

## Installation, Operation & Maintenance Manual

SUPERSEDES: July 30, 2014

EFFECTIVE: February 4, 2015

### GENERAL

All Taco MPT Tanks are designed and fabricated in accordance with the ASME Code for Unfired Pressure Vessels, Sect. VIII Div. 1.

Prior to shipment, all MPT tanks are hydrostatically tested to 1.3 times their rated working pressure and accepted by an independent insurance inspector.

Upon receipt of each tank, the shipping container should be examined for external damage. If the shipping container has been damaged in transit, the contents of the packaging should also be examined prior to acceptance of the shipment. If the tank appears to be damaged the shipment should be refused and or signed for as damaged. If the tank is damaged, the local Taco representative should be contacted for further instructions.

### INSTALLATION

Taco MPT tanks are designed for installation in hydronic systems. The purpose of the MPT tank is to reduce/eliminate short cycling in either a hot water or chiller water system. In a heating system application the tank should be mounted in the piping as close as possible to the exit of the boiler and prior to the pumps in the system. These units are not designed to withstand external piping loads which may be transmitted to the nozzles from the piping system. Should external piping loading requirements be present, confirmation from Taco's Design Engineering department regarding the suitability of the tanks design should be obtained prior to installing this product.

When tanks are installed, care should be taken to allow access to the ASME name plates, air vent (by others) and drain plug (by others).

All piping to each tank should be installed full size, to match the vessel's connections, isolation valves on each side of the unit should be installed for future maintenance. The isolation valves are used during maintenance to reduce the loss of system fluid.

**See Warning under General Section.**

Engineering department regarding the suitability of the tank(s) design should be obtained prior to installing this product.

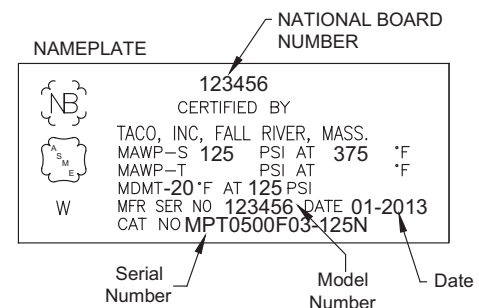
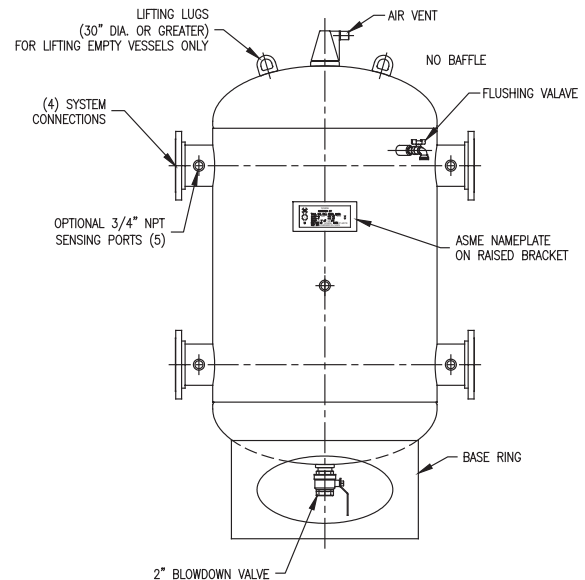
### INITIAL SYSTEM FILL

**WARNING:** Prior to the initial filling of the system the automatic vent (by others) installed in the top of the tank should be closed to prevent system debris from fouling the venting mechanism. Once the system is filled this vent must be opened for proper operation.

### MAINTENANCE

A regular inspection schedule should be adopted and carried out by competent personnel to examine the pressure vessel for corrosion and its cause, extent and possible arrest, to determine minimum metal thicknesses, maximum metal temperatures, calculation of reduction in allowable working pressure and to conduct hydrostatic tests. Also, defects such as cracks, laminations and distortion of shell, heads or connections should be noted and repaired if possible, after consultation with and acceptance by a commissioned authorized inspector who shall be involved at all stages of any repairs or alterations of the ASME vessel.

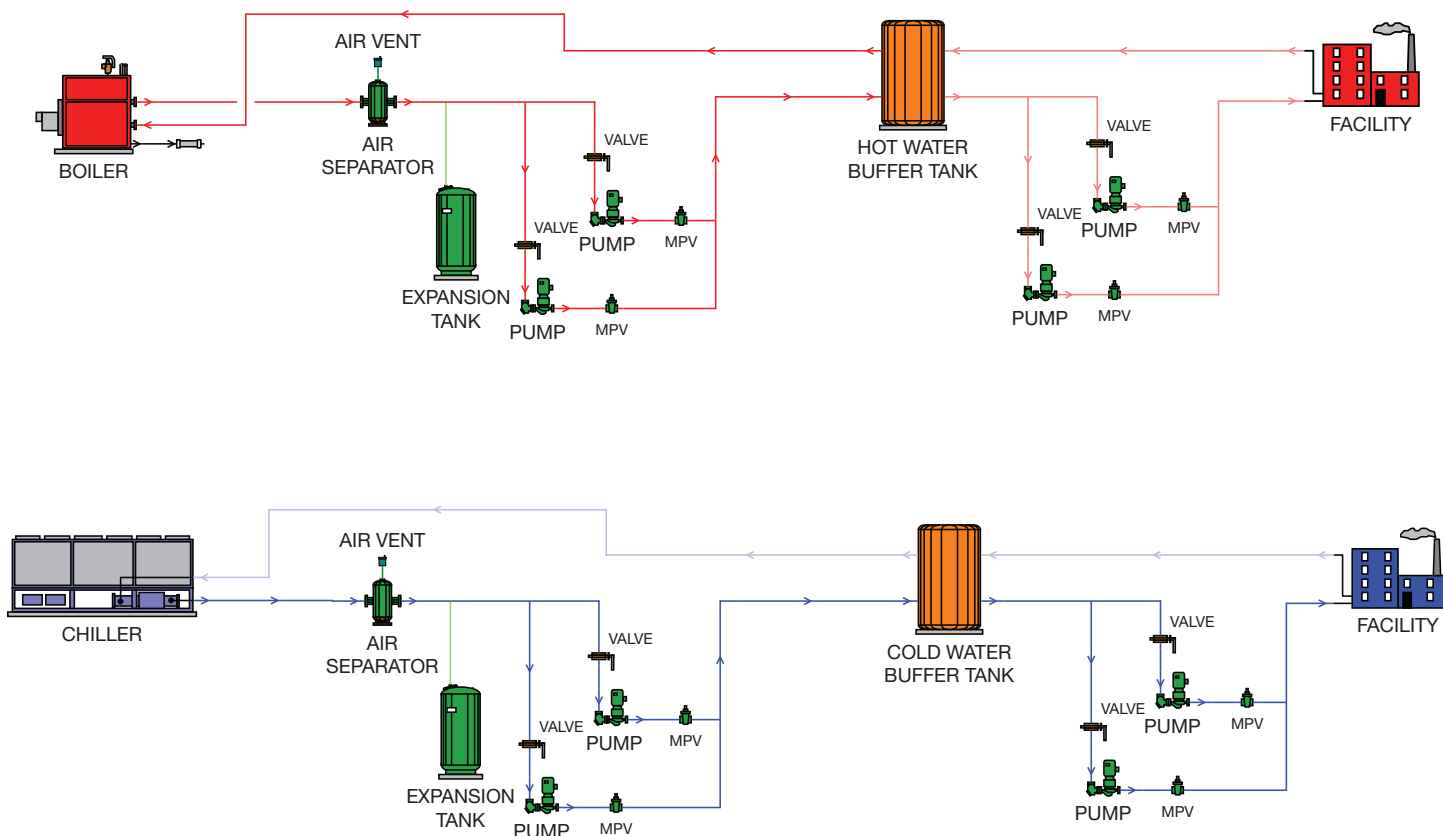
**CAUTION: NEVER OPEN A VESSEL UNTIL THE SYSTEM PRESSURE IS OFF AND THE VESSEL HAS BEEN ISOLATED AND DRAINED. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.**



MPT Tanks should be periodically blowdown by properly trained personnel to remove sand, dirt or other system debris. The frequency of this cleaning is dependent upon the nature of the system fluid. Initially the system is blowdown after the first 12 hours of operation. Dependent upon the amount of debris removed during the blowdown process, subsequent blowdown should be scheduled at a minimum of every three months for a minimum of three minutes.

The blowdown process should be undertaken by trained personnel only. **CAUTION: MAINTENANCE SHOULD ONLY BE UNDERTAKEN BY PROPERLY TRAINED AND QUALIFIED PERSONNEL. CARE SHOULD BE UNDERTAKEN DURING SYSTEM BLOWDOWN AS SYSTEM FLUIDS MAY BE UNDER HIGH TEMPERATURE AND PRESSURE. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.**

The MPT should be isolated from the system by closing the adjacent valves as needed. Residual pressure within the separator should be reduced by slowly opening the factory installed blowdown valve. Make-up water may be introduced through the flushing cock located on the side of the separator to promote further rinsing of the internals of the separator without wasting system fluids. **Standard Taco buffer tanks are designed for indoor use. Design requirements for outdoor use should be submitted to our engineering department as required.**



See Related Documents: 400-5.1 Catalog  
401-124, 401-125, 401-126 Submittals

## LIMITED WARRANTY STATEMENT

Taco, Inc. will repair or replace without charge (at the company's option) any product or part which is proven defective under normal use within one (1) year from the date of start-up or one (1) year and six (6) months from date of shipment (whichever occurs first).

In order to obtain service under this warranty, it is the responsibility of the purchaser to promptly notify the local Taco stocking distributor or Taco in writing and promptly deliver the subject product or part, delivery prepaid, to the stocking distributor. For assistance on warranty returns, the purchaser may either contact the local Taco stocking distributor or Taco. If the subject product or part contains no defect as covered in this warranty, the purchaser will be billed for parts and labor charges in effect at time of factory examination and repair.

Any Taco product or part not installed or operated in conformity with Taco instructions or which

has been subject to misuse, misapplication, the addition of petroleum-based fluids or certain chemical additives to the systems, or other abuse, will not be covered by this warranty.

If in doubt as to whether a particular substance is suitable for use with a Taco product or part, or for any application restrictions, consult the applicable Taco instruction sheets or contact Taco at (401-942-8000).

Taco reserves the right to provide replacement products and parts which are substantially similar in design and functionally equivalent to the defective product or part. Taco reserves the right to make changes in details of design, construction, or arrangement of materials of its products without notification.

**TACO OFFERS THIS WARRANTY IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY WARRANTY IMPLIED BY LAW INCLUDING WARRANTIES OF MERCHANTABILITY OR FIT-**

**NESS IS IN EFFECT ONLY FOR THE DURATION OF THE EXPRESS WARRANTY SET FORTH IN THE FIRST PARAGRAPH ABOVE.**

**THE ABOVE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR STATUTORY, OR ANY OTHER WARRANTY OBLIGATION ON THE PART OF TACO.**

**TACO WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS OR ANY INCIDENTAL COSTS OF REMOVING OR REPLACING DEFECTIVE PRODUCTS.**

This warranty gives the purchaser specific rights, and the purchaser may have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts or on the exclusion of incidental or consequential damages, so these limitations or exclusions may not apply to you.

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