

Medical Chiller Systems



Packaged Chillers & Precision Heat Transfer Modules. Rejects heat to chilled water



Since the early 80's, ArctiChill has earned a valuable reputation for producing mission-critical, precision water cooled and air cooled refrigeration systems for medical applications like cooling MRIs, CT Scanners and Linear Accelerators for Cancer treatment.

Models are pre-engineered to meet major OEM equipment specifications such as General Electric, Siemens, Varian, Hitachi, and others. They have evolved into a suite of products and accessories that are guaranteed to meet the precision flow, cleanliness, and consistent pressure requirements for critical equipment cooling.

When a diagnostic or treatment center is handling a high patient load, even small lapses of operations due to equipment failures is simply unacceptable and unnecessary.

- Highest quality non-proprietary components
- Large reservoir with external evaporator
- Advanced microprocessor controls with interface
- Single & multiple circuit and full system redundancy
- Automated city-water switch over systems
- Special pump/tanks, de-ionized water controls
- Web-based monitoring, diagnostic, alerting & control

And when you do need us on site for start-up and service, our in-house and trained nationwide service staff stands ready with a 24x7 Service Hotline.



Automatic City-Water Switchover Systems with Optional Heat Exchanger



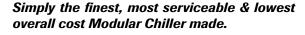
Modular HVAC/R Chiller Systems



Five water-cooled modules

Standards from 20-120 tons per module.

NEW! High-efficiency Turbocor compressor models.



ArctiChill has raised the bar in modular parallel refrigeration with our newest product features and innovations. Air cooled, water cooled and split systems with tanks, pumps, free-cooling and glycol feed systems are available.

- Service Any Module Without Shutting Down Entire System
- Clean Module Strainers Without Shutting Down Entire System
- Operate Modules If Master Controller Fails Option
- Single Point Electrical and Plumbing Connections. NO Bus-bar
 Constant Flow or Variable Primary Flow System Options
- Shell & Tube Condensers for Poor Water Quality Option
- Air-Cooled Models have Low Temp Rise Condensers
- Header Diameters Meet Velocity Standards for Large Systems
- Communication with BacNet, ModBus, LonWorks & ChillerNET





Simplified strainer cleaning reduces costs



Air-cooled module with shell & tube evap. Free-cooling available



Water Cooled models with Scroll Compressors

Solutions Engineered for Diverse Customers

Medical

- MRI, CT and Linear Accelerators
- Heart Surgery Blood Cooling
- Surgical Suite Dehumidification
- Critical-Duty Cooling & Pumping
- Precision Heat Transfer







SIEMENS



DBOEING"

Plastics Processing

- Injection Molds & Machines
- Extrusion Line Cooling
- Blow Molding & Film Production
- Turn-Key Cooling & Pumping
- Material Conveying & Cooling
- Filtration and Advanced Controls



Industrial Process

· Laser, EDM, Water-Jets

Low and Ultra-Low Temp

• Intermediate Heat Transfer

· Clean Closed-Loop Cooling

Metal Finishing - Acid Cooling

• Food Processing, Holding Tanks

• Chemical & Pharmaceuticals

- Special-Duty Air Conditioning
- Packages with Tanks/Pumps
- Modular and Retrofits
- Data-Centers & Computer Rooms
- Cold Climate Free-Cooling
- · Large Residence Air Conditioning
- High Tonnage Single-Phase
- Low-Noise Air Cooled Needs
- High Ambient Applications
- High Part-Load Efficiency



WHITE HOUSE

Drinking Water

- Packaged Purification Systems
- · Treat Bacteria, Organisms, Taste
- Central Distribution to Fountains
- · Solids Removal to 1 Micron
- Governments & Institutions
- Healthcare Facilities



OEM Equipment

- Customizable in All Details
- Custom Dimensions & Low Noise
- Flexible Availability and Terms
- Dedicated Support & Service









LOCKHEED MARTI

Know us by the customers we serve and the company we keep

Nothing speaks louder than the trust and long-term loyalty from customers. In a world where competitors are a click away, we know our niche is in creating higher value by producing close performance highly reliable and attractive products using innovative designs, combined with advanced services. We are honored to be a supplier to these and many other fine companies.





Military & <u>Government</u>

- Small to High Capacity Cooling
- Stationary & Mobile
- Land Based & Sea Based
- Mil-Spec Chiller Requirements
- Custom Fabrication Needs

Process Chiller Systems



Engineered Process Gooling - Process cooling often requires specialized refrigeration, pumping, filtration and controls. We excel in applications where equipment must be optimized together. Turn-key installation is available.

Drinking Water Chiller and Purification Systems

A centralized, self-contained chiller and purification approach reduces complexity and point of use costs. Designs available for rejecting heat to existing plant chilled water systems using double-wall heat exchangers. System stores and circulates purified and chilled drinking water to point of use fountains.

US Pentagon Water Purification.

Double-wall plate exchanger, UV, charcoal, particulate and 450 gal tank. All Stainless

ArctiChill Drinking Water Was Selected for US Pentagon and US White House

 CARBON FILTER - Liquid path includes pulverized carbon filter contained in electropolished stainless steel housing with easy-access service.
 Carbon filtration removes chlorine, organic chemicals, turbidity and improves taste.

• **UV STERILIZATION** - Germicidal ultraviolet lamps to produce short-wave radiation designed to destroy bacteria, viruses and other organisms in the drinking water system.

 ABSOLUTE FINAL FILTER - Pleated polypropylene filter contained in electropolished housing removes 99.9% of solids as small as 1 micron. Provides complete control of cryptosporidium, giardia and other harmful organisms.

- Rugged welded steel frame with powder finished aluminum easy-access enclosure panels.
- Large capacity, insulated stainless steel reservoir and close-coupled circulating pumps.
- Refrigeration can be external or self-contained using water cooled, air cooled, or split systems.
- Analog controls includes capacity control and refrigeration and water system gauges.
- Water controls include air vent and relief valve.
- · Custom designs to meet any requirements..

White House
Chiller and Purification.
Double-wall, UV, charcoal



Filter skids with charcoal and pre-filter available

Equipment to Solve Any Process Cooling Need

NEW! Chillers for Data Centers - The reliable and uninterrupted flow of data is the lifeblood of many enterprises. Servers are becoming faster, smaller and hotter. New "Blade" Servers can generate 8-10 times more heat per cubic

foot of rack space as traditional rack mounted servers.



Utilizing our rich experience in critical-duty chillers for medical other high-technology process applications, ArctiChill now offers computer room chillers. Air cooled, water-cooled and split systems are available to handle one to dozens of server racks. We can circulate chilled glycol or provide condensing units for custom applications.

New Blade Server racks utilize chilled

water which is circulated through the bottom of the rack where special glycol to air coils extract heat and circulates cooled air at high velocity across the Blade units. This approach is very efficient.

Chillers for data centers are very compact to converse valuable floor space and can include full system redundancy with automatic switch over, city-water-backup, moisture sensing and alarms, remote performance monitoring and alerting. Split systems reject heat outdoors.





Outdoor Air-Cooled Screw Chillers Through our parent company, Freeze Co Systems, a variety of chillers are available with features to make them suitable for demanding applied HVAC and process applications. Equipment can



be designed for high HP, low discharge temperature down to minus 50°F, remote diagnostics and performance monitoring. Systems can include tanks, pumps, controls, installation, start-up and service. System shown is 400 HP screw chiller with pumps, cooling critical fluid to minus 20°F.



- Medical Chillers
- Data-Center Chillers
- High-Tech Chillers
- Small & Large Chillers
- Turn-Key Systems
- Tank & Pump Systems
- City-Water-Switchover
- Drinking Water
- Modular Chillers
- Compact OEM Chillers
- Portable Chillers
- · Central Chiller Skids
- Cooling Tower Systems
- Filtration Systems
- Low Noise Chillers
- Condensing Units
- Closed-Loop Systems
- Free-Cooling Systems
- Cold-Plunge Chillers
- Solvent Chillers
- Single-Phase Chillers
- Dehumidification
- BacNET, MODBus, LON
- Web-Based Controls

Specialty Chillers and Other Equipment

Cooling Towers - Fiberglass towers in 30 models from 6 to 4,000 GPM. Lightweight and compact. Provides quick and easy installation simplified by modular components. Circular designs eliminates prevailing wind issues. Easy access casing simplifies cleaning. Fiberglass panels are bolted using stainless steel hardware. Aerodynamically designed propeller type blades conserve power and assure quiet operation. Water distribution system uses ABS or stainless steel components that require little or no head pressure loss and low maintenance. Durable even under the most severe weather conditions.







Danish "Cold-Plunge" Chillers - The Danish cold plunge is a 4-6 foot diameter pool of 45-55 degree water, deep enough for a single user to literally jump into the chilled pool, causing the skin pores to quickly close. Cold-plunges are reputed to deliver therapeutic value to millions throughout Europe. ArctiChill chillers utilizing materials and designs for cold plunges are in many professional athletic team facilities, universities, international hotels and private clubs throughout America. Units can be sized to match your pool requirements and be installed indoors or outdoors. Available in white or mill finish aluminum cabinets.

Low-Noise & Custom Chillers - It is very common to deviate from our standard designs to provide specialized equipment for a specific application. Constraints in dimensions, performance variability, installation, use of special fluids, higher static pressure, or low-noise requirements can result in a fully custom design, engineered exactly for the application. Our low-noise systems can include composite or sickle-shape fans, low RPM fan motors, compressor and interior compartment lining with low and high octave band sound attenuation materials.





Specialty Residential Chillers - A number of custom air cooled and water cooled chillers are installed in high-end residences throughout North America serving the primary air conditioning system. We are specified because we can provide low-noise, low-profile horizontal or compact vertical cabinets, single phase power, even modularity for easy assembly, and a reputation for excellent trouble-free performance and serviceability. ArctiChill equipment also includes a distinctive and attractive all aluminum rust-free cabinet available in white or mill finished.

Web-Based Control System - ChillerNET is a suite of web applications that monitors the performance and status of remote process cooling equipment and gives secure users the ability to be notified about faults that occur, and even changes in flow, temperature and pressure that cross the users notification threshold. Users then login to ChillerNET.com from anywhere in the world to view all the equipment values logs and page real time graphs of flows temperatures and pressures.



view all the equipment values, logs, and near-real time graphs of flows, temperatures and pressures. Authorized users can fully control the remote system. Change set-points, silence alarms, cause a switchover. Just like you are physically there.

Represented By...

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