## Aqua-Vent<sup>®</sup> Cooling Systems for Industrial Process Fluids







### Selecting the Right Aqua-Vent® System

Dry Coolers can provide you with cooling systems specifically designed to fit your applications, including Air Cooled Heat Exchangers and Evaporative Cooling Towers, as well as Refrigerant Chillers.

Our applications engineers will assist you in selecting the most cost efficient type of cooling system for your industrial process, because we know that the right cooling system can literally save you thousands of dollars over the life of your equipment by:

- Saving Water & Sewer Costs
- Controling Scaling & Corrosion
- Recuperating
  Waste Heat
- Eliminating Water Discharge to Drain

### Air Cooled Heat Exchanger

140 kW

PM 7ºF At

155 GPM 0 465 MBH

- Cools by blowing air across finned tubes
- Temperatures to within 5°F of ambient (i.e. 100°F on a 95°F day)
- Waste heat recoverable as warm, dry air
- Low maintenance
- Low horsepower—lowest operating cost
- Needs glycol antifreeze if installed outdoors

### **Evaporative Cooling Tower**

- Cools by evaporating water
- Temperatures from 85°F to 100°F
- Reduces water use by approximately 97%
- Centrifugal solids separators are available
- Can be open or closed system with integral tube bundle or external heat exchanger
- Requires water treatment to control scale, corrosion and biological growth

### Refrigerant Chiller

Mes

1.13

600 GPM 6" COPPER

- Cools by mechanical refrigeration cycle
- Temperatures below 85°F

300 GPM @ 60 PSI

20 HP 3500 RPM

HV

- Air or water cooled condensers available
- Centrifugal blowers available for heat recuperation
- Can be open or closed system wit integral evaporator or secondary heat exchanger

ADE

 Ozone-friendly refrigerant systems are available

1.15A

3"

### 4" Tower Trim Cooler Supply and Return







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### Engineered Systems at Component Prices

Dry Coolers systems are completely assembled, tested and skid mounted. Details are thoroughly engineered by our experts so that your system will be custom built to fit your space requirements and orientation, which means quick installation.

Standard proven designs and detailed instructions provide rapid start-up without the expense of on-site engineering and fabrication. A main power drop and straight runs of piping are usually all that is required. Many times this can be done in-house by your personnel, saving on the cost of hiring contractors and/or architect engineers.

You'll save money even before the system is put into operation. And of course you have the peace of mind knowing that your cooling system will be matched to your requirements.



### Pumping Stations

Analysis of pumping head requirements and proper system design will ensure that you get the most energy efficient and maintainable equipment available. Duplex systems with full capacity backup pumps and/or emergency city water backup systems that automatically activate when trouble arises are available. Other backup systems include engine driven pumps and generators, and air or water driven pumps.

PRIMARY PLATE HEAT EXCHANGER



### Control Panels

Control systems are built to the National Electrical Code so you'll be up and running with the least amount of installation headaches. Full detailed drawings and schematics are provided to facilitate future system expansions and maintenance. Only high quality industrial enclosures and components are used in construction so you will experience years of troublefree operation. Indicating lights, alarms, and control logic are engineered into the system from the start. All control panels are fully tested before shipment for quick start-up. Custom panels with all brands of instrumentation and PLCs are available.

### Valuable Optional Equipment

Dry Coolers offers optional equipment that can enhance your operation, including:

### Emergency Backup Pumping Systems

Critical for any high temperature equipment to prevent loss of coolant flow which can quickly cause equipment damage.

### Solids Removal & Filtration

Cyclean<sup>™</sup> centrifugal separators, bag filters, strainers and de-ionizers can be integrated into your cooling system for easy solids removal without interrupting system operation —in many cases with zero water discharge to drain.

### Plate Heat Exchanger

Greater efficiency, small footprint, expandibility, cleanability, and stainless steel heat transfer surfaces make plate heat exchangers preferable over shell and tube designs in many applications.









### Give Us A Challenge

 $\checkmark$ 

We can tackle any type of cooling system from lasers to distillation equipment and compressors to truckmounted mobile units. Our engineers have seen just about everything under the sun. And if we haven't encountered it yet, we look forward to the challenge.

Dry Coolers can work with you to help solve any cooling system problem. With government regulations and the costs of water, sewer, and energy increasing at an ever accelerating pace, isn't it time you looked into saving on your operating expenses?

Call us today and find out how we can help you save money.

### A Worldwide Reputation for Quality and Reliability

Efficient design and advanced engineering place Dry Coolers Inc. a step ahead of your ever changing industrial processing demands. Standard or custom engineering of complete cooling systems are field proven by hundreds of installations around the world.

At Dry Coolers we start your system with an in-depth study of plant operations, location and climate. From initial contact through the stages of detailed quotations, start-up advice, warranty repairs and spare parts, our knowledgeable sales and service engineers work to provide friendly and competent assistance to our customers. Our experience and expertise in the field of industrial process cooling equipment means you get reliable, efficient and proven systems which are thoroughly engineered, tested and skid mounted in a compact package.

Our fully integrated approach to cooling system design and installation has proven itself a money saver for hundreds of industrial concerns. Small job shops, Fortune 500 companies, and many military and government installations have made Dry Coolers their number one choice for process cooling equipment.

Our large percentage of repeat customers is testament to our prudent design, quality fabrication, and commitment to customer satisfaction. Excellent instruction manuals, CAD drawings, thorough documentation, and comprehensive service long after the systems are installed, are standards that make Dry Coolers the logical choice for your cooling systems needs.

# Six Good Reasons to Cool with Aqua-Vent®

### Purchasing

You'll purchase a complete skid-mounted system customized by experts. It's headache-free one-stop purchasing.

### Engineering

Save hours of engineering and fabrication time. With an Aqua-Vent cooling system from Dry Coolers you get the right design, prudently engineered with quality components, and flexibility to suit your application.

### Installation

All necessary valves, controls and gauges are pre-installed, so in-plant piping is streamlined. Running field wiring from the power supply and to remote fan motors typically completes the installation. A thorough, yet easy-to-read installation, operation and maintenance manual is prepared for each order.

### Maintenance

Designed and built for low maintenance. Save on the routine maintenance of competitive systems and reduce your chance of shutdowns. Your customized maintenance manual is clear and concise.

### Support

Experts are available to answer your questions toll-free. We can offer advice on system flow, pressure and heat transfer requirements, equipment layouts, piping materials, and expanding a system to meet increased capacity, as well as trouble-shooting any existing installation.

### Price

Aqua-Vent air or water-cooled systems are quality produced at an affordable price that can save you money for years to come. A real winner in terms of return on investment.

> For immediate assistance and specific product bulletins call us Toll Free at 1-800-525-8173 or visit our web site at www.drycoolers.com

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