Vertical STAINLESS STEEL Packaged Water Heaters
Solid 316-L Stainless Steel Vessel

Energy Sources
- Steam
- Boiler Water
- High Temperature Hot Water
Sample Specifications

For ease in specifying Cemline SWH-SS Water Heaters, use the interactive CD-ROM Sizing Program or go to www.cemline.com on the internet to download Cemline specifications.

SWH-SS Water Heaters

Storage heater shall be Cemline Series SWH-SS, factory assembled and packaged. Water heater shall be constructed in accordance with ASME Code for a working pressure of 150 psig. The packaged water heater shall be constructed with a vertical solid 316-L stainless steel tank, with a 12” x 16” manhole (500 and 680 gallon only), with stainless threaded openings, 3/4” O.D. copper tubes, copper lined tube sheet, and steel or cast iron coil head.

Steam Units

Heater shall be mounted on a steel support skid and shall have concealed lifting lugs. Heater shall be insulated with 3” Fiberglass protected by an enameled metal jacket, 20 gauge minimum thickness. Heater shall be factory assembled and piped including incoming steam strainer, (air) or (pilot) or (electronic) operated temperature regulator, main and auxiliary float and thermostatic steam traps. Coil shall have a stainless steel wrapper, shall be baffled and shall have an integralvalved circulator to circulate the water across the coil into the bottom of the tank.

Boiler Water Units

Heater shall be mounted on a steel support skid and shall have concealed lifting lugs. Heater shall be insulated with 3” Fiberglass protected by an enameled metal jacket, 20 gauge minimum thickness. Heater shall be factory assembled and piped including incoming steam strainer, (air) or (electronic) operated (2) or (3) way temperature regulator. Coil shall have a stainless steel wrapper, shall be baffled and shall have an integralvalved circulator to circulate the water across the coil into the bottom of the tank.

Heater shall be provided with a field programmable digital electronic limit control with LCD readout and digital thermometer.

Heater shall be furnished with a water pressure gauge and an A.S.M.E. pressure temperature relief valve of sufficient size to relieve total BTU input of the coil.

Heater shall be provided with a vacuum breaker.

(Not required with boiler water or HTHW for energy source.)

Manufacturer shall assume responsibility for correct sizing of components to assure performance designated in design criteria.

Heater shall be CEMLINE Corporation Model ____________.

Tank dimensions ______” diameter x ______” tall.

Storage gallon capacity ______.

Steam Units

Coil to heat ______ GPH from ______°F to ______°F with ______ psig steam to the control valve.

Boiler Water Unit

Coil to heat ______ GPH from ______°F to ______°F with GPM of ______°F inlet to ______°F outlet hot water.
Cemline SWH-SS Series Vertical Packaged Heaters are normally piped as shown below.

The drawing below shows piping with steam as the energy source. If hot water is the energy source traps will not be needed or supplied.

### Dimensions

<table>
<thead>
<tr>
<th>Gallon Capacity</th>
<th>Model Number</th>
<th>Tank Size D x L</th>
<th>W</th>
<th>H</th>
<th>O</th>
<th>J</th>
<th>M</th>
<th>S</th>
<th>A &amp; B</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>V120SWH-SS</td>
<td>24&quot; x 63&quot;</td>
<td>26&quot;</td>
<td>77&quot;</td>
<td>48&quot;</td>
<td>24&quot;</td>
<td>10&quot;</td>
<td>20&quot;</td>
<td>1 1/2&quot;</td>
</tr>
<tr>
<td>200</td>
<td>V200SWH-SS</td>
<td>30&quot; x 76&quot;</td>
<td>34&quot;</td>
<td>90&quot;</td>
<td>54&quot;</td>
<td>28&quot;</td>
<td>10&quot;</td>
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</tr>
<tr>
<td>300</td>
<td>V300SWH-SS</td>
<td>36&quot; x 80&quot;</td>
<td>40&quot;</td>
<td>94&quot;</td>
<td>60&quot;</td>
<td>28&quot;</td>
<td>10&quot;</td>
<td>25&quot;</td>
<td>1 1/2&quot;</td>
</tr>
<tr>
<td>500</td>
<td>V500SWH-SS</td>
<td>42&quot; x 90&quot;</td>
<td>46&quot;</td>
<td>104&quot;</td>
<td>66&quot;</td>
<td>30&quot;</td>
<td>10&quot;</td>
<td>32&quot;</td>
<td>1 1/2&quot;</td>
</tr>
<tr>
<td>680</td>
<td>V680SWH-SS</td>
<td>48&quot; x 96&quot;</td>
<td>52&quot;</td>
<td>110&quot;</td>
<td>72&quot;</td>
<td>30&quot;</td>
<td>12&quot;</td>
<td>42&quot;</td>
<td>2&quot;</td>
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</table>

**Recovery Systems - Steam, Boiler Water, or High Temperature Hot Water:**

Coil sizing for SWH-SS can be obtained by using Cemline Corporation’s automated sizing program on the Cemline CD Rom or from the internet at www.cemline.com. Please contact Cemline or your local representative for sizing or for a copy of the sizing program.
## Standard Equipment

### Cemline Stainless Steel Packaged Water Heaters

Cemline Stainless Steel water heaters are completely packaged and ready to use. All components are sized, mounted and piped prior to shipment. These heaters come complete and require only connection to services.

The use of a stainless steel vessel in SWH Series water heaters has been developed at our customers request for a packaged water heater with an unlined tank. These stainless steel vessels are lighter in weight than the traditionally lined tanks, thus reducing shipping and rigging costs.

### Basic SWH-SS Package Includes:

- A.S.M.E. CODE constructed National Board registered storage tank (150 PSIG WP)
- 316-L Stainless Steel Vessel.
- 316-L Stainless Steel threaded connections.
- 3” Fiberglass insulation.
- 20 gauge steel jacket with hammertone enamel paint.
- Structural steel base.
- A.S.M.E. relief valve-pressure and temperature.
- Electronic temperature gauge.
- Water pressure gauge.
- Water pressure valve.
- Drain valve.
- Copper U-Bend heating coil, rolled into copper lined tube.
- Integral bronze circulator.
- Single solenoid safety system with electronic limit control.

### Standard Steam Package Includes:

- Steam temperature control valve tank. (pneumatic, pilot or electronic).
- Steam traps-main inlet and auxiliary.
- Steam strainer, inlet.
- Steam pressure gauge.

#### Optional Steam Trim

- Steam pressure reducing valve.
- Vacuum breaker.
- Double solenoid safety system.
- Double wall coil.

### Standard Boiler Water/High Temperature Hot Water Package Includes:

- Boiler water control valve (two way or three way). Pneumatic or electronic.
- Boiler water temperature gauge.
- High temperature hot water units with 90:10 CuNi tubing. 400 PSI maximum pressure.

#### Optional Boiler Water Trim

- Boiler water pump.
- Aquastat for boiler water pump.
- Double solenoid safety system.
- Double wall coil.