

envirosep WSHP

# WATER SOURCE HEAT PUMP 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 water source heat pump condenser water systems to our customers.

Envirosep engineers and manufactures packaged water source heat pump condenser water systems provide an integrated solution for the condenser water supply of water source heat pumps in commercial high-rise or low-rise buildings. The envirosep WSHP system includes integrate, automation and controls for stand-alone cotnrol of the complete system, while maintainingthe ability to network with a building management system (BMS), if desired.



#### **FEATURES & BENEFITS**

- The envirosep WSHP is factory manufactured, tested and UL-listed ensuring quality and NEC code compliance
- Sole source manufacturing responsibility, just one manufacturer to coordinate
- Our envirosep WSHP is cost effective offering fixed costs and on-time delivery coordinated with site (factory controlled environment means no weather delays)
- Envirosep's water source heat pump systes are simple to operate via the user-friendly, graphical operator interface.
- Each unit is custom-engineered to meet specific system or footprint requirements
- Factory operational and hydrostatic testing is performed prior to shipment, therefore miminal site testing is required
- Speeds up installation and start-up which provides significant savings to contractors, engineers and facility owners

### **STANDARD DESIGN INCLUDES:**

- Centrifugal pumps-vertical in-line or base mounted, end suction
- Plate & frame heat exchangers
- PLC based system controller(with color touchscreen interface)
- Variable frequency drives (VFD)
- Evaporative cooling towers with variable speed fan control
- Hot water boilers with secondary heat exchanger isolation
- On-demand, auto pump staging based on actual system demand
- Auto system temperature controls
- Air separator
- Bladder expansion tank

#### WATER SOURCE HEAT PUMP SYSTEM OPTIONS:

- Redundant heat exchangers & pumps
- Network communication interface to BMS
- ASME PP stamp
- Specific performance criteria (upon request)



## sales @envirosep.com

The *envirosep WSHP* system project (shown to the right) is a complete condenser water system for use with water source heat pumps for a commercial high rise building. The system furnished includes all controls required for standalone control of cooling towers, pumps, hot water boilers, and heat exchangers by maintaining consistent temperature in the condenser loop. Envirosep's water source heat pump systems are an effective choice for demanding applications.



### WE MAKE **CERTAIN** YOUR PROJECTS ARE **DONE RIGHT.**

Envirosep maintains licenses and certifications that keep us current with the latest industry standards and ensure first class quality. Our licenses and certifications include:

- Professional Engineer Licenses (PE)
- Certified Project Management Professional (PMP)
- AWS Certified Welding Inspector (CWI)
- Mechanical Contractors Licenses
- ASME Certificate of Authorization

- Underwriters Laboratories Listings
- National Board Certificate of Authorization
- TSSA Certificate of Authorization
- Leadership in Energy & Environmental Design (LEED)



**UL Listed Packaged Pumping Systems** 



**UL Listed Controls** 



**European Conformity** 



Office of Statewide Health Planning and Development (CA)



**OSHA Complaint Safety Program** 



**NIST Certified Testing Equipment** 



State of New York OTCR (NY)



**Unfired Pressure Vessels** 



**Pressure Piping** 



**Miniature Unfired Pressure Vessels** 



**National Board** 



Repairs and/or Alterations



**Process Piping & Power Piping** 



**LEED AP expertise** 

