



Aquagel

High-Efficiency Hydraulic Equipment



Intelligent Process Cooling Done Right

Setting a new standard in process cooling operational efficiencies, Aquagel components deliver optimal pumping, reservoir and filtration performance for Frigel central cooling systems – Ecodry and Heavygel. Highly customized to meet individual demands, now and in the future, Aquagel systems are designed for fast, economical installation and expansion across numerous industrial applications.



Frigel

Aquagel

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Customized for You

No two central cooling installations are alike. And with over 50 years of experience, Frigel has the engineering expertise to design a system specifically catered to the needs of your plant and its projected growth. By analyzing your current and future process cooling requirements, including your plant layout and a wide range of other contributing factors, we maximize system efficiency.

Equipped with the finest world-class components, there are innumerable possible configurations to choose from. We base our designs on considerations such as:

- Volume of fluid to be stored
- Cooling load to be satisfied
- Fluid flow and pressure requirements
- Water or glycol solution

Ready to Install and Get Right to Work

- Modular construction for plug-and-play, bolt-on expansion
- All components custom selected for each application, including expansion plans
- Stainless-steel reservoirs and pre-wired, fully-trimmed pumps for fast, inexpensive installation

Fully
Engineered
Systems

- 1 Frigel engineers work with each customer to determine the optimum Aquagel hydraulic system configuration for each Ecodry and/or Heavygel central cooling system
- 2 Frigel pump stations are selected properly to take into account the pressure losses due to the standard factory-supplied suction and discharge trim (an exclusive Frigel consideration)
- 3 3D CAD drawings and piping schematics are produced and customized for each facility

Get Peak Performance from High-Quality Components

Pumping Stations

Three basic configurations, for three primary operating duties:

- GPP for process supply
- GPR for recirculation through Frigel self-draining Ecodry adiabatic fluid coolers
- GPA for recirculation through Frigel Heavygel central chillers



Features of Frigel high-efficiency pump stations:

- Completely factory wired and trimmed, including suction and discharge valves, stainless steel suction and discharge manifolds and discharge pressure sensors
- Available variable frequency drives (VFDs)
- Total modularity for bolt-on expandability
- Maximum energy efficiency
- Highest component quality
- Easy installation

Reservoirs

The most important considerations with the tanks are:

- Capacity – tanks must be able to hold all process fluids when a system is shut down without overflow – while maintaining proper minimum fluid levels to avoid pumps pulling in air and being damaged by cavitation when the system is running
- Tank capacity needs to be selected properly to accommodate current and future system needs



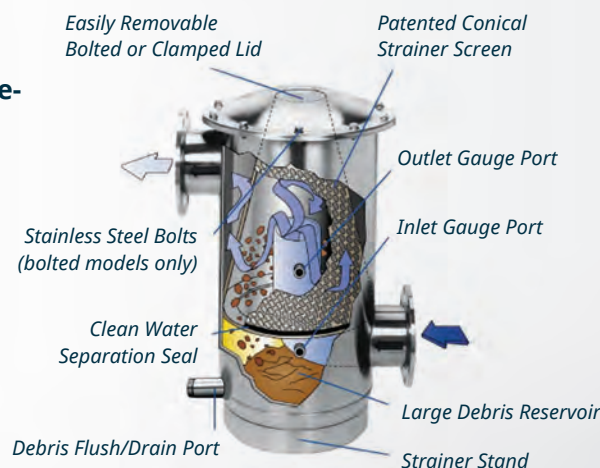
Rugged central system reservoirs consist of:

- Industrial-duty stainless steel wetted surfaces
- Automatic makeup kit (for non-glycol systems)
- Victaulic connections with flange adapters as required to connect to Aquagel pumping stations
- Ports for liquid level sensing
- Liquid level sight glass
- Overflow and drain connections

Full Flow Filters

Unique low-maintenance, space-saving filters are available in a variety of sizes and configurations to suit your needs, including:

- High-quality stainless steel construction
- In-service debris flushing



Free Cooling Valves

- 3-way motorized modulating valves are selected for free cooling by Ecodry fluid coolers with Heavygel central chiller systems
- Automatic control, depending on ambient conditions and operating temperatures

Let's Configure Your Custom Aquagel Solution

Visit Frigel.com to contact your local Frigel office today.



Total Control

Frigel PMR and 3PR central control systems provide you with at-a-glance operating performance of your Aquagel system:

- Real-time readouts of reservoir levels, pump pressures and calculated flow rates
- Automatic cycling of process pumps, including standby units
- Alarm indications and history logs
- Remote monitoring by Frigel service technicians
- Connectivity with building-wide monitoring systems via Modbus RTU or Modbus Ethernet TCP/IP network
- Multiple languages and a choice of metric or US standard units

In addition, Frigel's 3PR system provides:

- 7" touchscreen control with multiple operational screens
- Onboard trouble shooting guide
- Routine maintenance recommendations
- Pump power consumption readouts
- Full-language interface



Engineered for optimal operation, see how the right Aquagel system can help you get the most out of your process cooling system.



Contact a Frigel representative to discuss which custom Aquagel configuration is best for your needs – now and in the future.

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