enviro SNO

SNOW MELT SYSTEMS

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 snow melt water systems to our customers.

Our pre-engineered packaged system, the envirosep SNO, range from simplified systems with just pumps, heat exchangers and hydronic accessories to larger, more complex systems that include boilers with pumps, valves, fitting, and variable frequency drives. We design our systems for either new construction or retrofits. Envirosep engineers and manufactures each system with complete understanding of the total system and the dynamic effects of downstream equipment. Effective and efficient heat transfer is paramount in managing the rapid onset of inclement weather.

FEATURES & BENEFITS

• The enviro SNO is factory manufactured, tested and UL-listed ensuring quality and NEC code compliance
• Sole source manufacturing responsibility, just one manufacturer to coordinate
• Our packaged snow melt system may be configured with a variety of pump, heat exchanger and boiler capacities for any industrial or commercial application
• The enviro SNO is cost effective - offering fixed costs and on-time delivery coordinated with site (factory controlled environment means no weather delays)
• Each system may be custom engineered to meet specific system requirements.
• Speeds up installation and start-up which provides significant savings to contractors, engineers and facility owners

STANDARD DESIGN INCLUDES:

• Circulator, in-line or end suction pumps
• Heat exchangers for system isolation
• Single point power
• Common supply header
• Common return header
• Pre-piped and pressure tested piping
• 1/4” diamond plate decking
• H.S.S. base frame
• Lifting lugs
• Snow melt controller

SNOW MELT SYSTEM OPTIONS:

• Boilers
• Chemical shot feeder
• Water storage tank
• Tangential or in-line ASME air separator
• ASME expansion tank, with bladder
• Specific performance criteria (upon request)
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The goal of every snow melt system is to provide a clean and safe concrete walking environment for foot traffic at a facility during ice and snow conditions. Snow melt systems distribute tempered water to piping installed throughout in-ground systems in heavy foot traffic areas of facilities such as universities, football stadiums or hospitals. The typical snow melt system requires a standard hot water source and pumping distribution system. Large systems typically generate their own hot water as a fully functional, self-contained system. Pictured above in figure 1 is an example of a simple snow melt system which uses hot water from another source within the facility. Envirosep also designs dedicated snow melt systems which include the hot water source as shown in the picture to the right in figure 3. This enviro SNO consists of two boilers along with the standard snow melt system components. This type of system is a self contained system without need of an alternate heating hot water source.

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

Figure 1.

Figure 2. Schematic of a single pump enviro SNO system with in-line circulator pump, brazed heat exchanger, and optional air separator and expansion tank.

Figure 3.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>SYSTEM CONDITIONS</th>
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<tbody>
<tr>
<td>hot water temperature</td>
<td>110° to 240°F</td>
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<tr>
<td>system flow rate</td>
<td>10 to 900 gpm</td>
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<tr>
<td>standard power</td>
<td>460V (others available)</td>
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<tr>
<td>working pressure</td>
<td>&lt; 300 psig</td>
</tr>
<tr>
<td>working temperature</td>
<td>&lt; 300°F</td>
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</tbody>
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<table>
<thead>
<tr>
<th>COMPONENT OPTIONS</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>number of pumps</td>
<td>1 to 4</td>
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<tr>
<td>air separator</td>
<td>2” to 6”</td>
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<tr>
<td>expansion tank</td>
<td>6 to 211 gallons</td>
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<tr>
<td>glycol feed unit</td>
<td>17 to 50 gallons</td>
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<tr>
<td>hot water boilers</td>
<td>as specified</td>
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<tr>
<td>brazed plate or u-tube heat exchanger</td>
<td>as specified</td>
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