

envirosep PCW-DI

## DEIONIZED PROCESS COOLING

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 industrial process cooling water systems to our customers.

Our packaged deionized process cooling system designs have proven to be a benchmark solution with outstanding reliability, robust construction, and superior automation for the most challenging industrial environments. Our systems are specifically engineered and manufactured for providing process cooling water in applications requiring deionized or high resistivity fluid, such as microelectronics manufacturing and research.



### FEATURES & BENEFITS

- Our *envirosep PCW-DI* is factory manufactured, tested and UL-listed ensuring quality and NEC code compliance
- Sole source manufacturing responsibility, just one manufacturer to coordinate
- The system is a variable speed system which allows it to meet system requirements, while consuming minimal electrical energy.
- Our *envirosep PCW* 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 any industrial application in either an open or closed loop.
- 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)
- On-demand, auto pump staging, based on actual system demand
- Auto system temperature controls
- Auto system restart
- Air separator (closed systems) & cooling water storage tank for intermittent demand/loads (open system)
- System conductivity controls with auto blow-down
- System pressure and differential pressure controls
- Stainless steel main headers

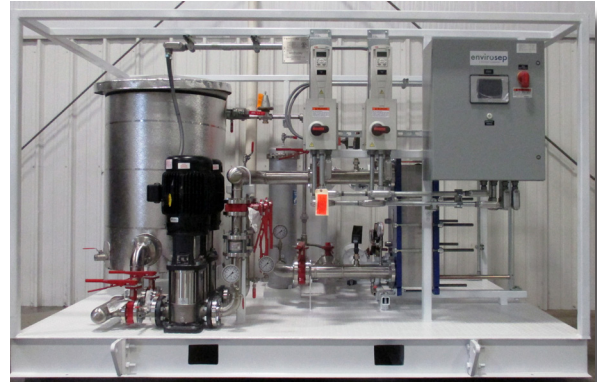
### PROCESS COOLING SYSTEM OPTIONS:

- PVC main headers
- Heat exchangers
- Magnetically driven, centrifugal pumps
- Post-filtration
- Multi-staged centrifugal pumps
- Specific performance criteria (upon request)



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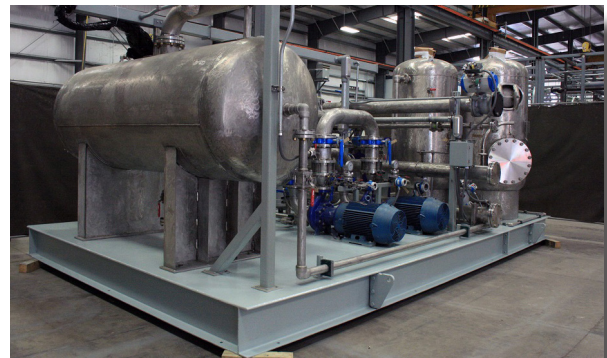
Process cooling water is an integral part of most industrial systems. Envirosep's tailor-made, complete systems meet your needs, regardless of the size. Modular or stand-alone system integration of the complete mechanical room provides rapid installation and start-up. Envirosep can easily design custom, space saving arrangements for our customers.



and flow control in processes with relatively continuous loads. System lag pumps are automatically staged on/off based on actual system requirements. Envirosep engineers can also provide closed loop system designs to meet specific site criteria.

### OPEN LOOP

Our *envirosep PCW-DI* open loop design package is a variable speed system which includes a water storage tank. The nitrogen-blanketed, storage tank provides additional system volume for systems which require precision temperature control in intermittent load. System lag pump(s) are automatically staged on/off based on actual system requirements. Envirosep engineers can provide open loop system designs to meet specific site criteria.



### CLOSED LOOP

Our *envirosep PCW-DI* closed system design package is also a variable speed system which provides process cooling water in applications requiring deionized water or high resistivity fluid. The closed loop system arrangement provides precision temperature

Specifically engineered and manufactured to site conditions, Envirosep ensures that our systems are designed for optimum energy efficiency for any industrial process cooling application.

## TECHNICAL DATA

OPEN LOOP TYPICAL SPECIFICATIONS	
system arrangement	duplex, triplex, quadraplex
available system flow rate	50 to 5,000 gpm
storage tank	nitrogen blanketed polyethylene
standard power	460/3/60
working pressure	175 psi
working temperature	< 200°F

CLOSED LOOP TYPICAL SPECIFICATIONS	
system arrangement	duplex, triplex, quadraplex
available system flow rate	50 to 5,000 gpm
cooling medium	chilled water or glycol
standard power	460/3/60
working pressure	175 psi
working temperature	< 200°F