

# Process Cooling Equipment and Solutions

Portable Chillers  
Central Chillers  
Cooling Towers  
Pump Reservoirs  
Temperature Controllers

**Energy efficient, reliable,  
and easy-to-maintain**

Since 1969, Thermal Care has been on the leading edge of process cooling technology with energy saving and cost efficient product designs. Our application experience – combined with dependable products made from the best available components – makes us the unmatched choice for all your process cooling needs.



### EQ Series

Air-Cooled 1 to 3 tons, Water-Cooled 2 to 3 tons,  
Remote Condenser 3 tons

#### Features

- Stainless steel brazed plate evaporators with flow and temperature safeties to prevent freezing
- Stainless steel pump for harsh industrial conditions
- Nonferrous wetted materials in the process water circuit, including a stainless steel pump
- External sight glass, fill connection, and drain connection
- Air-cooled condenser for ambient temperatures up to 115°F
- Internal insulated nonferrous reservoir
- Inlet strainer protects evaporator from contaminants in the water
- Water regulating valve keeps refrigerant pressure constant (water-cooled units only)

### NQ Series

Air-Cooled 4 to 30 tons, Water-Cooled 5 to 40 tons

#### Features

- High efficiency, low noise fans
- Stainless steel brazed plate evaporators with flow and temperature safeties to prevent freezing
- Low voltage 24 VDC control keeps the control circuit signals free from AC interference
- C-UL 508A industrial control panel with single point electrical connection
- Rotary non-fused disconnect for quick and safe main power disconnect
- Remote 4-20 mA set point input capability for increased application flexibility
- Nonferrous wetted materials in the process water circuit, including a stainless steel pump
- Modulating hot gas bypass provides accurate capacity control and extends compressor life



### NQV

Air-Cooled and Water-Cooled 10 and 20 tons

#### Features

- Variable-speed scroll compressor improves efficiency and performance
- Matches the process load to reduce energy costs
- Eliminates wasted energy of fixed speed compressor and hot gas bypass for capacity control
- Advanced PLC control system
- Changes speed to control temperature
- No more need for multiple size chillers for different size cooling loads



## Aquatherm RQE Series

Up to 48 kW and 10 HP

### Features

- 300°F operation (250°F is standard)
- Multifunction controller with dual temperature displays and remote communication capabilities
- Fan-cooled electrical enclosure extends component life
- Seal saver control sequence automatically cools process water to 90°F before unit shutdown
- Three-year warranty on total unit; lifetime warranty on pump seal and pump/heater castings
- Five-year warranty on microprocessor parts with \$175 lifetime exchange policy
- RQE Basic is also available for applications that require less robust features



## Vactherm RV Series

Positive/Negative Pressure, 9 kW, 2 HP

### Features

- Vacuum-adjusting valve eliminates leaks without pulling air into mold
- Insulated stainless steel reservoir assures temperature stability and air separation
- Stainless steel 2 HP centrifugal pump protects against corrosion
- Copper heat exchanger isolates cooling source
- Inlet strainer protects against debris in water
- Solenoid valve fills tank automatically

## Oiltherm R0 Series

Hot Oil, 6 to 36 kW

### Features

- Standard operation from 125°F to 575°F
- Stainless steel heat exchanger for corrosion-free operation
- Stainless steel, multistage centrifugal pump eliminates need for drip return pump
- 24/7 programmable preheat timer brings oil up to production temperature
- Insulated circuitry and oil lines for energy efficiency and safety
- Multiple 3 kW low-watt density stainless steel heater elements provide long life and built-in unit standby



### TC Series

Water-Cooled or Remote Air-Cooled Condenser,  
Single circuit up to 135 tons, Dual circuit up to 270 tons

#### Features

- Oil-free centrifugal compressor requires less maintenance, extends unit operation, and eliminates capacity loss due to oil coating
- Operational cost-savings of up to 40% (compared to chillers with screw-type compressors) can result in less than a 2-year payback on price differential
- Variable speed drive starts compressors with just two amps, reduces demand charges, and operates chiller at maximum electrical efficiency
- Quiet operation of 71dBA allows chiller to be placed anywhere in facility
- Powerful PLC allows remote operation and diagnostics by computer, tablet or smartphone



### TSE Series

Water-Cooled or Remote Air-Cooled Condenser,  
Single circuit (two compressors) 10 to 85 tons,  
Dual circuit (four compressors) 20 to 170 tons

#### Features

- Scroll compressors
- Compressor anti-cycle and start-up timer
- Lead/lag switch alternates primary compressor
- Available with or without integral tank
- Compact and modular – users can combine as many as six chillers with 12 refrigeration circuits in a single system for over 1,000 tons of cooling
- Powerful PLC communicates with Thermal Care's plant-wide central monitoring system
- NEMA-12, C-UL 508A industrial control panel with single point electrical connection
- Three phase power monitoring and safety protection

## MX Series

Water-Cooled or Remote Air-Cooled Condenser,  
50 to 125 tons

### Features

- Direct drive rotary screw compressors with integral oil separator and filter
- Users can combine up to six multiple chillers to be linked together with a common control system
- NEMA-12, C-UL 508A industrial control panel
- Compressor unloading for capacity control
- Water-cooled shell and tube condenser with removable head
- Alarm horn with silence button



## Air-Cooled Remote Condensers

### Features

- Eliminate the need for a cooling tower
- Designed to work efficiently with any Thermal Care central chiller series
- Fan cycling and variable speed fan control allows operation from -20°F to 110°F



## Pump Reservoir Systems

### PT Series

250 to 6,000 gallons

#### Features

- Units available in fiberglass or stainless steel for indoor or outdoor installations
- Powerful PLC for single point operation of chilling and tower systems
- All pumps are mounted on a solid deck for added rigidity, serviceability, and safety
- NEMA-12, C-UL 508A industrial control panel
- Grooved pipe connecting system reduces the need for flexible couplings and eliminates pipe stress at start-up
- Premium-efficiency, close-coupled, non-overloading, centrifugal pumps provide optimum flow and pressure with reduced electrical costs



## Fiberglass Cooling Towers



### FC Series

100 to 240 tons

#### Features

- Constructed totally of corrosion-resistant material
- Efficient counterflow design
- Access door to interior of tower
- One-piece, leak proof basin
- Hostile-duty, TEAO fan motor comes with permanently lubricated motor bearings
- ABS non-clogging water nozzles
- Stainless steel fan guard
- 10-year warranty on the fiberglass shell
- 5-year warranty on the motor

### FT Series

38 to 120 tons

#### Features

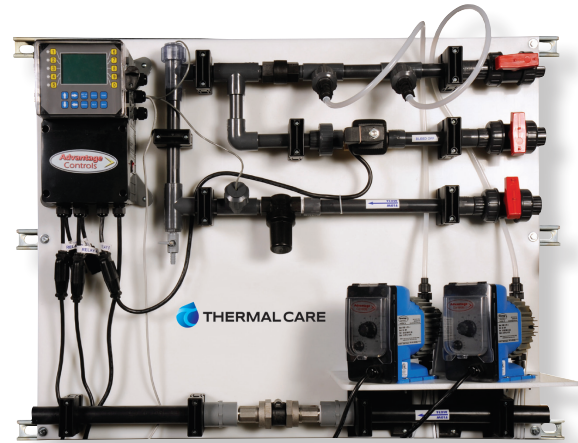
- Rugged UV stabilized fiberglass shell resists corrosion and harsh weather conditions
- Self-rotating, nonferrous water distribution system has non-clog openings to improve performance and extend service life
- Fan guard provides protection from debris entering fan assembly
- Hostile-duty, TEAO fan motor comes with double sealed, permanently lubricated, maintenance-free bearings that provide maximum protection against moisture
- 360° air intake eliminates tower positioning problems associated with prevailing winds or nearby structures
- 10-year warranty on the fiberglass shell



### TWC Series

#### Features

- Tower water conductivity is monitored and purges dirty, scale-producing water from the system
- A powerful microbiocide is added at timed intervals to kill all algae-producing bacteria
- Corrosion inhibitors are added to protect all metals in the tower system



### Filtration Equipment

#### Features

- Economical and dependable options for water filtration
- Heavy duty suspended solids are removed from both cooling tower and chilled water systems



PS Series Sand Media Filter



BF Series Bag Filter



SF Series Strainer Filter



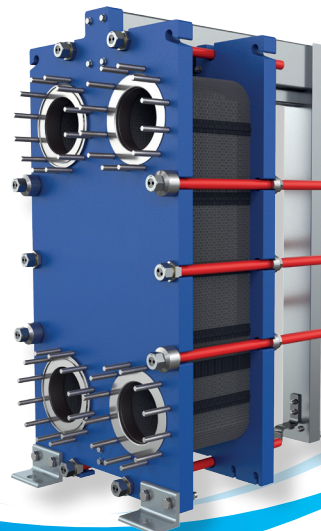
TD Series Turbo Disc Filter

### Accessories

### HX Series

#### Plate and Frame Heat Exchangers

When used in conjunction with a cooling tower or chiller system, these units provide a manufacturing plant with clean, closed-loop water to reduce operating and maintenance costs.



### Plant Wide Systems

As one of the largest providers of heat transfer cooling solutions in North America, Thermal Care understands your process cooling needs. We can help you through every step of the process, starting with initial application engineering surveys to properly assess your heat transfer requirements, to offering system design solutions that fit both your needs and budget. We continue to work closely with you and the installation team in all phases of the project through start-up to make sure our equipment works as promised. With every system, we include comprehensive project documentation for your convenience and complete peace of mind. Our success depends on your complete satisfaction.



### Customer Warranty and Support

Our customer service reps are trained technicians that can promptly diagnose a problem over the phone. They have direct access to information about your equipment including bills of material, CAD drawings, and equipment service history through our computer database. If a plant visit is needed, Thermal Care has an extensive network of service companies that can usually provide same day service.

### Parts Replacement and Sales

Our parts department has a large inventory of available parts enabling us to have 99.5% same day shipments.



# THERMAL CARE

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**Thermal Care is ISO 9001 Certified**

*Manufacturer reserves the right to change specifications or design without notice or obligation.*