

- **Temperature Control Units**
Water & Oil
30° - 500°F
- **Portable Chillers**
Air & Water-Cooled
20° - 70°F
- **Central Chillers**
Air & Water-Cooled
Packages & Modules
20° - 70°F
- **Pump Tank Stations**
Chilled or Tower Water
200 - 3000 gallons
- **Cooling Tower Cells**
45 - 540 tons
- **Filters**
- **Heat Exchangers**
- **Heat Recovery Units**
- **System Controls**

CHECKMATE™

System Control and Monitoring for Cooling Tower Systems and Pump Tank Stations

The **ADVANTAGE** CheckMate™ Series control and monitoring instrument puts you in control of your central cooling tower system or chilled water pump tank system. Checkmate™ is a convenient and easy to use package.

CheckMate™ control instruments are tailor made for **ADVANTAGE** systems and the duty of controlling and monitoring evaporative cooling tower and chilled water systems.

CheckMate™ monitors up to 2 process pumps and controls 6 outputs to achieve unprecedented capability and flexibility in your plant water system. And, as your capacity requirements grow, Checkmate™ is ready with expansion capability built-in!

The *to process* control probe and up to 5 other temperature probes allow you to monitor every aspect of your water system's performance.

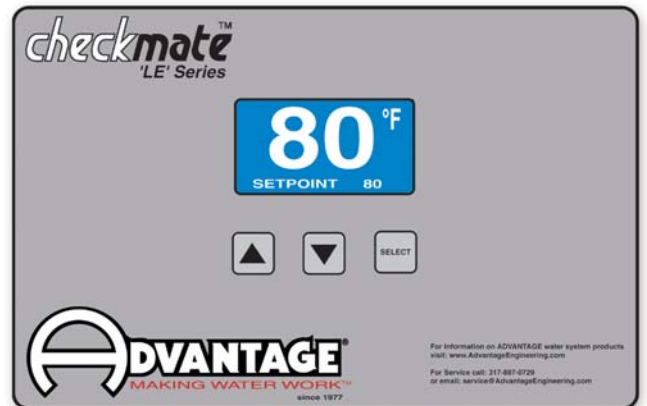
An alarm output is provided for a visual / audible beacon and the Modbus® / RTU interface provides detailed access to all of Checkmate™ temperature and status configurations.



TTK-1500 pump tank station with polyethylene reservoir and 3 pump system shown with Checkmate™ monitoring and system control instrument



Checkmate™ system control and monitoring instrument shown with pump station control switches.



Checkmate™ system monitoring and control instrument.

checkmate™

APPLICATIONS

Heat exchangers can be used on a variety of process applications.



Molds & Dies



Nozzles, Barrels & Tools



Heat Exchangers



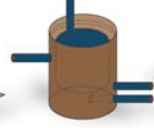
Troughs & Tanks



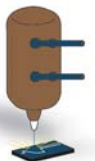
Rolls



Radiators and Air Coils



Jacketed Vessels and Mixers



Lasers

Top Operator™ Pump / Fan Control

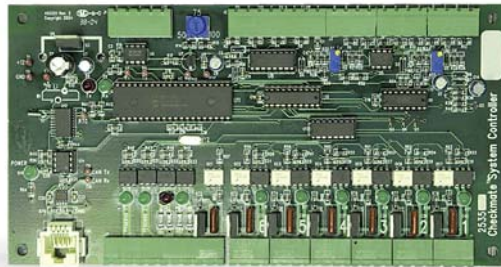
Checkmate™ Display Panel



- Combines 3 traditional components to 1 item
 - On / Off or On / Off / Auto Switch
 - Running Light
 - Overload Trip Light
- Allows for On / Off / Auto configuration
- Can be controlled and monitored by:
 - **ADVANTAGE** Checkmate™ Control System
 - Any programmable Controller (PLC)
- Allows for manual override

Checkmate™ Staging Board

The staging board works in conjunction with the Checkmate™ display panel or as a stand-alone device to stage cooling tower fans and pumps to match system capacity to cooling requirements.



When used as a stand-alone device, the desired cooling tower water temperature is selected by using the setpoint dial on the staging board mounted inside the electrical panel. When the Checkmate™ display panel is purchased, the setpoint is entered on the panel located on the front of the cabinet. The display panel communicates with the staging board to stage fans and pumps and report system status.

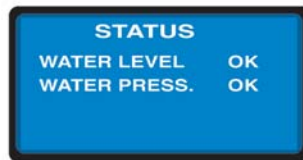


- Set tower water temperature (tower systems)
- View important temperatures:
 - To / From Process
 - To / From Tower or Chiller
- View important system status variables:
 - Temperature alarm
 - Pressure alarm
 - Tank level status
 - Pump & fan accumulated running hours
- Modbus® communication protocol
- Programmed for application
- Control and monitor nearly any combination of tower fan and pumps
- Time & Date stamped error log
- 4 year warranty

Display Screens



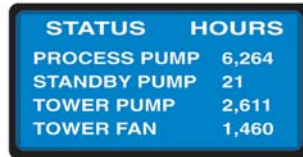
Main Screen



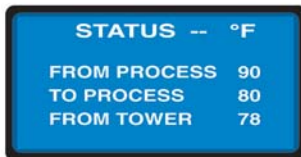
Set Up Screen



Temperature Setup Screen



Hour Log



Temperature Status Screen



Error Log



Phone: 317-887-0729 Web: www.AdvantageEngineering.com

TEMPERATURE CONTROLLERS • PORTABLE CHILLERS • CENTRAL CHILLERS • PUMP TANK STATIONS • TOWER SYSTEMS • FILTERS

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