About Us

Your trusted partner in advanced automated water monitoring technology.
At Angel Guard, we make our expertise accessible to everyone, delivering cutting-edge tools for effective digital water management.
Transform your building's water system with smart, efficient solutions. Start your journey today and experience the benefits of intelligent water monitoring!

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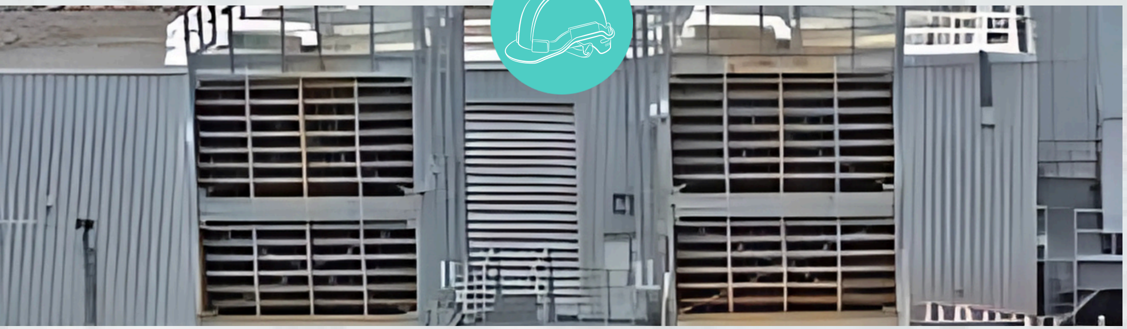
COOLING TOWERS

CLARENCE

Case Study:

Digital Water Monitoring within cooling towers.



Background

A renowned food and drinks manufacturing company were aware of previous water issues that had occurred within one of their industrial sized cooling towers. Upon making contact through their water management company, it was requested that Angel Guard inspect the cooling towers with a view to installing the Clarence system.
This would allow secure remote monitoring of the pipework and enable it to gather data , subsequently providing a risk level alongside a comprehensive water quality report.

Solution

To address the issue, an outdoor Clarence C-1 was installed to the pipe of a cooling tower. The device provided 24-hour monitoring of the water temperature within the pipework and was able to monitor if there was any break in the recirculation system. The outdoor Clarence C-1 was also able to monitor the water for potential biofilm contamination indicators. Once collected, the data would be displayed through the online portal Seraph Protect.

Results and ESG Benefits

The online portal Seraph Protect displayed that whilst the temperature was indeed originally between the accepted safe parameters , over the course of the case study however, the situation would change.

Trend Identification: The average temperature was beginning to trend upwards, with the minimum temperature slowly rising to what was originally the average temperature. This change signalled that there was a risk to water health that called for further observation.

Environmental: The results was also show that the chemical dosing was only effective for a short period of time, returning to baseline levels within three days.

Saving Lives: In addition to the above results, the system was able to identify the growth of a Legionella colony within the cooling tower. This allowed the company to quickly cease operations and perform counter measures to properly treat the Legionella growth and increase their dosing to twice a week.

Protecting Reputation: With the data being collected in real time , accurately and immediately available on the portal, the client was able to quickly identify any issues with their water before any product had to be publicly recalled.

Accurate Results: For the benefit of the case study, independent laboratory results were simultaneously carried out to ensure the results showing from our devices and portal were accurate. The laboratory results confirmed the information given by Clarence was 100% accurate.

Conclusion

Following the installation of the Clarence system and C-1 device a potentially life threatening water borne pathogen outbreak was avoided and ensured the reputation of the company remained secure. The longer term care plan for the cooling tower was revisited and changed made to address the increasing temperatures and the environment benefited from more appropriate and targeted use of chemical dosing.

> "The successful implementation of Angel Guard's Clarence system safeguarded our client's high-profile water infrastructure, reinforcing trust, ensuring compliance, and securing our ongoing partnership."
>
> Hydro-X