



Providing heat transfer solutions...  
since 1977

## PRODUCT and CORPORATE PROFILE

[www.AdvantageEngineering.com](http://www.AdvantageEngineering.com)



Made In America

# TEMPERATURE CONTROLLERS [www.TemperatureController.net](http://www.TemperatureController.net)

**ADVANTAGE** temperature controllers circulate fluid through a process application for HEATING or HEATING AND COOLING. Temperature controllers supply fluid temperatures from 30° to 500°F.

**WATER UNITS** circulate water through the process and are used for applications where the required temperature ranges from 30° to 300°F. Water units use a pump to circulate water through the process, an electric immersion heater to add heat to the process and a cooling valve working with a plant water supply for cooling the process. Water units are portable and require a plant water supply source.

**OIL UNITS** circulate oil through the process and are used for applications where the required temperature ranges from 100° to 500°F. Oil units use a pump to circulate high temperature heat transfer fluid through the process, an electric heater to add heat to the process and an optional heat exchanger with cooling water inlet control valve for cooling the process.



**SENTRA**  
TEMPERATURE CONTROLLER  
"SK" Series

SK-1035: 10 kW, 3/4 HP unit with 1/2" AVT™ modulating cooling valve



HE Instrument    LE Instrument    VE Instrument    300°F Instrument



**REGAL**  
TEMPERATURE CONTROLLER  
"RK" Series



RK-2760: 27kw, 3hp unit

RK-1230: 12kw, 1hp unit



Regal 'HE' Instrument - 500°    Regal 'LE' Instrument - 500°    Regal '400°' Instrument

# CHILLERS [www.WaterChiller.com](http://www.WaterChiller.com)

**ADVANTAGE** chillers circulate cooled fluid to provide process cooling to single or multiple use points. Chillers use mechanical refrigeration to supply fluid between 20°F to 70°F. Chillers are available in water and air condensed styles, portable and central, and with or without integral pumps and reservoir tanks.

**PORTABLE CHILLERS** supply temperatures between 20° to 70°F, are self contained units and use a refrigerant system to chill water. The chilled water is stored in a reservoir and supplied to the process using a circulating pump. Custom designed microprocessor instrumentation control the unit's operation. Portable chillers can service single or multiple process cooling points, and are designed to be moved between process applications as needed.

**CENTRAL CHILLERS** service multiple use points throughout the plant. Central chillers are stationary, and require a circulating system to distribute water to the process. Central chillers are offered in capacities from 20 to 500 tons. **ADVANTAGE** central chillers are offered as **MODULES** and **PACKAGES**. A module is a stand-alone chiller unit that requires a pump tank station to distribute the chilled water. A package is a self-contained unit with the chiller and pump tank station on a single platform.

**MAXIMUM**  
PORTABLE CHILLER



Maximum 'M1' instrument    Maximum 'LE' instrument



MK-10A: 10 ton air-cooled portable chiller with M1 instrument



MK-2A: 2 ton air-cooled portable chiller with M1 instrument



Outdoor air-cooled chiller with integral reservoir and pumping system

**WPT**  
CENTRAL CHILLER



Indoor multi circuit water-cooled chilling module

**OACS**  
CENTRAL CHILLER

**TITAN**  
CENTRAL CHILLER



Titan Multizone Instrument



PLC instrument

Indoor multi circuit water-cooled package chiller with integral reservoir and pumping system

**HYDRA**  
FLUID COOLER

**POWER**  
TOWER



HFC-25: 25 ton hybrid fluid cooler



TC-405F: 405 ton fiberglass tower cell

**ADVANTAGE Tower Cells** cool process water by evaporating a small portion of the recirculated water in the cooling system. Ambient air temperature and humidity influences the achievable water temperature. At design conditions, 85°F water can be provided. Tower cells are a part of a central cooling system and are installed outside, generally either elevated on a stand or mounted on a roof. Available capacities range from 10 to 1000 tons in both fiberglass and galvanized steel construction.

**ADVANTAGE pump tank stations** circulate cooled fluid to support plant-wide cooling needs. Cooling Tower Cells or Chilling Modules are combined with Pump Tank Stations to make a central system.

**ADVANTAGE Pump Tank Stations** include large reservoirs and either one or multiple pumps to circulate fluid throughout the plant. Pump tank stations are constructed from polyethylene, stainless steel or epoxy coated mild steel and range from 275 - 5,000 gallon capacities.

**ADVANTAGE Hybrid Fluid Coolers** are a unique alternative to traditional cooling towers. The fluid cooler utilizes cool ambient air for cooling process water the majority of the year instead of evaporating water like traditional cooling towers. When ambient air alone is not sufficient for cooling, the Hydra automatically switches to its adiabatic cooling mode, where a small amount of water evaporates on wetted media, pre-cooling the incoming warm air before it reaches the cooling coil. Cooling is accomplished while completely isolating your cooling water from the effects of solids build-up on your plant heat exchanger surfaces.

**TOUGH TANK**

**PTS**  
PUMP TANK STATION



TTK-1500: 1500 gallon rotational molded pump tank system, shown in conventional configuration.



PTS-2000, 2000 gallon epoxy coated steel pump tank system

**POLYETHYLENE RESERVOIRS, TOUGH TANK™**, are a patented hybrid design that creates a structurally sound cylindrical reservoir that provides total corrosion resistance. Polyethylene reservoirs are used in both tower and chiller systems. Each system is customized by our design engineers to include the proper reservoir size, flow, pump pressure and desired options.

**METAL RESERVOIRS** are built of epoxy coated mild steel or stainless steel sheets, welded and reinforced by angular tank banding.

**PUMPING SYSTEMS** are part of **ADVANTAGE Pump Tank Stations**. Heavy-duty centrifugal pumps specifically selected for the application provide the required flow and pressure to each use point in the system. Systems are configured with process pump or process and recirculating pump with optional standby. Systems can be equipped with full electrical starting, monitoring and diagnostic components including variable speed drive systems that maintain constant fluid flow and pressure.



Optional Control & Monitoring Instrument

## OTHER PRODUCTS

**ADVANTAGE** supplies many products to compliment standard heat transfer system products. These include Filters, Pump Stations, Heat Exchangers, and Control Cabinets. **ADVANTAGE** System engineers design individual components and complete systems.



Control Station with individual operators for a custom 800 ton central chilling and tower system.

200 ton heat exchanger for a free cooling circuit.



MLS-4: full flow filter



PM-30: side stream filter

# CAPABILITIES [www.AdvantageEngineering.com](http://www.AdvantageEngineering.com)



**ADVANTAGE** is located in a suburb of Indianapolis, Indiana, convenient to truck, air, and rail service. We have over 85,000 square feet of production, test, research, and administrative space in four buildings. Customers are welcome for plant tours, product demonstrations and technical assistance.

**NATIONAL SERVICE...** **ADVANTAGE** factory service technicians work from the Greenwood facility and are available for installation start-ups and service work. In addition, **ADVANTAGE** coordinates service support through a world-wide network of field service companies. For spare parts, **ADVANTAGE** maintains a large inventory with most orders being shipped the same day.



System drawings, including custom plant layout, are provided with the purchase of an Advantage water system.



**ENGINEERING...** **ADVANTAGE** staffs a complete CAD based engineering department with experienced water system design engineers. Working with customer supplied facility and process details, **ADVANTAGE** designers analyze the entire system and select the optimum component combinations to provide the most efficient installation and performance capability.



[www.AdvantageEngineering.com](http://www.AdvantageEngineering.com). The information you need, when you need it! Visit the **ADVANTAGE** website for full product information, including product technical specifications and pricing. Find your local sales representative, as well as service and technical information.

If one of over 250 standard models does not fit your application requirements... then we'll design one that will. No application is too big or too small... or too complex.



**ADVANTAGE ELECTRONICS**

[www.AdvantageElectronics.com](http://www.AdvantageElectronics.com)



**ELECTRONIC CONTROLS MANUFACTURING...** an affiliated company, established in 1984, **ADVANTAGE Electronics, Inc.** offers complete engineering services for control instrumentation, including microprocessor programming, printed circuit board design, layout, assembly and testing. Custom programming and computer interfacing is available for special customer applications.



[www.Temptek.com](http://www.Temptek.com)



**ECONOMY EQUIPMENT MANUFACTURER...** an affiliated company, **TEMPTEK** provides heat transfer and other auxiliary equipment for the budget minded. **TEMPTEK** equipment produces full performance with fewer bells and whistles. Ask your **ADVANTAGE** representative about **TEMPTEK** chillers, temperature controllers, grinders, dryers and loaders today.

*Providing Heat Transfer Solutions since 1977*

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