

From laser to food and beverage and manufacturing process cooling applications, Glen Dimplex Thermal Solutions (GDTS) offers innovative cooling solutions.

Most processes today utilize fluid cooling systems which are critical to maximizing process efficiency and equipment longevity. Precise fluid temperature control is key as well as understanding your industry's unique needs. Glen Dimplex Thermal Solutions brings our cooling expertise and responsive customer service to create your perfect process cooling solution.

**Koolant
Koolers**



**Glen
Dimplex**
Thermal
Solutions



Overview of cooling solutions.

Global presence. Local solutions.

One size does not fit all.

Our North American manufacturing center is the home of United States-made Koolant Koolers® brand chillers, and also is the home of the North American sales and service center for Riedel® brand chillers. Through these two well-respected chiller brands, Glen Dimplex Thermal Solutions (GDTS) provides thermal management system solutions tailored to your needs.

We offer several options for cooling fluids: vapor compression (VC) water chillers, air-cooled equipment, and heat exchanger packages. We have more than 60,000 chillers used in the field worldwide, however, if one of our reliable proven designs is not suitable for your needs, we have the cooling experts locally and globally to develop a customized OEM design.

We are your OEM partner.

Our structured working process for customized OEM designs starts with listening to you as our partner. Our innovative solutions are only successful if the application challenges and requirements are understood. From the first contact to production of the unit, GDTS will be there at every stage to ensure that your customized product is commissioned quickly and accurately. Our 24/7 unparalleled global service and support team then accompanies the life of your cooling solution.



The Koolant Koolers® design.

The Koolant Koolers patented design has been in play since 1950. Our chillers are partnered with a number of processing equipment units within several markets including laser, food and beverage, machine tools, and medical imaging.

Cooling is a crucial part of production. It is responsible for ensuring appropriate temperature for the tool, process, and the machine itself. We understand that and have incorporated four key elements in all of our designs:

Unparalleled Uptime.

Downtime due to equipment failure is not an option, especially when running critical processes or equipment. Our chiller designs have built-in features to help minimize downtime and keep your production running smoothly. We have proven designs that include redundancy, which perform with a 99.96% uptime rate. Our smart controllers are programmed with predictive maintenance algorithms to prevent production interruptions. In the event of a breakdown, the chiller is fully serviceable and supported by a team of more than 300 certified field technicians throughout North America.

Precise Temperature Control.

Some applications require tight temperature control to avoid quality and equipment issues. Our cooling solutions are able to exceed these requirements by including options that can maintain temperature stability of $\pm 1^\circ\text{F}$ or better. We offer customized chillers that can perform in extreme ambient conditions and harsh environments in addition to options for cooling as low as -20°F . Other options can include heaters to provide quick cold-starts and aid with cold incoming water conditions.

High Energy Efficiency.

Using our natural resources efficiently is a goal of GDTS. By incorporating our VC water chillers into the process, the recirculating chillers can save you money on water and sewer usage. Our energy efficient controls automatically match system cooling to part-load demand, saving energy as well as component life.

Lowest Total Cost of Ownership.

Chillers are accessories or ancillary units to industrial equipment, sometimes integrated into the OEM equipment or sold as a package. Our OEM partners know that our Koolant Koolers brand chillers provide reliable cooling to protect the overall equipment efficiency. The robust craftsmanship that is fully tested in-house, designed with name-brand components, backed by a 18-month warranty, and coupled with 24/7 phone support and field service technicians provides the OEM confidence that partnering with a Koolant Koolers brand chiller maximizes uptime through investment in upfront design.





World-class parts and service.



Technical Support Available 24/7 with
Factory-Trained Technicians



Unparalleled Global Replacement Parts and
Service Network



Service/Warranty Packages



Site Preparation Coordination Support



Continuous Performance Improvements
Driven by Customer Feedback



Remote-Monitoring Options



Online Manuals



Chiller Registration



Chiller series overview.

MODEL	DESIGN	BTUs	TONS	EVAPORATOR	AIR DISCHARGE	CONDENSER	TANK	FLUID TYPE
J Series	Standard Portable	2,100 - 24,000	1/8 - 2	Brazed Plate	Horizontal	Air Cooled	Open to Atmosphere	Water or Water Glycol
S Series	Standard Stationary	36,000 - 240,000	3 - 20	Brazed Plate	Vertical	Air or Water Cooled	Open to Atmosphere	Water or Water Glycol
W Series	Standard Base Customizable Options	29,450 - 796,500	1/8 - 60	Brazed Plate	Vertical	Air Cooled, Water Cooled, or Split System	Open to Atmosphere	Water or Water Glycol
P Series	Pressurized Modular Closed Loop	80,000 - 800,000 per Module	5 - 300	Brazed Plate	Vertical	Air Cooled or Water Cooled	Pressurized	Water or Water Glycol
A Series	Inline or Recirculating Multiple Fluids	Custom, Consult Factory	1/8 - 300	Brazed Plate, Shell and Tube, or Cleanable	Vertical	Air Cooled, Water Cooled, or Split System	N/A	Any
D Series	Drop In Multiple Fluids	12,000 - 360,000	1 - 30	Submersed Stainless Steel Coil	Vertical	Air Cooled or Water Cooled	N/A	Any
F Series	Fan Cooled	Custom, Consult Factory	2 - 24	Radiator	Horizontal	Air Cooled	Optional	Any
OEM Custom	Call for details and a quote for your custom OEM solution.							
HEX	Fluid to Fluid Custom	Custom, Consult Factory	Custom, Consult Factory	Brazed Plate, Shell and Tube, Cleanable, Plate and Frame	N/A	N/A	Optional	Any

Note: Our chillers are rated at a relatively high ambient temperature of 95°F. This ensures the cooling capacity remains high in hotter months.



J Series



Indoor
Portable and Powerful
1/8-2 Ton Capacity
2,100 to 24,000 BTU/hr

This compact, air-cooled chiller provides a turn-key solution with quick delivery. Its size, portability, simple operation, and ease of maintenance make it the chiller of choice for hundreds of applications. The aesthetically pleasing stainless steel cabinet rests upon four casters for portability and most models do not need special wiring, making this a plug-and-play chiller.

All standard models feature:

- Temperature stability of $\pm 3^{\circ}\text{F}$ (some models can provide $\pm 1^{\circ}\text{F}$ or better)
- Ambient temperature range 50-95°F (indoor models) and -20-95°F (outdoor)
- Fluid setpoint 50-80°F

S Series



Indoor/Outdoor
Reliable, Versatile, and Adaptable
3-20 Ton Capacity
36,000 to 240,000 BTU/hr

This powerhouse chiller is the preferred solution for a variety of indoor and outdoor applications. The robust and versatile design of this chiller makes it an outstanding choice because it has three base platforms that use minimal floor space yet can provide up to 20 tons of cooling using either an air cooled or water cooled condenser. If portability is desired, casters are available for chillers up to 5 tons. Additional options are available to make the standard adaptable to application specific requirements.

Optional features available for most models:

- Electrical connections for 50 Hz
- Multiple building communication protocols
- Certifications (CE, cUL, OSHPD Seismic)
- Saltwater packages for outdoor units
- Low and high ambient temperature designs

W Series



**Indoor/Outdoor
Robust, Customizable Platform
2-60 Ton Capacity
29,450 to 796,500 BTU/hr**

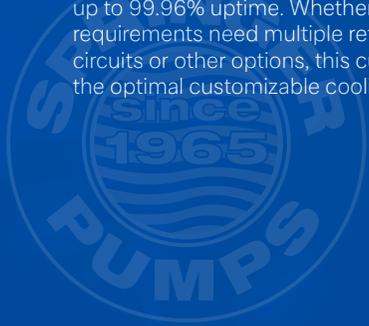
With its customizable platform, the W Series is the option when the standard chiller model does not fit the requirements. Offering the condenser options of air-cooled, water-cooled, or split system, this chiller design has the flexibility to cool up to 60 tons. When critical uptime is a necessity, the redundant design option has proven to provide up to 99.96% uptime. Whether the application requirements need multiple refrigeration or fluid circuits or other options, this customizable chiller is the optimal customizable cooling solution.

P Series



**Outdoor, Self-Contained Modules for Growth
5-60 Ton Capacity
80,000 to 800,000 BTU/hr per Module**

This water- or air-cooled chiller is a pressurized system with an integral pump, reservoir, and header piping in each module. The control system's design permits a single module to operate as a stand-alone chiller with the ability to add modules and a master controller as cooling capacity needs grow. The oxygen-free system prevents evaporation and biological growth in water-only systems and limits acid build-up to extend coolant life for water-glycol systems. The series is configurable to support N+1 system designs.



A Series



Indoor, Tankless/Flow Through 2-60 Ton Capacity Consult Factory for BTUs

This highly customizable, air-cooled chiller is recommended when a reservoir of fluid such as central coolant pits, storage tanks, or quench tanks must be cooled. It is used in cooling metalworking fluid, hydraulic fluids, and other liquids. Evaporator selection varies based on the fluid being cooled and the level of contaminants in the process. The fluid setpoint for the A Series is 50-90°F. The patented Koolant Koolers Cleanable Heat Exchanger is an excellent oil-cooling component for the A Series.

All standard models feature:

- Temperature stability of $\pm 3^\circ\text{F}$ (some models can provide $\pm 1^\circ\text{F}$ or better)
- Ambient temperature range 50-95°F (indoor models) and -20-95°F (outdoor)
- Fluid setpoint 50-80°F

D Series



Indoor, Drop-In Submersed Coil 1-30 Ton Capacity 12,000 to 360,000 BTU/hr

The drop-in, air-cooled, submersed coil eliminates the worry of a clogged heat exchanger. These robust chillers work in the dirtiest, unfiltered processes without additional pumps. The D Series can be used in existing tanks for grinding and heavy cutting applications and provide the added benefit of reduced floor space. It is compatible with any fluid and has a setpoint of 70-95°F.

Optional features available for most models:

- Electrical connections for 50 Hz
- Multiple building communication protocols
- Certifications (CE, cUL, OSHPD Seismic)
- Saltwater packages for outdoor units
- Low and high ambient temperature designs

F Series

OEM Custom Solutions



Indoor/Outdoor Powerful and Efficient Non-Refrigerant Air Cooled Consult Factory for BTUs

When cooling liquids at temperatures above ambient, the non-refrigerated, air-cooled unit is an efficient option. The base unit has a fan and coil for any fluid type. Designs include free standing or mounted to the application equipment. The robust compact design is built for harsh conditions with a minimal footprint. When designed with a tank, pump, and controls, this unit is completely self-contained and requires only a connection to a power supply and coolant lines. No other components are needed for safe and automatic operation.

Custom Units Designed for OEMs

While we offer standard and customizable designs, we also work closely with many major original equipment manufacturers (OEMs) within several markets. Our experience in designing and building reliable chillers to fit specific applications has positioned us as an industry-leader in providing OEM solutions.

Our solutions include all of our key factors, including optimal uptime, energy efficiency, and precise temperature control at the lowest total cost of ownership. We work closely with the OEM's team under the NDA terms to learn the cooling specifications, cooling challenges, delivery and installation expectations, machine-to-machine integration, building management systems, service and maintenance package agreements, and much more. It is more than designing a chiller; it is about being a partner with our OEM customers and providing cooling solutions that upholds the same high standards as the OEM's brand.

Heat Exchange Packages (HEX)



Custom Heat Exchanger



Dairy Heat Exchanger



Cleanable Heat Exchanger

Add extra cooling efficiency with our custom heat exchanger packages. Consult Factory for BTUs.

Heat exchanger packages can be used in a variety of ways, paired with one of our chillers or as a standalone. Common types are shell and tube or plate and frame, but other variations can be used to specific application requirements, including sanitary PHE used for food and beverage applications. Features include pressure and temperature gauges and mounting and finishing options.

The patented Koolant Koolers Cleanable Heat Exchanger is the ideal heat exchanger when contaminants create a challenge. The cleanable heat exchanger with removable sides allows for thorough cleaning to ensure it remains contaminant free and efficient. Unlike most other heat exchangers, there is no need to disconnect the process piping.

Remote Condenser or Split Systems



Options for ventilation and energy savings.

When an application needs cooling, but ventilation prohibits the dissipation of heat from an air-cooled chiller, the split system or remote condenser is an option.

The split systems is two units with the evaporator and compressor section installed indoors and the condenser unit installed outdoors. Consult the factory for specifications and how to customize this for your application.

Energy saving option for lower temperature climates.

Consider using the split system as an Economizer option in tandem with a chiller to utilize the cooler ambient temperatures to save energy. In certain climates, some cooling systems can save money in annual cooling energy costs with the Economizer pulling in outdoor air which can allow the chiller to shut off or run at reduced capacity.

Get your custom-fit solution.

Contact your local rep or submit an RFQ found at dimplexthermal.com.

When you partner with GDTS you'll work with a globally respected company with strong local connections. Big enough to be a leader and small enough to invest in relationships, we deliver:



EXPERTISE With extensive application experience, our Kalamazoo-based team listens to our partners' challenges in order to develop results-driven cooling solutions.



RELIABILITY Our engineering and manufacturing teams work together to build robust platforms designed to deliver optimal results. Using intelligent controls and redundancy schemes, GDTS chiller designs have been proven to provide 99.96% uptime.



SERVICE We care about our customers and machines from inquiry to installation and service to decommissioning. GDTS offers 24/7 technical service and support from factory-trained technicians, 18-month parts and labor warranties, and next day parts available through our unparalleled global service network.



INNOVATION We offer standard, custom, and OEM-specific chillers. GDTS designs focus on achieving results with precise temperature control, uptime, energy efficiency, and lower total cost of ownership.



At home on three continents.



Our promise.

Your investment in Glen Dimplex Thermal Solutions equipment is backed by 24/7, unparalleled global service and support.

The products built in our ISO-9001 certified facility use high-quality components, backed by an 18-month parts and labor warranty that redefines industry standards.

If your equipment needs installation, trust Glen Dimplex Thermal Solutions' knowledgeable technical service team for assistance. Service packages are available for all systems to assist with start-up and preventive maintenance — all to avoid costly downtime.

We are invested in the life of your chiller from production to installation and service to decommissioning.



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