



CHEMICAL SUPPORT SYSTEMS

DESIGN / ENGINEER / MANUFACTURE / INSTALL

Biofilm sensor

Our biofouling monitors provide a relative measure of "risk" of biofilm building up in your process, allowing you to dose you biocide accordingly or to take appropriate remedial action.

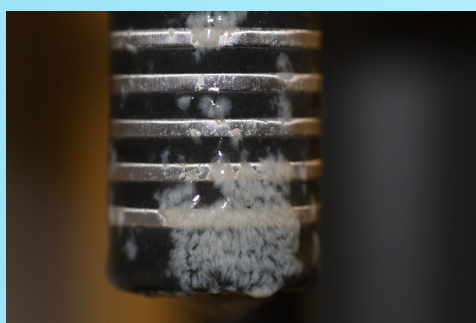
- Legionella control
- Automatic Biocide control
- Can be combined with other sensors
- No maintenance
- Cooling towers
- Water circuits
- Reduced chemical costs
- Rated up to 10 Bar

To be used in combination
with CSS Analyser



The controller applies a potential between the probe electrodes that encourage microorganisms to grow in the surface of the probe before they would grow on the surfaces of a pipe or vessel. The biological activity of the biofilm creates a signal. An increasing trend in the signal indicates the onset of biofilm activity on the probe. The controller can then take remedial action automatically by, for example, increasing or decreasing biocide levels

Cooling and heating systems in e.g. hospitals, airports and hotels can be a source of Legionella or Pseudomonas bacterium. The bacteria often grow in biofilms that adhere to the walls of water systems. The Biofilm monitor allows you to track the development of these biofilms and dose the appropriate chemicals to reduce and disperse the biofilm prior to building up to a dangerous level of legionella and pseudomonas. Biofilms can also induce corrosion and reduce heat exchange efficiencies all of which can be expensive if not controlled appropriately.



Measuring the residual biocide in a body of water only tells half the story. It tells you that there is little or no biological activity in the bulk water. This doesn't necessarily mean that biofilm isn't building up on the walls of pipes and vessels with the possibility of the development of harmful bacterial colonies. The biofilm sensor comes equipped with its own integrated GSM/GPRS modem, which allows anyone, with the appropriate security level, to receive text alarms or emails relating to the chemistry of the treated water. It also allows you to monitor the build up of any biofilm and in turn

take the appropriate action automatically to return the system to a clean condition. This could be as simple as triggering an alarm for a manual intervention or as complex as increasing biocide levels or shock dosing, all controlled by the biofilm monitor.

By monitoring biofilm activity on surfaces very precisely, costly over treatment can be avoided and chemical treatments can be optimised, therefore the biofilm sensor and associated monitoring equipment can:

- Reduce the risk of Legionella growth
- Reduce the cost of chemical treatment
- Reduce maintenance
- reduce the time taken to fix problems
- Increase the efficiency of process equipment



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