

BioFilmPro™

Proactive Biofilm Control Technology

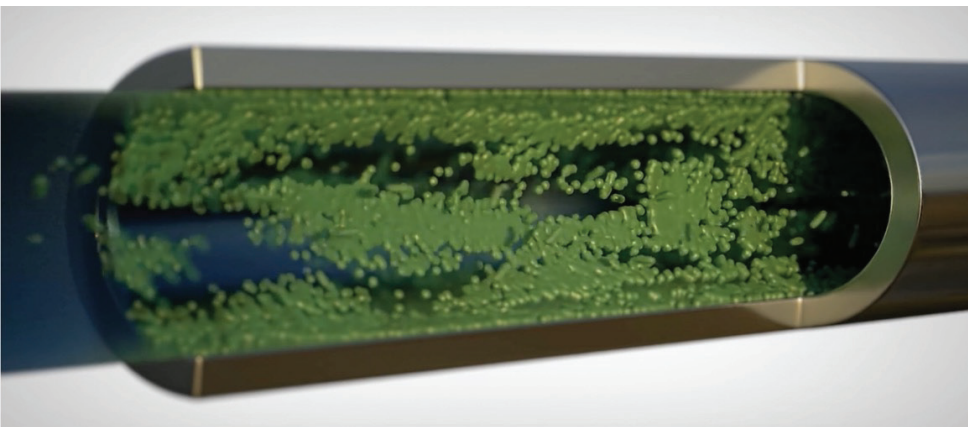
Say Goodbye to Chemical Overuse & System Disruptions

Aquatech takes biofilm control to the next level with BioFilmPro, a proactive biofilm measurement and control technology that treats biofouling before problems occur. BioFilmPro combines bacteria deactivation, real-time sensing, and data-driven analytics to predict, prevent, and control biofilm. This reduces chemical use and promotes sustainable plant operations.

Biofouling Formation

Commercial and industrial utility plants require mission-critical processes to run efficiently and reliably. If not addressed, biological fouling can lead to significant challenges that require extensive use of resources, making it an important part of a comprehensive water treatment program.

Biofilm forms when bacteria adhere to wet surfaces. Microorganisms form an attachment to the surface, and as biofilm growth progresses, it becomes harder to remove and can significantly impact operations resulting in reduced efficiencies and higher costs.



Conventional Treatment

Most water treatment programs use biocides to manage biofouling, but this approach frequently results in the overuse of chemicals. This can cause increased chemical consumption, higher costs, and use of chemicals that harm the environment. Bacteria cells can develop chemical resistance, allowing them to persist and proliferate. This makes chemical treatment less effective over time.



Advantages of BioFilmPro



Real-Time Results

Online detection & monitoring creates real-time biofilm formation trends



Proactive Action

Detecting changes in biofilm formation rate early enables proactive biocide injection



Lower Total Cost of Operation

Improve plant economics with higher uptime & optimized energy consumption



Improve Sustainability

Lower chemical & energy usage than conventional biofilm control methods



Mitigate Risk

Complete operator assurance & peace of mind with informed decision-making

BioFilmPro™

Next-Level Biofilm Control for Efficient & Sustainable Plant Operations



Bacteria Deactivation



Real-Time Sensing



Data-Driven Analytics

How Does BioFilmPro Work?

Bacteria Deactivation

BioFilmPro treatment uses a continuous mild electric current to damage and deactivate bacteria cells, rendering them unable to reproduce and form biofilm.

Real-Time Sensing

BioFilmPro's sensor continuously measures the potential for biofilm formation in real-time. It's easy to install on existing systems, and the collected data is fed directly to the predictive analytics software.

Data-Driven Analytics

Our predictive analytics software aggregates and analyzes data, employing machine learning and artificial intelligence to optimize the system in real-time.

Our software tracks biofilm trends against past events, anticipating future occurrences and issuing automatic corrective actions to avoid system disruptions.

What Does This Mean For Operations?

BioFilmPro uses bacteria deactivation, real-time sensing, and data-driven analytics to help plant operators make informed decisions that prevent biofilm-related challenges in their operations.

Cooling Towers & Heat Exchangers

For cooling towers and heat exchangers, BioFilmPro prevents microbiologically-induced corrosion, resulting in:

- Decreased chemical usage
- Maintained heat transfer efficiency
- Maximized equipment uptime
- Optimized energy consumption


Membrane Systems

In membrane systems BioFilmPro prevents biofouling, leading to:

- Reduced chemical usage & cleaning frequency
- Optimized energy consumption
- Prolonged membrane life
- Increased reliability

Achieve peace of mind with Aquatech's BioFilmPro technology, ensuring maximum system uptime and efficiency.



 Learn More