## CHILLED WATER BUFFER TANKS BARE STORAGE 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.

## OUTSTANDING STANDARD FEATURES:

- Vertical Internal Baffle to encourage proper mixing of fluid
- 125 PSI Working Pressure
- ASME Sec VIII, U-Stamped Vessel
- Five Year Limited Warranty
- Flanged Connections
- Lifting Lugs
- Red Oxide Paint

OPTIONAL EQUIPMENT:

- "R-12" Spray Foam insulation with UV Resistant Exterior
- $12^{\prime \prime} \times 16^{\prime \prime}$ Manway ( 300 gallons and above)
- $4^{\prime \prime} \times 6$ " Hand Hole
- Automatic Air Vent
- Temperature and Pressure Gauge


## COMMERCIAL <br> STORAGE TANKS

## 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 | Gallon Capacity | A | B | D | E | F | G | Max. Conn. Diameter | Weight (lbs.) |
| ACV*-120 | 120 | 56" | 28" | 20" | 36" | 19" | $24^{\prime \prime}$ | 6" | 298 |
| ACV*-200 | 200 | 86" | 28" | 20" | $66^{\prime \prime}$ | 29" | 24" | $6 "$ | 430 |
| ACV*-325 | 318 | $76^{\prime \prime}$ | $36^{\prime \prime}$ | 23" | 53" | 25" | 27" | 8" | 533 |
| ACV*-450 | 432 | $76^{\prime \prime}$ | 42" | 25" | 52" | 25" | 29" | 8" | 818 |
| ACV*-500 | 500 | 87" | $42^{\prime \prime}$ | 25" | 62" | 29" | 29" | 8" | 930 |
| ACV*-750 | 750 | 100" | 48" | 27" | 73" | 33" | 31" | 8" | 1430 |
| ACV*-1000 | 1000 | 124" | 48" | 27" | 97" | 41" | $31^{\prime \prime}$ | 8" | 1733 |

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

| Option Code: |  |
| :---: | :---: |
|  | $\mathrm{T}=\mathrm{T} \& \mathrm{P}$ Gauge, $\mathrm{S}=$ Seismic, $\mathrm{Z}=\mathrm{T} \& \mathrm{P}$ Gauge + Seismic |
|  | N = NPT; B = Bolting Flange |
|  | Number $=$ inch size |
|  | 4 = 4 Connections (Upper and Lower); L = Lower Connections; U = Upper Connections |

[^0]For technical information, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.


[^0]:    When custom options are ordered other than a manway or hand hole, custom option codes will be given.

