S-727 × L-8[L-12]

TYPE : Active

AWS A5.17 / ASME SFA5.17 F7A2-EL8(EL12)
JIS Z3183 S502-H
EN ISO 14174 S A AB 1 / EN ISO 14171 S1

Applications

Single and multi-layer welding of structural steels, H-beams, ships, agricultural implements, boilers, machinery, bridges and general fabrications.

Characteristics on Usage

Insensitive to rust, scales, primers, oil and dirts on the surface to be welded. Resistance to porosity and slag detachability are excellent. Impact value of weld metal is high.
Suitable for fillet welding of thin and medium plate with wide range of welding conditions.
As the consumption of flux is low, it is economical.

Notes on Usage

① Dry the flux at 300~350° C (572~662° 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.

Approval	I Current	I Basicity Index
KR, ABS, LR, BV, DNV, GL, NK (L-8) ABS, LR (L-12)	AC, DC +	1.1

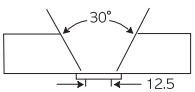
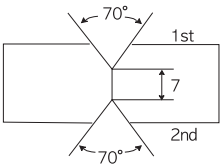
Typical Chemical Composition of All-Weld Metal (%)

Wire	C	Si	Mn	P	S	BM	Th.(mm)
L-8	0.08	0.35	1.45	0.030	0.020	SS400	25

Typical Mechanical Properties of All-Weld Metal

Wire	YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp. ℃ (℉)	CVN-Impact Value J (ft · lbs)	BM	Th.(mm)
L-8	480 (69,400)	560 (81,000)	30	-29 (-20)	50 (30)	SS400	25
	-	550 (79,900)	-	0 (32)	50 (30)	SM490A	28

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		1~14	570	30	40	AWS A5.17
L-8	4.8	20		1st 2nd	880 970	34 35	28 33	Both side Single pass