

## ACT – Cooling Tower Cell



The Aquatower may be the most space/energy-efficient cooling tower available. Cooling Technology's ACT series tower cells range from 8 tons to 126 tons.

### **PROVEN PERFORMANCE**

CTI Certified. CTI stands by its responsibility for reliable thermal performance.

### **INDUCED-DRAFT DESIGN**

Save on fan power and avoid the water leaks typical in forced draft, pressurized towers. The fan will operate in a warm atmosphere even in winter, so you'll never have to work on frozen mechanical equipment.

### **CROSSFLOW DESIGN**

Save on pump power because you only pay to move the water to the top of the tower. Gravity does the rest. The mechanical equipment and water distribution system are out where you can easily maintain them.

### **ALL SEASON RELIABILITY**

Aquatowers perform as specified in the heat of summer. They respond well to energy management techniques in the spring and fall and with appropriate fan controls, they can operate virtually ice-free in the dead of winter. Plus they offer simple maintenance all year long.

### **PROVEN CORROSION PROTECTION**

Thousands of users confirm the value of heavy galvanizing. G-235 is the most effective galvanizing used in the industry.

### **PVC FILM FILL WITH INTEGRAL DRIFT ELIMINATORS AND LOUVERS**

If you've ever had to replace deteriorated eliminators or louvers, you'll appreciate this advantage. Now those components are molded right in the PVC fill sheets. Integral honeycomb louvers keep the circulating water inside your tower – and you off the roof!

Fill sheets include integral louvers and drift eliminators, designed to minimize resistance to airflow. This patented arrangement prevents water from escaping the fill sheets, assuring proper heat transfer throughout wide variation in airflow. Users find this fill operates ice-free even in extremely cold weather.

### **SIMPLE FLEXIBLE INSTALLATION**

Just mount the motor, belts and belt guard, install the outlet connection that suits your needs – both side suction and bottom outlet are provided.

### **WATER DISTRIBUTION**

Warm water flows through external piping (not included with the tower) into the splash box chamber at the top of the Aquatower. A splash box prevents the incoming water from spilling out of the basin and helps provide uniform water distribution. Water then flows by gravity from the basin through nozzles to the fill.

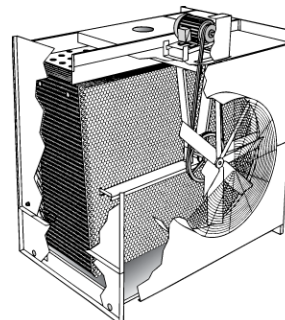
Hot water distribution basin covers are provided as standard equipment to keep the distribution basin free from airborne debris and to reduce the likelihood of biological growth.

All Aquatowers use "Spiral Target" nozzles. These inert polypropylene nozzles are evenly spaced throughout the distribution basin to assure uniform water distribution over all portions of the fill. Their large openings resist clogging. Nozzles are easy to remove and replace if you ever want to change the design water flow rate.

### **COLD WATER COLLECTION BASIN**

The Aquatowers collection basin reduces operating weight, simplifies basin cleaning, and assures proper outflow. Water flows from the elevated areas under the fill into the basin's rear depressed section, where side suction piping connects. A bottom outlet is also available for gravity flow applications.

Standard equipment on each tower basin includes: a screened suction connection; a threaded overflow connection; a threaded and plugged drain connection; and a float-operated make-up valve. Models 492A through 496B also include a bottom outlet conforming to 125# flanged specification. A blank cover plate is provided to seal the outlet connection not used.



## ACT – Cooling Tower Cell Popular Options



### **200V Motor**

Available for 1 hp to 7 ½ hp. Models 490B thru 496B.

### **Special Motors**

Two-speed, one-wind, 460-3-60, TEFC motors are available for models 494C thru 496B

### **Vertical Discharge Hood**

This option is available on models 494A and larger. It provides vertical discharge of the air leaving the tower. Hoods are galvanized steel. They ship separately for installation by others. A large access door provides entry to the fan and mechanical equipment.

For use in restrictive enclosures or other site situations where horizontal discharge is not desirable. CTI Certification does not apply when this option is selected.



### **Mechanical Access Platform**

Provides internal ladder to elevated bar-grating platform with handrail, facilitates maintenance access. Exterior platform with ladder and handrail also available for outside motor option. *Modular tower only.*

### **Component Basin Heaters**

Standard heater components consist of 3 or 5kW, 3 phase, 460 volt, shielded immersion heater; solid state circuitry for cut-off at low water level or high temperature; a control probe to monitor basin water temperature and water level; and a magnetic contactor all housed in a weatherproof enclosure. Components are shipped separately for installation and wiring by others. Designed to prevent sump freezing during shutdown periods in winter operations. Unnecessary if you use an indoor tank. Special heater characteristics result in extended lead times.

### **Pre-assembled Basin Heaters**

Tank type submersible heaters are available for all models. No tower modifications are necessary and heater includes a 6 foot electrical cord with grounded 3 prong plug for connection to a standard 120 volt source. One or more 1.5 kW elements provide protection at most ambient conditions. The built-in thermostat maintains 40°F water while the built-in safety switch shuts off power if the heater element is not submerged.

### **Stainless Steel Construction**

All Aquatower models are available with stainless steel structure. Or you can choose a galvanized tower with a stainless steel cold water collection basin.

### **Control System**

Factory-installed control center in NEMA 3R enclosure mounted on tower casing. Complete with thermostat controller for single or two-speed motors to maintain chosen cold water temperature.