

# Web Based Cooling Water Control

## Coolplex WM

### Features

Continuous monitoring

Automatic control

Remote adjustment

Alarm options

Real-time data

Trend recording

Communication options

Data processing

### Robust Engineering

Packaged control system

Rugged construction

Waterproof enclosure

Easy installation

Tamper-proof safety

Plug and play

Bespoke options

### Benefits

Legionella control

Corrosion control

Scale control

Process protection

Reduced down-time

No chemical handling

Safety

Proof of compliance

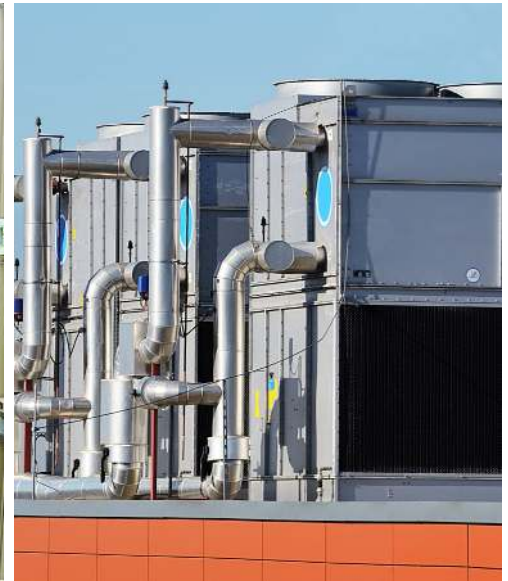
Economy and efficiency

Easy monitoring

Easy record keeping

Easy risk assessments

24/7 control



## Coolplex WM Cooling Water Control System

The Coolplex WM is a packaged cooling water dosage, control and monitoring system which incorporates data logging and web-based telemetric capability. This means that you can monitor and adjust your cooling water treatment programme from the comfort of your desk or indeed anywhere you can establish internet connection. When you're not monitoring it yourself you can be confident the system is automatically taking care of itself 24/7.

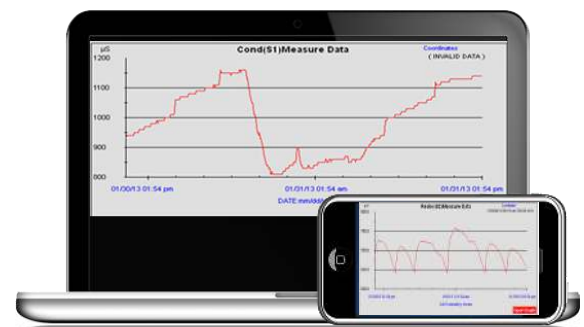
### Easy Installation

The system can be supplied either on a wall-plate for mounting within a plant room or housed within a robust waterproof enclosure for installation in the most hostile of environments. The Coolplex approach makes installation simple with the electrical connections between the pumps, sensors and controller all pre-wired and the sensor probes and chemical injection fittings being incorporated in a pre-fabricated manifold which simply requires connection across the cooling water flow and return.

### Monitoring, Control and Communications Options

A range of sensor probes and control options can be incorporated including redox (ORP), chlorine, bromine, pH, water temperature and conductivity to allow you to continuously monitor and control the key parameters of your cooling water treatment programme. The dosing pumps

can be fitted with chemical low level and no-flow alarms. Alarm or out of specification conditions can be notified by visual or audible alarm and via email or SMS text. The system comes with USB and Ethernet as standard for connection to a Local Area Network and can be supplied with Modbus connectivity and dial up or cell phone modems.



## Legionella Control Cost Saving Case Study

UK law requires that operators of cooling towers and evaporative condensers maintain rigorous control measures to control the risk from Legionella bacteria. Traditionally, this has required cooling systems to be shut down for physical cleaning every 6 months – whether they needed cleaning or not! This incurs both direct costs and lost production costs as systems are taken offline for cleaning.

Feedwater has worked with its customers to develop a new approach to cooling tower control. Our cooling water treatment programmes minimise the risk of fouling and the **Coolplex WM** system provides constant automatic monitoring and recording of your water systems condition to provide both historic and real-time evidence of control.

We worked with a major engineering and aviation parts manufacturer in the Midlands to improve the monitoring and control of their cooling systems. Using the traditional approach to cleaning meant the company had to shut its towers down twice a year, costing over £100,000 / day in lost production. In addition, a great deal of site time was taken up with monitoring systems and performing periodic checks which only told the user about the system condition at the time of sampling. Identifying and correcting unrecognised problems took time and effort since system operating conditions constantly varied.

Feedwater installed and commissioned a **Coolplex WM** dosage and control system on the site's main 40m<sup>3</sup> cooling system. The easy-to-access telemetry system immediately provided data to both the site personnel and the Feedwater team to show the system was under control 24 hours a day - not just when analysis was done by a technician.

Because of this site personnel and the Feedwater team are now alerted by email whenever an out of specification event occurs, allowing prompt investigation and correction of any problems with the water system. Additionally audible and visual alarms alert nearby staff to any problem situations.

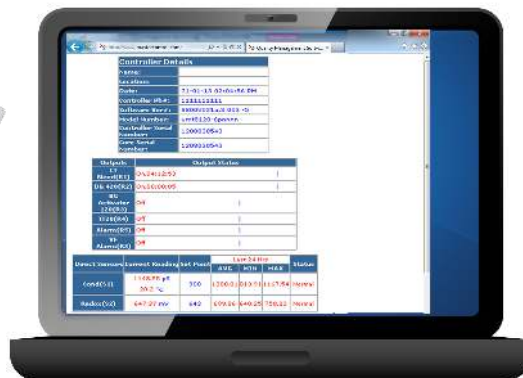
The built in software processes the data to show a range of trend charts about system condition for whatever period the user chooses.

Being able to demonstrate consistent control and compliance has meant the customer has been able to save £1,000,000s by reducing the frequency of shut-downs whilst being totally confident of controlling the legionella risk. Control is assured by consistent dosing and real-time monitoring. Staff who were previously involved in routine sampling and testing are now free to do other things in the knowledge that the cooling systems are safe, effective and secure.

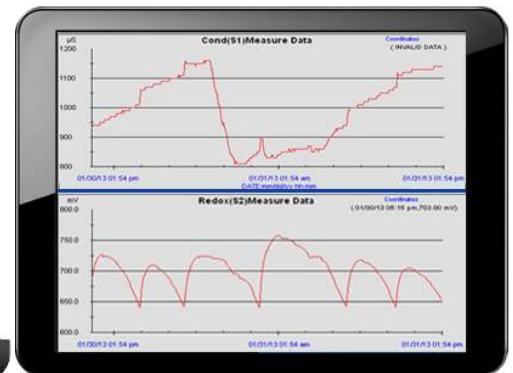
In fact, the customer was so pleased with the system they purchased several other Coolplex WM units for the site's remaining cooling systems.



Proof of Compliance



System Status Monitoring



Data Logging Charts