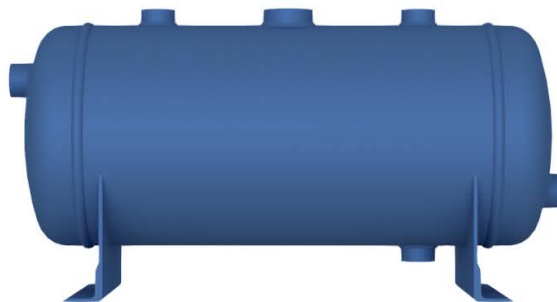


Horizontal Flash Tanks

Carbon Steel

Model	WFLH
Vent Sizes	1-1/2", 2", 2-1/2", 3", 4", 6"
Connections	150# RF
Body Material	Carbon Steel
PMO Max. Operating Pressure	150 PSIG
TMO Max. Operating Temperature	366°F
PMA Max. Allowable Pressure	150 PSIG @ 562°F

Note: 300 PSIG unit available. Consult factory.

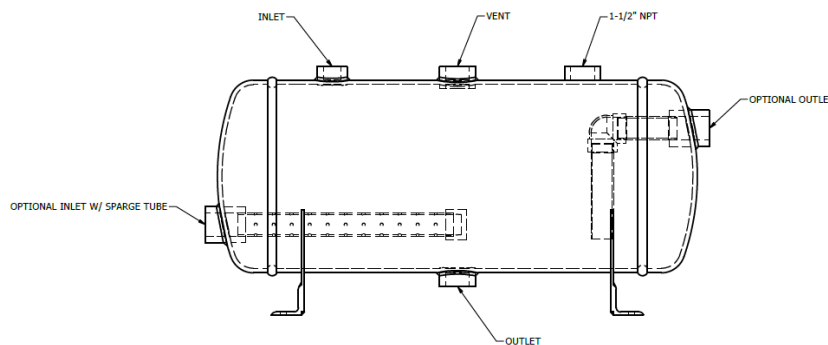


Note: All Watson McDaniel horizontal flash tanks are supplied with ASME Section VIII Code Stamp.

Typical Applications

The **WFLH Horizontal Flash Steam Recovery Vessels** are installed in condensate return systems to separate flash steam from hot condensate and neutralize pressure in condensate return lines. The flash steam may be used for low pressure heating applications or vented to atmosphere. The low-profile of horizontal flash tanks make them ideal to allow gravity drainage when head space is limited and vertical tanks cannot be installed. ASME Code Stamped.

Optional integral sparge tube and internal drop leg available when combining condensate at different temperatures and flash steam will not be generated, such as preheating for boiler feed.



How to Size / Order

Use **Table 1** to determine amount of Flash Steam that will be generated by the hot pressurized condensate. The percentage of Flash Steam formed is found where Condensate Pressure and Flash Tank Pressure intersect.

Multiply your Condensate Load by the decimal equivalent of the Flash Steam Percent to determine the amount of Flash Steam in lbs/hr.

Confirm vessel Volume and Vent diameter are suitable for both Condensate and Flash Steam loads. Consult factory for assistance if needed.

Example: Condensate Pressure: **15 PSIG**
 Flash Tank Pressure: **0 PSIG**
 Condensate Load: **5,000 lbs/hr**
 % Flash Steam: **3.9%** from chart
 Decimal Equivalent % Flash Steam = **.039**

.039 x 5000 = 195 lbs/hr of flash steam

Table 1 – PERCENT (%) FLASH STEAM

Produced when condensate is discharged to atmosphere (0 PSIG) or into a flash tank controlled at various pressures

Condensate Pressure (PSIG)	Flash Tank Pressure (PSIG)						
	0	5	10	20	30	40	60
5	1.6	0.0					
10	2.9	1.3	0.0				
15	3.9	2.4	1.1				
20	4.9	3.3	2.1	0.0			
30	6.5	5.0	3.7	1.7	0.0		
40	7.8	6.3	5.1	3.0	1.4	0.0	
60	10.0	8.5	7.3	5.3	3.7	2.3	0.0
80	11.8	10.3	9.1	7.1	5.5	4.2	1.9
100	13.3	11.8	10.6	8.7	7.1	5.8	3.5
125	14.9	13.5	12.3	10.4	8.8	7.5	5.3
150	16.3	14.9	13.7	11.8	10.3	9.0	6.8

DIMENSIONS & CAPACITIES

Tank Diameter in.	Length in.	Model Code	Vent Size in.	Inlet Size in.	Outlet Size in.	Volume gallons
12	40	WFLH-16-N	1 1/2	1 1/2	1 1/2	20
16	40	WFLH-17-N	2	2	2	35
16	54	WFLH-18-F150	2 1/2	2	2 1/2	45
20	62	WFLH-19-F150	3	2	3	80
24	64	WFLH-20-F150	4	3	4	120
36	72	WFLH-22-F150	6	3	6	310