

Carbon Steel Construction
Qualified to ASME Sec. VIII, Div. 1

**Series WFV
Flash Tank
ASME Code Stamped**

PRESSURE
MOTIVE PUMPS

How it Works

High Pressure condensate forms at the same temperature as the steam from which it condenses. When this condensate is discharged to a lower pressure a percentage of the water again evaporates or "flashes" to steam at the lower pressure.

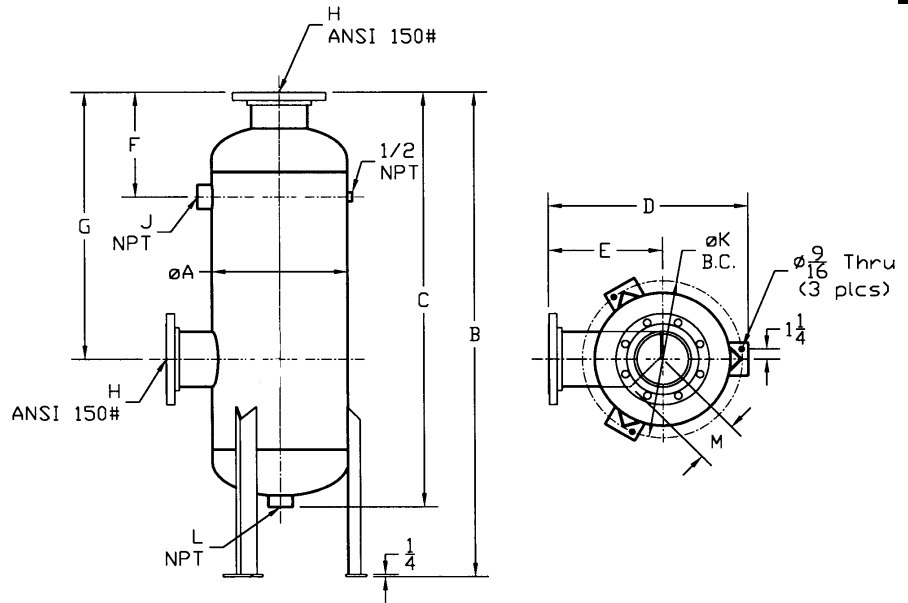
This flash steam can be utilized by piping the mixture of hot condensate and flash steam to a vessel that can facilitate the separation of the steam from the condensate so it can be captured and piped away for other lower pressure steam uses.

Features

- Carbon Steel Construction
- Tank Sizes: 6", 8", 12", & 16"
- Pressure rated at 150 psig max.
- Connections: 150 RF & NPT

Materials & Sizes

Body.....Carbon Steel
Size.....6", 8", 12", & 16"
Connections.....ANSI 150 RF & NPT



Operating Conditions

Maximum Operating Pressure (PMO).....150 psig
Maximum Operating Temperature(TMO).....366° F
Note: All ASME code ratings available

Pressure Shell Design Limits

All Models
Max Allowable Pressure(PMA).....Full Vacuum to 150 psig @ 566° F

Size	A	B	C	D	E	F	G	H	J	K	L	M	Weight
6"	6.63	47	38.6	13	8	9	25.5	2.5	3/4	8.8	1.5	2.5	75lbs.
8"	8.63	48	39.6	14.6	8.6	9.5	25.8	4	3/4	10.8	2	3.5	150lbs.
12"	12.75	49.5	41.2	19.9	11.8	11.5	26.8	5	1.5	14.9	3	5	165lbs
16"	16.0	58	49.7	23.5	13.4	12.5	32	6	2	18.9	3	5	215lbs

Watson McDaniel reserves the right to change the designs and/or materials of its products without notice



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Manufacturers of:
**PRESSURE & TEMPERATURE REGULATORS - RELIEF VALVES - STEAM TRAPS - CLEAN STEAM PRODUCTS
LIQUID DRAINERS - PRESSURE PUMPS - EJECTORS - SPECIALTY PRODUCTS**



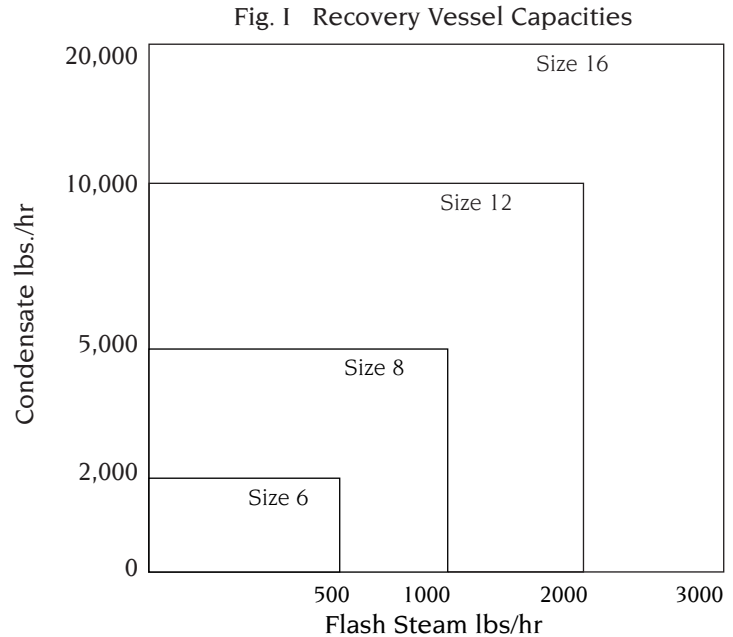
ASME Sect VIII Div I
PP-170
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Series WFV - ASME Code Flash Tank

How to Size

Enter the Percent of Flash Table with the condensate pressure then locate to the right the flash tank pressure; at that intersection is found the percent of flash that will generate at that pressure drop.

Now take the maximum condensate load and multiply it by the decimal version of the percentage to calculate the flash steam in lbs/hr. Next, enter the graph in figure 1 with the flash steam and condensate values and find the tank size line that encloses both values.



Percent Flash Steam											
Produced when condensate is discharged to atmosphere or into a flash tank controlled at various pressures											
Condensate Pressure (psig)	Flash Tank Pressure										
	0	2	5	10	15	20	30	40	60	80	100
5	1.6	0.9	0.0								
10	2.9	2.2	1.3	0.0							
15	3.9	3.3	2.4	1.1	0.0						
20	4.9	4.2	3.3	2.1	1.0	0.0					
30	6.5	5.8	5.0	3.7	2.6	1.7	0.0				
40	7.8	7.2	6.3	5.1	4.0	3.0	1.4	0.0			
60	10.0	9.4	8.5	7.3	6.2	5.3	3.7	2.3	0.0		
80	11.8	11.2	10.3	9.1	8.1	7.1	5.5	4.2	1.9	0.0	
100	13.3	12.7	11.8	10.6	9.6	8.7	7.1	5.8	3.5	1.6	0.0
125	14.9	14.3	13.5	12.3	11.3	10.4	8.8	7.5	5.3	3.4	1.8
150	16.3	15.7	14.9	13.7	12.7	11.8	10.3	9.0	6.8	4.9	3.3
200	18.7	18.1	17.3	16.2	15.2	14.3	12.8	11.5	9.4	7.6	6.0
250	20.8	20.2	19.4	18.2	17.3	16.4	14.9	13.7	11.5	9.8	8.2
300	22.5	21.9	21.2	20.0	19.1	18.2	16.8	15.5	13.4	11.7	10.2
350	24.1	23.5	22.8	21.7	20.7	19.9	18.4	17.2	15.1	13.4	11.9
400	25.6	25.0	24.2	23.1	22.2	21.4	19.9	18.7	16.7	15.0	13.5