

# From Laser to Food and Beverage and Manufacturing Process Cooling applications, Dimplex Thermal Solutions (DTS) 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. DTS brings our cooling expertise and responsive customer service to create your perfect process cooling solution.





# Overview of Cooling Solutions



## Global Presence, Local Solutions

#### One Size Does Not Fit All

Dimplex Thermal Solutions (DTS) is home to the **Koolant Koolers**\* brand chillers. Manufactured in the United States, DTS is also the home of the North American sales and service center for **Riedel Kooling**, **Hyfra**, and **Werner Finley** brand chillers. Through these four well-respected chiller brands, DTS 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 70,000 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 a partner. Our innovative solutions are only successful if the application challenges and requirements are understood. From the first contact to production of the unit(s), DTS is there at every stage to ensure that your customized product is commissioned quickly and accurately. Our 24/7 unparalleled global service and support team is available througout 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 ± 1°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 DTS. 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 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. This provides OEMs confidence that partnering with a Koolant Koolers brand chiller maximizes uptime through investment in upfront design.





Scan the QR to Contact Us for More Information.



## **J-SERIES**

1/8-2 Ton Capacity



#### Indoor Portable and Powerful 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.

## S-SERIES

3-20 Ton Capacity



### Indoor/Outdoor Reliable, Versatile, and Adaptable 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.

#### All Standard Models Feature:

- Temperature stability of ± 3°F (some models can provide ± 1°F or better)
- Ambient temperature range 50-95°F (indoor models) and -20-95°F (outdoor)
- Fluid setpoint 50-80°F
- Built to UL 1995 CSA compliant
- 18-months parts and labor warranty
- · Next day parts available



## W-SERIES

#### 2-60 Ton Capacity



## Indoor/Outdoor Robust, Customizable Platform 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, fluid circuits, or other options - this customizable chiller is the optimal cooling solution.

#### **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

## **P-SERIES**

#### **Growth 5-60 Ton Capacitu**



## Outdoor, Self-Contained Modules for 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.





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## **A-SERIES**

#### 2-60 Ton Capacity



## Indoor, Tankless/Flow Through 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 or the A Series is 50-90°F.

## **D-SERIES**

#### 1-30 Ton Capacity



#### Indoor, Drop-In Submersed Coil 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.

#### All Standard Models Feature:

- Temperature stability of ± 3°F (some models can provide ± 1°F or better)
- Ambient temperature range 50-95°F (indoor models) and -20-95°F (outdoor)
- Fluid setpoint 50-80°F
- Built to UL 1995 CSA compliant
- 18-months parts and labor warranty
- · Next day parts available



## **OEM Custom Solutions**



## Custom Units Designed for OEMs

We offer both standard and custom chiller designs and collaborate closely with major OEMs across various markets. Our expertise in creating reliable chillers for specific applications has established us as a leader in OEM solutions.



Our chillers focus on optimal uptime, energy efficiency, and precise temperature control while ensuring the lowest total cost of ownership. We work directly with OEM teams under NDA to understand cooling specifications, challenges, delivery and installation needs, machine integration, building management systems, and service agreements. Our approach goes beyond chiller design – we partner with OEMs to deliver cooling solutions that reflect their high standards.

#### 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





Scan the QR to Contact Us for More Information.



# HEAT EXCHANGE PACKAGES (HEX)



Dairy Heat Exchanger

Cleanable Heat Exchanger

# Enhance cooling efficiency with our custom heat exchanger packages - Consult the factory for BTU details

Our heat exchangers, including shell and tube or plate and frame types, can be used with our chillers or standalone. Options include sanitary PHEs for food and beverage, which come with pressure and temperature gauges, plus various mounting and finishing choices.

The Koolant Koolers Cleanable Heat Exchanger features removable sides for easy cleaning, making it ideal for applications where contamination is a concern.

# REMOTE CONDENSER SPLIT SYSTEMS



## For applications with limited ventilation, consider a split system or remote condenser

The split system has an indoor evaporator and compressor unit and an outdoor condenser unit. Consult the factory for specifications and customization.

In cooler climates, use the split system as an Economizer to save energy by leveraging ambient temperatures. This can reduce cooling energy costs by allowing the chiller to shut off or operate at reduced capacity.



## World-Class Parts and Service

Our approach to **Complete Customer Care** is proactive, ensuring that every chiller provides optimal, efficient cooling performance today and in the future. You are covered during every step of chiller ownership.

We consider ourselves an experienced process partner and work with your maintenance staff to be sure they fully understand the functionality, as well as care and best practices for the chiller. We know that proper maintenance ensures not only the life of our machines but the quality of your process output.

Start-up service and planned maintenance contracts are efficient and economical ways to ensure your Dimplex Thermal Solutions (DTS) equipment provides optimal performance with trouble-free operation for years to come. These services are especially valuable and recommended in the instances of large capacity, multi-module, or otherwise complex applications, or where it is known that units will be located in facilities that lack personnel with a basic understanding of refrigeration circuits.



Technical Support Available 24/7 with Factory-Trained Technicians



Continuous Performance Improvements Driven by Customer Feedback



Unparalleled Global Replacement Parts and Service Network



**Remote-Monitoring Options** 



Service/Warranty Packages



Online Manuals



Site Preparation Coordination Support



**Chiller Registration** 







## Chiller Series Specification 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 Cus- tomizable 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 Recirculat- ing Multiple Fluids	Custom, Consult Factory	1/8 - 300	Brazed Plate, Shell and Tube	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.							
НЕХ	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  $95^{\circ}$ F. This ensures the cooling capacity remains high in hotter months.

<sup>\*</sup> Tonnages are based upon a 65° F leaving water temperature (LWT) with lower LWT requiring derating of the chiller

## Get Your Custom-Fit Solution

When you partner with DTS 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, DTS 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. DTS 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. DTS designs focus on achieving results with precise temperature control, uptime, energy efficiency, and lower total cost of ownership.



## Our Promise

Your investment in Dimplex Thermal Solutions equipment is backed by **24/7**, **unparalleled global service and support.** The products built in our QMS certified facility use high-quality components, backed by an **18-month parts and labor warranty** that redefines industry standards.

Once installed, trust Dimplex Thermal Solutions' knowledgeable *Technical Service Team* and support staff to be alongside you throughout the life of your chiller.

Service packages are available for all systems to assist with **start-up** and **preventive maintenance** — all designed to avoid costly downtime.