C. 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 (%)

С	Mn	Si	Р	S	Ni	Cr	Мо
0.06	1.80	0.45	0.010	0.009	0.64	0.41	2.0

Typical mechanical properties of weld metal

YP	TS	EL	IV J (kgf-m)
N/mm ² (kgf/mm ²)	N/mm ² (kgf/mm ²)	%	-51℃
853(87)	931(95)	20	50(5)

Size & recommended current range (AC or DC +)

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