



## Laborelec (GDF-Suez Group)

### SUCCESS STORY

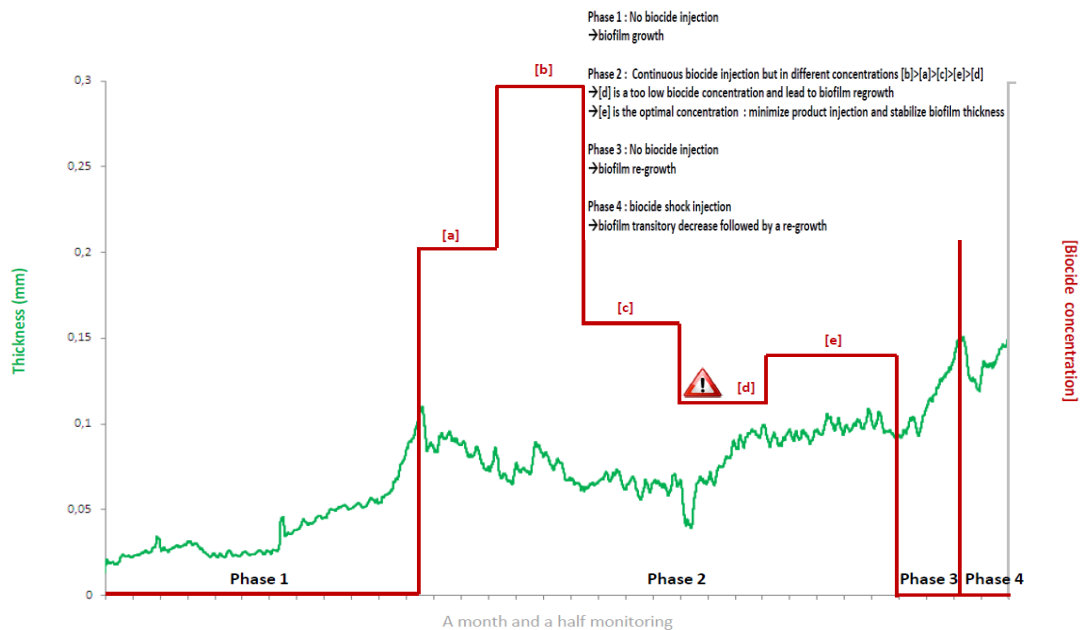
Innovative sensors, probes and systems for water-quality monitoring.

One of the goal using Neosens Fouling probe was to define the optimal concentration of an alternative biocide treatment in an open recirculating cooling circuit of a thermal power plant.

Tests were performed on a pilot installation. During phase 1, the biofilm was let to grow without any biocide treatment. Once its thickness reached 100µm, a biocide was continuously injected at different concentrations (phase 2). Concentrations [a], [b] and [c] all enabled a control of the biofilm. Contrary to this, [d] corresponded to a biofilm growth and is therefore a too low biocide concentration. The biocide concentration was then increased to [e], which led to a biofilm thickness stabilization. This biocide concentration (minimizing product injection while still keeping biofilm under control) was considered as being the optimal concentration. During phase 3, no biocide was applied with a corresponding biofilm re-growth. At the beginning of phase 4, a biocide shock injection was realized leading to a transitory biofilm decrease which was immediately followed by a regrowth.



Neosens will provide you the best innovative and most reliable solution for your application and needs.



**Look for Neosens Fouling Sensor as a powerful tool to optimize your biocide treatment while keeping your exchangers efficiency at the highest level, reducing your cost of biocidal treatment and minimizing your environmental impact!**

For more details: [lieve.verelst@laborelec.com](mailto:lieve.verelst@laborelec.com) or [www.laborelec.com](http://www.laborelec.com)

#### Neosens S.A.

Diapason – Bat B  
Rue Jean Bart  
BP 57490  
31674 Labège Cedex  
France  
Tel +33 (0)5 61 75 62 47  
Fax +33 (0)5 61 75 63 08  
sales@neo-sens.com

[www.neo-sens.com](http://www.neo-sens.com)

#### About Neosens

Founded in 2001, and located outside Toulouse, France, Neosens develops and markets a new generation of sensor solutions to monitor and control the quality of any liquids in the environment and the industry to optimize industrial processes, to protect our environment, and to extend life of equipment.

With expertise in electro-chemical fluid monitoring and microelectronics processes, Neosens has created a series of innovative sensors based on Micro-Electro-Mechanical Systems (MEMS) technology, which enables to reduce the size of the sensors, while increasing their precision and reliability in harsh environments. Neosens' advanced solutions monitor water quality continuously, in-situ and real-time for applications such as cooling systems, pulp & paper, food & beverage processing, and more.