

envirosep JCW

## ENGINE JACKET COOLING WATER 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 engine jacket cooling water systems to our customers.

Envirosep engineers and manufactures packaged engine jacket cooling water systems specifically to provide process cooling water to engine jackets to prevent damage to the engine, typically in power generation and Cogen applications. Envirosep designs 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 an engine's overall performance.



### FEATURES & BENEFITS

- The *envirosep JCW* is factory manufactured, tested and UL-listed ensuring quality and NEC code compliance
- Sole source manufacturing responsibility, just one manufacturer to coordinate
- Our *envirosep JCW* is cost effective - offering fixed costs and on-time delivery coordinated with site (factory controlled environment means no weather delays)
- Our process cooling systems may be configured for pumping a variety of fluids at a controlled flow rate for virtually any flow rate
- Typically in duplex, triplex or quadraplex pumping arrangements
- Each unit is custom-engineered to meet specific system or footprint requirements
- Factory operational and hydrostatic testing is performed prior to shipment, therefore minimal 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, end suction or horizontal split-case
- PLC based system controller (with color touchscreen interface)
- Variable frequency drives (VFD) or constant speed starters
- Auto system mixing/diverting temperature controls
- Closed loop with air separator and bladder expansion tank
- System conductivity controls with auto blowdown
- System pressure and differential pressure controls

### ENGINE JACKET COOLING SYSTEM OPTIONS:

- Back-up cooling for loss of heat load
- Integrated Chemical Treatment Metering Pump Systems
- Full-stream or side-stream filtration
- ASME PP stamp
- PED certification
- Factory on-line monitoring and troubleshooting via secured internet connection
- Stainless steel headers
- ANSI Class 150, 300, 600 with either 50 or 60HZ, 3-phase power supply



Typical system layout consists of recirculating pumps, heat exchangers, air separation/expansion control, and integrated temperature controls. For Combined Heat and Power (CHP) applications, systems may be engineered for jacket cooling, after-cooler, oil cooler, and exhaust heat recovery. Envirosep's Engine Jacket Cooling Water 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 Package 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