Envirosep has led the way in packaged systems by offering designs and manufacturing integrated solutions for fluid handling, heat transfer and energy recovery for over 20 years. We strive to provide the most cost effective and energy efficient heat transfer systems to our customers.

Our packaged steam to hot water systems are specifically engineered and manufactured for use in conventional building hydronic heating systems which utilizes steam as the heating source. The envirosep HTS can deliver multiple supply water temperatures for heating hot water, domestic hot water, sterilization and laundry systems, among many others. All Envirosep packaged systems come with a UL-listing and all piping comes with an ASME stamp.

**FEATURES & BENEFITS**

- Sole source manufacturing responsibility, just one manufacturer to coordinate
- The envirosep HTS is factory manufactured, tested and UL-listed ensuring quality and NEC code compliance
- Steam supply is received at a standard 15 PSIG into the one-third two-thirds valve arrangement and converted to use for hot water in the supply loop
- Heating hot water is supplied at a standard 180°F and is recirculated through the building system by use of centrifugal pumps which are sized to meet specific building requirements
- Our standard design allows for steam supplies up to 100 PSIG and water temperatures from 140°F to 220°F.
- The envirosep HTS is cost effective - offering fixed costs and on-time delivery coordinated with site (factory controlled environment means no weather delays)
- Factory operational and hydrostatic testing is performed prior to shipment, therefore minimal site testing is required
- Speeds up installation and start-up providing significant savings to contractors, engineers and facility owners

**STANDARD DESIGN INCLUDES:**

- ASME shell & tube heat exchanger (u-tube with U-stamp)
- Steam pressure regulator at steam supply inlet
- Steam control valves for supply water temperature control
- Centrifugal pumps end suction
- Variable frequency drives (VFD)
- Tangential air separator
- Expansion tank
- Triple duty valves & suction guides
- UL listed NEMA 12 industrial control panel
- Make-up water assembly with safety relief valve
- Float & thermostatic steam trap
- Pump differential pressure gauge

**STEAM TO HOT WATER SYSTEM OPTIONS:**

- PLC system controller w/touch screen
- NEMA 7/9 explosion-proof rating
- Flexible pump connectors
- Seismic or vibration isolators
- Vertical in-line pumps
- Combination air & dirt separators
- Internet connectivity for remote system monitoring
- Interface w/Building Management System
- Specific performance criteria (upon request)
STEAM TO HOT WATER SYSTEMS

Tempered water or hot water is utilized in any number of HVAC applications such as building reheat, or processes such as laundry and sterilization systems. Envirosep’s signature design of steam to hot water transfer systems provide trouble-free equipment to meet your needs.

envirosep HTS
Our envirosep HTS systems include a complete one-third two-thirds valve train with all normal accessories and controls. This includes light heating load controls with fast response and valves that automate staging to maintain tight water temperature control, and vacuum breakers in the heat exchanger. It also includes steam condensation removal systems to handle the mass flow of heating water through the tubes and pressure changes in the heat exchanger. Proper control helps in the right temperature control required for the system.

Our envirosep HTS is engineered and manufactured with a complete pumping system configured for close loop operation. It comprises of pumps with all installation accessories, headers and service valves, hydronic components, such as air separators, expansion tanks, make-up water assemblies, and other components required.

All envirosep systems may be designed with our PLC based control system for fast response, single source responsibility and testing before the system ever leaves the factory. System control valves and lag pumps are automatically staged on/off based on actual system requirements, as well as condensate removal systems when required.

Engineering and manufacturing to site-specific conditions, Envirosep ensures that our systems are designed for optimum energy efficiency for any HVAC application.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>SYSTEM CONDITIONS</th>
<th>COMPONENT OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>inlet steam pressure</td>
<td>number of pumps</td>
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<tr>
<td>hot water temperature</td>
<td>1 to 4</td>
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<tr>
<td>system flow rate</td>
<td>air separator</td>
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<tr>
<td>standard power</td>
<td>2&quot; to 10&quot;</td>
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<tr>
<td>working pressure</td>
<td>expansion tank</td>
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<tr>
<td>working temperature</td>
<td>6 to 211 gallons</td>
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<td></td>
<td>chemical shot feeder</td>
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<td>2 to 12 gallons</td>
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<tr>
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<td>motor power</td>
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<tr>
<td></td>
<td>2 to 200 hp</td>
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<td>pump TDH</td>
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<td>40' to 150'</td>
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</tbody>
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