Commercial Storage Tanks

BARE BUFFER TANKS

A. O. Smith Chilled Water Buffer Tanks are designed to create volume in a chilled water system when the system and associated piping can not provide the chiller with the volume required for efficient operation. To meet this criteria, A. O. Smith's Chilled Water Buffer Tank is an ASME certified vessel and is available in various custom configurations and tank sizes.

Chiller manufacturers recommend a specific volume of water per ton of chiller capacity to maintain water temperature stability. These recommendations range from 3 to 5 gallons of system volume per ton of chiller capacity when used in a comfort cooling application, to system volumes of 6 to 10 gallons per ton when used in a process cooling application where temperature stability is critical.

Selecting the right tank is easy. After determining how much additional volume the tank will provide, select the size and configuration of the system connections that will best connect the tank to the chilled water system.

STANDARD FEATURES:

- Vertical Internal Baffle to encourage proper mixing of fluid
- 125 psi Working Pressure
- ASME Sec VIII, U-Stamped Vessel
- Flange or NPT Connections
- Lifting Lugs
- Red Oxide Paint

OPTIONAL EQUIPMENT:

- 12" x 16" Manway (300 gallons and above)
- 4" x 6" Hand Hole
- Automatic Air Vent
- Temperature and Pressure Gauge
- 150 or 160 psi Working Pressure
- Custom connection locations

5-YEAR LIMITED WARRANTY

ASME U

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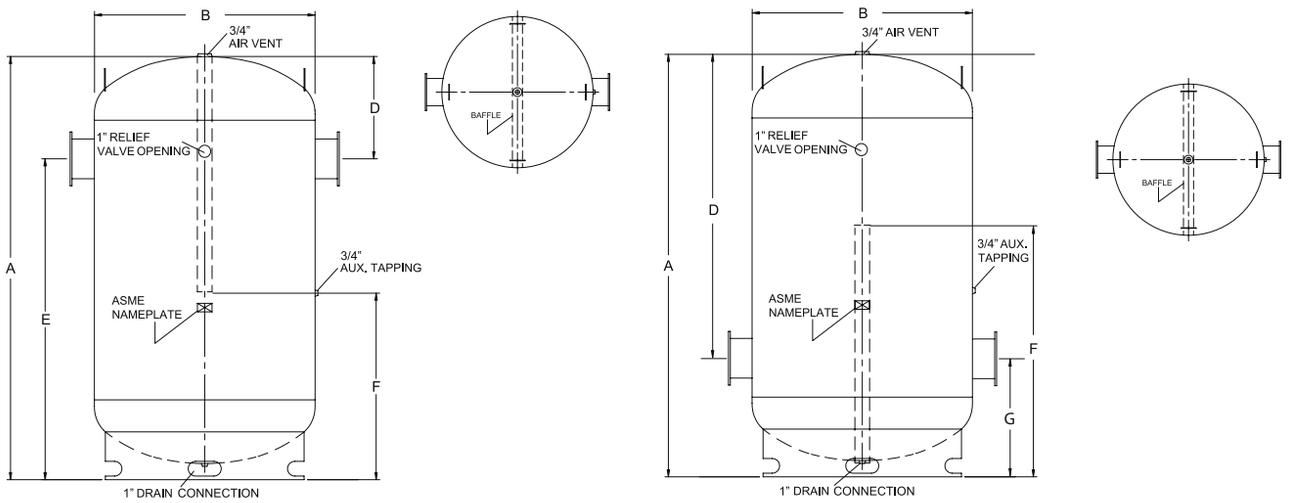
WARNING

Use this vessel only in chilled water systems. DO NOT use in potable water systems. The installer must comply with all plumbing codes. DO NOT operate above the temperature or pressure specified on the rating plate. Failure to comply may result in personal injury, property damage, or death.

Figure 1 Buffer tank dimensions, refer to table below



DIMENSIONS AND SPECIFICATIONS

CHILLED WATER BUFFER TANK W/ UPPER OR LOWER CONNECTIONS								
MODEL NUMBER	**CAPACITY USG (L)**	**A IN (CM)**	**B IN (CM)**	**D IN (CM)**	**E IN (CM)**	**F IN (CM)**	**G IN (CM)**	**WEIGHT LB (KG)**
ACV*-120	120 (454)	56 (142)	28 (71)	20 (51)	36 (91)	19 (48)	24 (61)	298 (135)
ACV*-200	200 (757)	86 (218)	28 (71)	20 (51)	66 (168)	29 (74)	24 (61)	430 (195)
ACV*-325	318 (1,204)	76 (193)	36 (91)	23 (58)	53 (135)	25 (64)	27 (69)	533 (242)
ACV*-450	432 (1,635)	76 (193)	42 (107)	25 (64)	52 (132)	25 (64)	29 (74)	818 (371)
ACV*-500	500 (1,893)	87 (221)	42 (107)	25 (64)	62 (157)	29 (74)	29 (74)	930 (422)
ACV*-750	750 (2,839)	100 (254)	48 (122)	27 (69)	73 (185)	33 (84)	31 (79)	1,430 (649)
ACV*-1000	1,000 (3,785)	124 (315)	48 (122)	27 (69)	97 (246)	41 (104)	31 (79)	1,733 (786)

*ACVL120 for Lower, ACVU for Upper and ACV4 for Lower and Upper Connections

OPTIONAL CONNECTIONS

FLANGED CONNECTIONS	BOLT PATTERN
3" NPT	
3" Bolt Flanged	
4" Bolt Flanged	
5" Bolt Flanged	325 - 1,000 only
6" Bolt Flanged	
8" Bolt Flanged	
10" Bolt Flanged	
EXTRA TAPPINGS	
1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4"	

OPTION CODE:	
ACVU-120-3NTM —	M = 150 psi; 6 = 160 psi
	T = T&P Gauge; S = Seismic; Z = T&P Gauge + Seismic*
	N = NPT; B = Bolting Flange
	Number = inch size
	4 = 4 Connections (Upper and Lower); 3 = 3 Connections**; L = Lower Connections; U = Upper Connections; C = Custom Offset Connections**

*Seismic offered on ACV-325 models and up.
** Submittal is required for ordering.

For Technical Information call 888-599-2837. A. O. Smith Enterprises Ltd. reserves the right to make product changes or improvements without prior notice.