

# COMMERCIAL HEAT PUMP STORAGE TANKS

## FACTORY JACKETED AND INSULATED STORAGE TANKS

These A. O. Smith heat pump storage tanks are optimized for heat pump DHW applications requiring long duration recovery periods.

#### **FEATURES**

Heat pump DHW production often relies on minimal input and full utilization of off-peak periods to heat the stored water. These tanks are designed to take full advantage of these systems by reducing turbulence and providing unprecedented stratification. The proprietary stratification system employs a unique baffle that arrests water velocity into and out of the tank to prevent disruption of the stratified layers. An impressive R30 insulation value helps retain heat until it is demanded by the system. Draw down of 95% sets these tanks apart from others, delivering more hot water from a given capacity.

#### **FOUR MODELS**

- 250-gallons (model TJVHP-250A)
- 450-gallons (model TJVHP-500A)
- 650-gallons (model TJVHP-750A)
- 850-gallons (model TJVHP-1000A)

#### **GLASS-LINED TANK**

 Alkaline borosilicate composition permanently fused to steel by firing at a temperature of 1600°F, providing years of corrosion protection and dependable use

### ANODE PROTECTION

Furnished with magnesium anodes for additional anti-corrosion protection

#### **HEAVY GAUGE STEEL JACKET**

 The jacket is constructed from heavy gauge galvanized steel, primed and painted on both sides

#### THREADED OPENINGS

 Furnished with two 3" bolted flange circulating connections, one 1-1/4" NPT relief valve connection, four 3/4" NPT aquastat openings and one 1" NPT drain connection

#### INSULATION

 Completely encased in a minimum of 5" thick, high density polyurethane foam insulation and have an insulating value of R30, exceeding the minimum thermal insulation requirements of the U. S. Department of Energy and current edition of ASHRAE/IESNA 90.1

#### **ASME TANK CONSTRUCTION**

- Constructed in accordance with ASME Boiler and Pressure Vessel Code requirements, and "HLW" stamped and registered with the National Board of Boiler and Pressure Vessel Inspectors
- 125 PSI ASME standard working pressure

#### **10 YEAR WARRANTY**

 If the tank should leak any time during the first 10 years, under the terms of the warranty, A. O. Smith will repair or replace the tank. Installation, labor, handling and local delivery are extra. For complete information, consult the written warranty.

#### MODELS TJVHP-250A, TJVHP-500A, TJVHP-750A, TJVHP-1000A



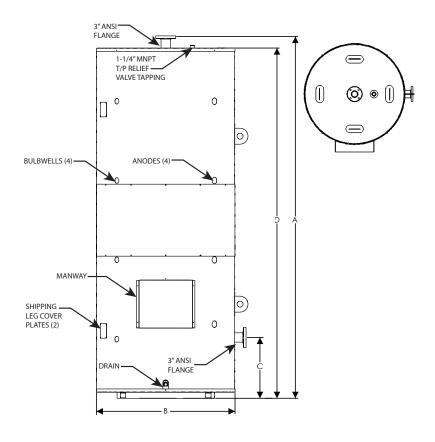




**ASME** 



| Model Number | Rated Storage<br>Capacity (Gallons) | A       | В   | С       | D        | Shipping Weight |
|--------------|-------------------------------------|---------|-----|---------|----------|-----------------|
| TJVHP-250A   | 250                                 | 99-1/2" | 40" | 19-1/2" | 95"      | 1,180           |
| TJVHP-500A   | 450                                 | 100"    | 52" | 23"     | 95-1/2"  | 1,726           |
| TJVHP-750A   | 650                                 | 136″    | 52" | 23"     | 131-1/2" | 2,911           |
| TJVHP-1000A  | 850                                 | 137"    | 58" | 25"     | 132-1/2" | 3,458           |



### SUGGESTED SPECIFICATION

Storage tank shall be A. O. Smith tank, Model \_ with vertical construction having a storage capacity of \_ gallons. The tank shall be constructed with an inner chamber baffle designed to receive all circulation to and from the water heater to eliminate turbulence in the tank. The baffled tank shall supply 95% of tank capacity without a drop in outlet temperature, regardless of rate of draw.

Storage tank shall be constructed in accordance with ASME Boiler and Pressure Vessel Code requirements, and "HLW" stamped and registered with the National Board of Boiler and Pressure Vessel Inspectors. The tank shall be furnished with the following connections: two 3" bolted flange circulating connections, one 1-1/4" NPT relief valve connection, four 3/4" NPT aquastat openings and one 1" NPT drain connection. The tank shall be furnished with a man-way for ease of inspection, clean-out and service.

Storage tank shall have a working pressure of 125 PSI. The interior of the storage tank shall be glass-lined and fired to 16000 F to ensure a molecular fusing of glass and steel. Storage tank shall be furnished with magnesium anodes. Storage tank shall have a ten (10) year limited warranty as outlined in the written warranty.

The storage tank shall be constructed with a heavy gauge galvanized steel jacket assembly, primed and painted on both sides with a minimum dry film thickness of 0.70 mills. The storage tank shall be completely encased in a minimum of 5" thick, high density polyurethane foam insulation and have an insulating value of R30.

The jacket dimensions shall be \_ \_" wide, \_\_\_\_ \_\_" deep and \_\_\_\_\_" high.

For Technical Information call 800-527-1953. A.O. Smith Corporation reserves the right to make product changes or improvements without prior notice.