



# CHILLED WATER BUFFER TANKS

## CLOSED LOOP CHILLER SYSTEMS CWBT SERIES ASME INSTALLATION & OPERATION INSTRUCTIONS

Models CWBT120-3 through CWBT1040-12



**NOTE:** Inspect for shipping damage and notify freight carrier or store where purchased immediately if damage is present. To avoid risk of personal injury and property damage, if the product appears to be malfunctioning or shows signs of corrosion, call a licensed professional immediately. Current copies of the Product manual can be viewed at [www.amtrol.com](http://www.amtrol.com). Use proper safety equipment when installing.



**THIS IS THE SAFETY ALERT SYMBOL. IT IS USED TO ALERT YOU TO POTENTIAL PERSONAL INJURY AND OTHER HAZARDS. OBEY ALL SAFETY MESSAGES THAT FOLLOW THIS SYMBOL TO REDUCE THE RISK OF PERSONAL INJURY AS WELL AS PROPERTY DAMAGE.**

**WARNING** READ CAREFULLY THE PRODUCT INSTALLATION & OPERATION INSTRUCTIONS. FAILURE TO FOLLOW THE INSTRUCTIONS AND WARNINGS IN THE MANUAL MAY RESULT IN SERIOUS OR FATAL INJURY AND/OR PROPERTY DAMAGE, AND WILL VOID THE PRODUCT WARRANTY. THIS PRODUCT MUST BE INSTALLED BY A LICENSED PROFESSIONAL. FOLLOW ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS, IN THE ABSENCE OF SUCH CODES, FOLLOW THE CURRENT EDITIONS OF THE NATIONAL PLUMBING CODE AND NATIONAL ELECTRIC CODE, AS APPLICABLE.

**WARNING** This Product, like most Products under pressure, may over time corrode, weaken and burst or explode, causing serious or fatal injury, leaking or flooding and/or property damage. To minimize risk, a licensed professional must install and periodically inspect and service the Product. A drip pan connected to an adequate drain must be installed if leaking or flooding could cause property damage. Do not locate in an area where leaking could cause property damage to the area adjacent to the tank or to lower floors of the structure.

**WARNING** EXPLOSION OR RUPTURE HAZARD. A relief valve must be installed to prevent pressure in excess of local code requirement or maximum working pressure designated in the Product Manual, whichever is less. Do not expose product to freezing temperatures or temperatures in excess of 450°F. Replace the Product if corroded, damaged or with diminished integrity. Failure to properly size the product or follow these instructions may result in excessive strain on the system and may lead to product failure, serious or fatal personal injury, leakage, and/or property damage.

**WARNING** Chlorine & Aggressive Water. The water quality can significantly influence the life of this product. You should test for corrosive elements, acidity, total solids and other relevant contaminants, including chlorine and treat your water appropriately to insure satisfactory performance and prevent premature failure.

**WARNING** Welding to the pressure vessel boundary will void the ASME rating.

**WARNING** Leaking, corrosion or indications of damage are signs of an impending serious failure of the buffer tank. Periodically inspect for damage and if noted the product must be serviced or replaced. Failure to follow these instructions could result in serious personal injury or death and property damage.

**WARNING** Water temperature above 100°F can be very hazardous. Allow system water temperature to cool down below 100°F before blowing down this product. Failure to follow these instructions could result in serious personal injury or death and property damage.

**WARNING** EXPLOSION OR RUPTURE HAZARD. A relief valve must be installed to prevent pressure in excess of local code requirement or maximum working pressure designated in the Product Manual, whichever is less. At least once every 3 years or if discharge is present, a licensed contractor should inspect the temperature and pressure relief valve and replace if corrosion is evident or the valve does not function. FAILURE TO INSPECT THIS VALVE AS DIRECTED COULD RESULT IN UNSAFE TEMPERATURE OR PRESSURE BUILD-UP WHICH CAN RESULT IN PRODUCT FAILURE, SERIOUS INJURY OR DEATH AND/OR SEVERE PROPERTY DAMAGE AND VOID THE PRODUCT WARRANTY.

**FOR USE IN CLOSED HYDRONIC SYSTEMS ONLY.** Do not install on domestic water systems, or in open heating systems. Corrosion and tank failure may result.

**WARNING** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY  
IMPORTANT GENERAL SAFETY INFORMATION -  
ADDITIONAL SPECIFIC SAFETY ALERTS APPEAR IN THE FOLLOWING INSTRUCTIONS.**

### Pre-Installation

1. Visually inspect the CWBT for any damage. If damage exists return product for replacement.

### Installation

**WARNING** THIS PRODUCT MUST BE INSTALLED BY A LICENSED PROFESSIONAL.

1. Refer to Figure 1 for typical installation of the AMTROL CWBT Series.

### Maintenance

1. A licensed professional should check the complete system, including the CWBT, yearly and more frequently as the system ages.

### Operation

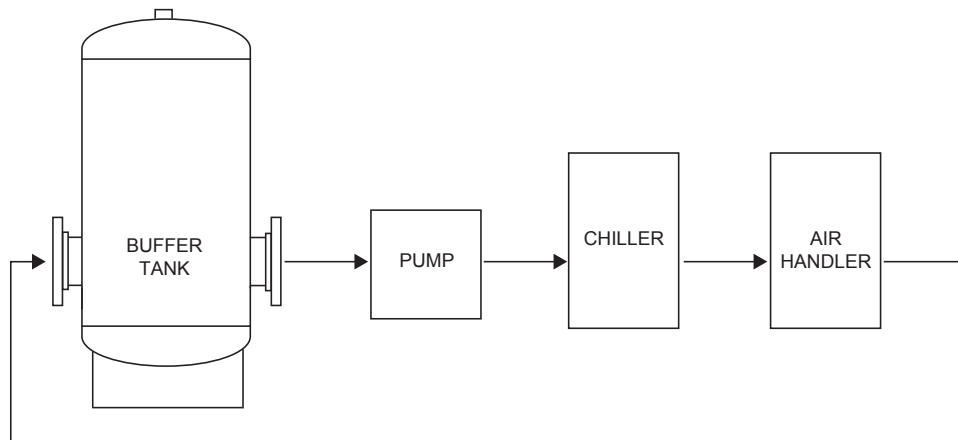
1. The CWBT models are designed to add capacity to non-potable, closed, chilled water systems to help reduce compressor unit cycling, improve temperature control and provide more consistent system operation.
2. Water temperature is not to exceed 450°F.
3. System pressure is not to exceed the maximum working pressure of the tank.

### Warranty

CWBT120-3 through CWBT1040-12 Models:  
One (1) Year Limited Warranty

Visit [www.amtrol.com](http://www.amtrol.com) for complete warranty details.

Figure 1



OTHER VALVES AND ACCESSORIES REQUIRED FOR SYSTEM INSTALLATION ARE NOT SHOWN.



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