S-707×L-8

TYPE: Active

Applications

Single-layer and multi-layer welding of shipbuildings.

Characteristics on Usage

As the penetration is deep, it is suitable for welding of thick plate in both side single-layer welding. Impact value (or mechanical properties) of weld metal and crack resistibility are excellent. Also applicable to one-side welding. As the consumption of flux is low, it is economical.

Notes on Usage

- ① Dry the flux at $300\sim350^{\circ}$ C $(572\sim662^{\circ}$ F) for 60 minutes before use.
- ② Pay attention to welding voltage. Excessive welding voltage causes deterioration of joint properties.
- ③ Add new flux periodically to prevent the weld defects and bad bead appearance which occurs when continuously reusing the flux.
- Weld pass should be limited to 3 or 4 passes. (please inquire of the manufactures when welding more than 5 passes)

Approval	I Current	I Basicity Index
KR, ABS, LR, BV, DNV, GL, NK, MRS	AC, DC +	1.6

Typical Chemical Composition of All-Weld Metal (%)

Wire	С	Si	Mn	Р	S	BM	Th.(mm)
L-8	0.07	0.40	1.40	0.028	0.015	SS400	25
L-8	0.08	0.32	1.29	0.015	0.014	AH36	25

Typical Mechanical Properties of All-Weld Metal

Wire	YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp. ℃ (°F)	CVN-Impact Value J (ft · lbs)	ВМ	Th.(mm)
1-8	490 (71,000)	560 (81,000)	31	-40 (-40)	70 (52)	SS400	25
L-0	-	570 (82,800)	-	-20 (-4)	40 (30)	AH36	25

Typical Welding Conditions									
Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks	
L-8	4.0	25	30°	1~13	570	30	40	AWS A5.17	
L-8	4.8	25	70° 1st 8 7 10	1st 2nd	950 1100	34 37	40 30	Both side Single pass	