S-707TP × H-14

TYPE : Neutral

AWS A5.17 / ASME SFA5.17 F7A(P)6-EH14
JIS Z3183 S502-H
EN ISO 14174 S A AB 1 / EN ISO 14171 S4

Applications

Multi-layer welding of various kinds of structures such as ship building, machinery, pressure vessels.

Characteristics on Usage

Excellent notch toughness at low temperature. Good mechanical properties can be obtained with multi-layer welding using high heat input. It deposits weld metal of good appearance even in low speed welding with high currents.

Notes on Usage

① Dry the flux at 300~350˚C (572~662˚F) for 60 minutes before use.
② When the flux height is excessive, poor bead appearance may occur.
③ Add new flux periodically to prevent the weld defects and bad bead appearance which occurs when continuously reusing the flux.

Approval	Current	Basicity Index
KR, ABS, LR, BV, DNV, GL, NK	AC, DC +	1.8

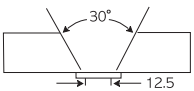
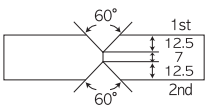
Typical Chemical Composition of All-Weld Metal (%)

Wire	C	Si	Mn	P	S	BM	Th.(mm)
H-14	0.09	0.25	1.40	0.020	0.016	SS400	25
	0.11	0.29	1.60	0.022	0.014	EH36	32

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)
H-14	510 (74,000)	570 (82,800)	28	-51 (-60)	80 (59)	SS400	25
	550 (76,800)	590 (85,700)	-	-40 (-40)	60 (44)	EH36	32

Typical Welding Conditions

Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks
H-14	4.0	25		1~13	570	30	40	AWS A5.17
H-14	4.8	32		1	200	28	20	(FCAW)
				2	280	32	25	(FCAW)
				3	600	32	35	Both
				4~8	700	34	40	Multi-
				9~	800	36	40	pass