

S-787TT × H-12K[H-14]

TYPE : Neutral

AWS A5.17/ASME SFA5.17 F7A(P)8-EH12K
 AWS A5.17/ASME SFA5.17 F7A(P)8-EH14
 JIS Z3183 S502-H
 EN ISO 14174 S A AB 1 / EN ISO 14171 S3Si[S4]

Applications

Multi-layer welding of various kinds of structure such as ship buildings, offshore structures, machinery, pressure vessels, large diameter and heavy wall steel pipe.

Characteristics on Usage

It produces the weld metal which has excellent impact value at low temperature service. Single and multi electrode welding can be performed. It has excellent X-ray characteristics and slag removal, because of insensitivity to rust, scale, primer on the surface to be welded.

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 Use welding current and speed as low as possible at the first layer of groove to avoid cracking.

Approval	I Current	I Basicity Index
	AC, DC +	2.4

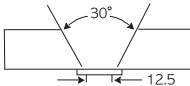
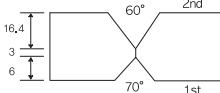
Typical Chemical Composition of All-Weld Metal (%)

Wire	C	Si	Mn	P	S	BM	Th.(mm)
H-12K	0.10	0.31	1.33	0.019	0.007	SS400	25
H-12K	0.09	0.28	1.46	0.013	0.016	API 2H Gr.50	25.4
H-14	0.10	0.11	1.41	0.019	0.005	SS400	25

Typical Mechanical Properties of All-Weld Metal

Wire	YS	TS	EL	Position of fracture	CVN-Impact Value J (ft · lbs)		BM	Th. (mm)
	MPa(lbs/in ²)	MPa(lbs/in ²)	(%)		-50°C(-58° F)	-62°C(-80° F)		
H-12K	510 (74,000)	590 (85,600)	26	-	-	100 (74)	SS400	25
H-12K	-	560 (81,200)	-	BM	110 (81)	-	API 2H Gr.50	25.4
H-14	521 (75,600)	550 (79,800)	29	-	-	120 (89)	SS400	25

Typical Welding Conditions

Wire	Dia. (mm)	Th. (mm)	Groove Design (mm)	Pass	Amp. (A)	Volt. (V)	Speed (cm/min)	Remarks	
H-12K (H-14)	4.0	25		1~13	570	30	40	AWS A5.17	
H-12K	L(DC+):4.0 T(AC) :4.0	25.4		1st	1	(L)580 (T)500	32	60	Both Side Multi-pass
				2nd	2	(L)750 (T)550	32		
				3-4	(L)700 (T)550	34			