

# S-737 X H-14

Type : Neutral

## Conformances

AWS A5.17 / ASME SFA5.17 F7A(P)4-EH14  
 JIS Z3352 SA AB1  
 EN ISO 14174-S A AB 1 / EN ISO 14171-A-S4  
 KR 3M, 3YM

ABS 3M, 3YM  
 LR 3M, 3YM  
 DNV-GL IIIYM

## Applications

- Storage tanks
- Pressure vessels
- Shipbuilding

## Features

- Good performance and bead appearance
- Easy to remove slag
- Density : 1.1g/cm<sup>3</sup>

## Current

AC, DC +

## Basicity Index

1.6

## Packages (Flux)

Tin Can 20kg(44lbs)  
 PE Bag 20kg(44lbs)

## Flux Composition

Consumable	Chemical Composition, wt%			
	SiO <sub>2</sub> + TiO <sub>2</sub>	CaO + MgO	Al <sub>2</sub> O <sub>3</sub> + MnO	CaF <sub>2</sub>

## Diameter / Packaging

Diameter mm (in)	Spool	Basket		Coil						Pac				
	20kg (44lbs)	25kg (55lbs)	100kg (220lbs)	25kg (55lbs)	100kg (220lbs)	200kg (440lbs)	250kg (551lbs)	300kg (661lbs)	500kg (1102lbs)	200kg (440lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)	400kg (881lbs)
1.6 (1/16)	✓			✓							✓			✓
2.0 (5/64)	✓			✓	✓	✓	✓					✓		
2.4 (3/32)	✓	✓		✓	✓	✓								
3.2 (1/8)		✓		✓	✓	✓	✓	✓			✓	✓	✓	
4.0 (5/32)		✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
4.8 (3/16)	✓			✓	✓			✓	✓					
6.4 (1/4)				✓	✓									

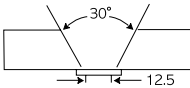
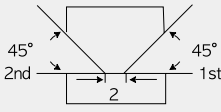
**Typical Chemical Composition of All-Weld Metal(%)**

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

**Typical Mechanical Properties of All-Weld Metal**

Wire	YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	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
	-	540 (78,400)	-	-20 (-4)	60 (44)	SM490	28

**Typical Welding Parameters**

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	Horizontal ML
				6-8	500	26	50	

SWAW

SAW

GM/AV

GTAW

FCAW

Non-FERROUS

APPENDIX