

### SIMPLIFY THE COMPLEX

Historically it's been difficult to have all the needed information available in one location. TowerEye<sup>™</sup> Monitoring Program simplifies the collection and analysis of data 24/7.

#### **IMPROVE EFFICIENCY**

That which is not measured is not managed. Monitoring the key parameters of a cooling tower helps identify lower than-desired efficiencies as well as identifies periods where the cooling tower is trying to obtain an unrealistic setpoint temperature.

#### EASY SHARING

Often owners don't have the skill sets in-house to understand how to impact their cooling tower efficiencies. Since all the data from the RemoteLobes<sup>™</sup> is saved in the ProcessCentral<sup>™</sup> online historian, owners can grant access to specialists who can help interpret the data from anywhere and at any time. There's no need to try and mine a DCS system for data.

### ECONOMICAL

Capital cost and human capital investment can be a challenge when monitoring multiple boilers. Our Managed Program eliminates those concerns by providing all the equipment and services for a low annual fee in a manner like a cell phone. Let us worry about all the details while you extract the value from the data.





## THE PROBLEM

Cooling towers serve a critical role in providing cooling for a wide variety of processes. They also represent one of the larger energy users in a facility as well as typically the highest water usage. In addition, cooling towers are susceptible to chemical and mechanical related problems that can result in loss of efficiency and increase the risk of *Legionella* growth. Even though they are a significant unit operation at a facility they have historically operated with minimal oversight.

In addition, typical control logic for a cooling tower system has involved changing the fan operation to maintain a desired basin temperature. Yet, in many cases there are times where it is impossible to obtain the set-point because the wet-bulb temperature (the theoretical minimum temperature a cooling tower can achieve) is too high.

## THE SOLUTION

Our TowerEye<sup>™</sup> Monitoring Program provides a simple, cost-effective way to monitor cooling tower efficiencies. By monitoring up to 4 key variables, the TowerEye<sup>™</sup> Monitoring Program can provide operations personnel with valuable insight into how their cooling tower system is operating under a variety of conditions. Our TowerEye<sup>™</sup> monitoring program has the ability to:

- 1. Use our AmbiAirEye<sup>TM</sup> sensor to monitor the wet bulb, dry bulb and dewpoint temperatures and humidity of ambient air
- 2. Accept a T1 or T2 Series temperature sensor for basin temperature (or another 4-20mA sensor)
- 3. Accept a T1 or T2 Series temperature sensor for return temperature (or another 4-20mA sensor)
- 4. Accept a U1 Series ultrasonic transit-time flow meter (or another 4-20mA sensor)

The data within ProcessCentral<sup>™</sup> can be kept internal to the organization, or it can be shared with companies that can directly impact their cooling tower operations like water treatment specialists.

### **THE FEATURES AND BENEFITS**

- ✓ Simplify data collection & make it easy to share
- Understand relationships between multiple variables
- Identify lower-than-desired efficiencies
- ✓ Identify when additional fan energy won't provide any benefit
- ✓ Lower carbon footprint by reducing energy usage

#### PROGRAM OPTIONS

- New or Existing Sensors
- Purchase Equipment Out-Right or Managed Program...Fixed annual fee

   no upfront capital & no worries
- MODBUS Interface COMING SOON





















# **STANDARD PACKAGES**

PARAMETER	DESCRIPTION	Раскаде	
		BASIC	ENHANCED
WET BULB, DRY BULB, DEWPOINT, HUMIDITY	1 AmbiAirEye <sup>TM</sup> RemoteLobe <sup>TM</sup>	✓	✓
RETURN TEMP	1 RemoteLobe <sup>tm</sup> , 1 cable, 1 insertable <u>or</u> surface-mount temp transmitter	✓	✓
BASIN TEMP	1 RemoteLobe <sup>tm</sup> , 1 cable, 1 insertable <u>or</u> surface-mount temp transmitter	✓	✓
RECIRC RATE	1 REMOTELOBE <sup>TM</sup> , 1 CABLE, 1 TRANSIT-TIME ULTRASONIC FLOW METER		✓

# OTHER OPTIONS/CONFIGURATIONS AVAILABLE

- Add multiple temperatures for basin temperature profile
- Monitor fan speed rates & their role on cooling tower efficiency
- Monitor air velocity via anemometer
- Calculate evaporation rate with the ENHANCED Package
- Incorporate existing process instrumentation signals via standard 4-20mA signals
- MODBUS capable RemoteLobe<sup>™</sup> coming soon
- Purchase equipment out-right or part of a ProcessEye's Managed Program