

S-737 × H-14

TYPE : Neutral

AWS A5.17 / ASME SFA5.17 F7A(P)4-EH14
JIS Z3183 S502-H
EN ISO 14174 S A AB 1 / EN ISO 14171 S4

Applications

Horizontal welding of oil storage tanks, ships, bridges, pressure vessels, penstocks, boilers and structural steels.

Characteristics on Usage

Inactive, neutral type bonded flux which is applicable to all kinds of wire. Impact value of weld metal and crack resistibility are good. Slag detachability in the groove and resistance to porosity are good. Usability in horizontal fillet welding and X-ray performance are good.

Notes on Usage

- ① Dry the flux at 300~350° C (572~662° F) for 60 minutes before use.
- ② Remove rust, scales, oil, paint, water, dirt and slag of tack welds from the groove to obtain sound weld metal.
- ③ Use welding current and speed as low as possible at the first layer of groove to avoid cracking.
- ④ Preheat at 50~100° C (122~212° F) according to base metal and plate thickness.
Keep interpass temperature at 100~250° C (212~482° F).

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

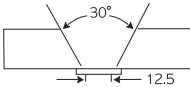
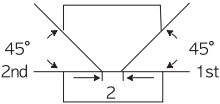
Typical Chemical Composition of All-Weld Metal (%)

Wire	C	Si	Mn	P	S	BM	Th.(mm)
H-14	0.08	0.31	1.60	0.025	0.019	SS400	25
H-14	0.07	0.40	1.53	0.020	0.013	SM490	28

Typical Mechanical Properties of All-Weld Metal

Wire	YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	Temp. °C (°F)	CVN-Impact Value J (ft · lbs)	BM	Th.(mm)
H-14	510 (74,000)	570 (82,800)	31	-40 (-40)	110 (81)	SS400	25
H-14	-	540 (78,400)	-	-20 (-4)	60 (44)	SM490	28

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	AW A5.17
H-14	3.2	28		1	450	28	35	} 1st
				2~4	500	26	50	
				5	450	28	35	} 2nd
				6~8	500	26	50	