

LEGIONELLA IN COOLING SYSTEMS

A Hidden Risk That Demands Expert Control

What is Legionella?

Legionella is a pathogenic bacterium that thrives in warm water environments especially in cooling towers. Undetected and unmanaged, when released in aerosols this leads to:

- Health risks (Legionnaires' disease)
- Legal liability
- System shutdowns
- Operational downtime

Legionella isn't just a health issue, it often hides within biofilm. Once biofilm builds up in your cooling system, it creates a safe space for Legionella and other harmful bacteria to multiply.

Conditions that stimulate Legionella growth in cooling water systems:

- Optimal water temperatures (20-45°C).
- Pockets of stagnant water.
- Scaling.
- Presence of biofilms.

Why Traditional Approaches Fall Short

- Periodic disinfection often occurs too late.
- Culture testing can miss early biofilm development.
- Reactive dosing leads to chemical overuse without targeting the root cause.



H2OBFS Approach: Risk-Based Legionella Management

We help operators move from reactive to preventive control through a site-specific strategy combining:

- ✓ Real-time biofouling monitoring (**Biosafe®**)
Early warning system to detect biofilm growth before Legionella risk escalates.
- ✓ Customized anti-biofouling programs
Optimized biocide programs and **Ecodosing™** to control microbial risk with minimal chemical use.
- ✓ Expert guidance and RCA (**Root Cause Analysis**)
Identify vulnerabilities in your system that allow Legionella and biofilm to develop.

Our solutions are already helping facilities in:

- Power generation (open- and closed-loop systems)
- Industrial Cooling Towers



Protect Your People, Plant, and Process

Legionella control is not just compliance - it's smart operations.
Let's assess your system.