Condensing Companion Heater
The perfect solution for producing domestic hot water when using a Hydronic Condensing Boiler.
Cemline® Condensing Companion Heater
Dimensional Data-Horizontal

The Cemline Condensing Companion Heater (CCH) is a perfect solution for producing domestic hot water when using a Hydronic Condensing Boiler.

The package consists of storage vessel, brazed plate heat exchanger, and domestic water pump. The boiler’s controller monitors the domestic hot water temperature in the tank turning on and off a boiler water pump to maintain the desired domestic water temperature. Optionally, a boiler water pump and pump control panel can be supplied by Cemline. The Condensing Companion Heater (CCH) is completely packaged and ready to install.

### CCH Series Features

- **A.S.M.E. Pressure Vessel**
  - A.S.M.E. Code Stamping and Registration offer the assurance of quality controlled construction.

- **STONESTEEL® Tank**
  - Prevents rust and corrosion.

- **Brazed Plate Heat Exchanger**
  - Highly efficient allowing for optimal heat transfer between the boiler water and the domestic hot water.

- **Intratank Circulating Pump**
  - Constant flow through heat exchanger maintaining a constant domestic water temperature while reducing the risk of legionnaire’s disease.

- **Well for Boiler Controller**
  - Condensing boiler monitors domestic hot water temperature as required.

- **Temperature Sensor**
  - 20 gauge steel jacket protects the insulation and provides a neat finished appearance with hammertone enamel painted exterior. Insulation prevents heat loss and meets ASHRAE standards.

- **ASME Relief Valve**
  - Temperature and pressure relief valve sized to relieve in the event of over temperature or pressure situations.

- **Gauges**
  - Thermometer and Pressure Gauge indicating vessel temperature and pressure.

### Optional Equipment

- **Stainless Steel Vessel**
  - Type 316-L provides long life with corrosion resistance.

- **Boiler Water Pump**
  - Turns on from boiler’s control to maintain desired set point in the tank.

- **Control Panel**
  - Interfaces with condensing boiler’s controller to turn boiler water pump on/off controlling temperature of the water heater. Includes On/Off switch, power on light, pump running lights.

- **3-Way Automatic Tempering Valve**
  - To maintain outlet temperature from heater. Available in self-contained, thermostatic or electronic with P.I.D. controller.

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Unit shown with optional Boiler Water Pump and optional 3-way Tempering Valve.
Cemline Condensing Companion Heater

Dimensional Data-Horizontal

Sizing Chart

Available with Single or Double Wall Brazed Plate Heat Exchangers.

<table>
<thead>
<tr>
<th>Model</th>
<th>Gallon Capacity</th>
<th>BTU/HR Input</th>
<th>GPH Recovery at Degree Rise</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>80° F</td>
</tr>
<tr>
<td>V120CCH100</td>
<td>120</td>
<td>100,000</td>
<td>75</td>
</tr>
<tr>
<td>V120CCH250</td>
<td>120</td>
<td>250,000</td>
<td>175</td>
</tr>
<tr>
<td>V120CCH500</td>
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<td>500,000</td>
<td>375</td>
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<tr>
<td>V120CCH750</td>
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<td>750,000</td>
<td>1125</td>
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<tr>
<td>V120CCH1000</td>
<td>120</td>
<td>1,000,000</td>
<td>1500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Gallon Capacity</th>
<th>BTU/HR Input</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>80° F</td>
</tr>
<tr>
<td>V200CCH500</td>
<td>200</td>
<td>500,000</td>
<td>75</td>
</tr>
<tr>
<td>V200CCH750</td>
<td>200</td>
<td>750,000</td>
<td>1125</td>
</tr>
<tr>
<td>V200CCH1000</td>
<td>200</td>
<td>1,000,000</td>
<td>1500</td>
</tr>
<tr>
<td>V200CCH2000</td>
<td>200</td>
<td>1,200,000</td>
<td>1800</td>
</tr>
</tbody>
</table>

Energy Source: Boiler Water, typically 180, 160, 150, or 140 of with a 30 - 40° F Delta T. (140° F boiler water can not be used to produce 140° F of domestic water.)

Dimensional Data

Unit shown with optional Boiler Water Pump and optional 3-way Tempering Valve.

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>GALLON CAPACITY</th>
<th>TANK SIZE D x L</th>
<th>W</th>
<th>H</th>
<th>J</th>
<th>X</th>
<th>F</th>
<th>O</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>V120CCH</td>
<td>120</td>
<td>24&quot; x 63&quot;</td>
<td>28&quot;</td>
<td>66&quot;</td>
<td>14&quot;</td>
<td>21&quot;</td>
<td>40&quot;</td>
<td>32&quot;</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>V200CCH</td>
<td>200</td>
<td>30&quot; x 76&quot;</td>
<td>34&quot;</td>
<td>80&quot;</td>
<td>16&quot;</td>
<td>25&quot;</td>
<td>46&quot;</td>
<td>37&quot;</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>V300CCH</td>
<td>300</td>
<td>36&quot; x 80&quot;</td>
<td>40&quot;</td>
<td>84&quot;</td>
<td>17&quot;</td>
<td>30&quot;</td>
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<td>40&quot;</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>V500CCH</td>
<td>500</td>
<td>42&quot; x 90&quot;</td>
<td>46&quot;</td>
<td>94&quot;</td>
<td>20&quot;</td>
<td>33&quot;</td>
<td>58&quot;</td>
<td>48&quot;</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

* V500CCH models will be supplied with 12" x 16" manhole
Available Cemline Brochures

- STONESTEEL®
  - Water Storage Tanks
  - Jacketed Storage Tanks
  - Commercial Electric and Packaged Copper Coil Water Heaters
- Submerged Heating Coils
- Replacement Tube Bundles
- Steel Tanks
- Chilled Water Buffer Tanks
- System Efficiency Buffer Tanks
- Electric Boilers
- Stainless Compact Packaged Copper Coil Water Heaters - Semi-instantaneous, Instantaneous
- Unfired Steam Generators
- Condensed Catalog

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