

BioCon: Increase your operational safety and biological stability

by using an intelligent control system

Situation

Many wastewater treatment plants have stable discharge values but short-term changes in influent conditions disrupt the operations safety. Results are:

≡ Insufficient cleaning performance in the biological stage.

Aim: Operational stability and securing the targeted discharge values.

Solution

In such a situation a targeted control system such as BioCon can help:

≡ It controls the biological cleaning process according to demand and load.

≡ It stabilizes the discharge values on a lower level.

≡ It improves the efficiency of the entire cleaning process.

≡ The aeration, sludge and phosphor elimination modules provide an optimized dosage of oxygen, flocculants and returning sludge.

Result

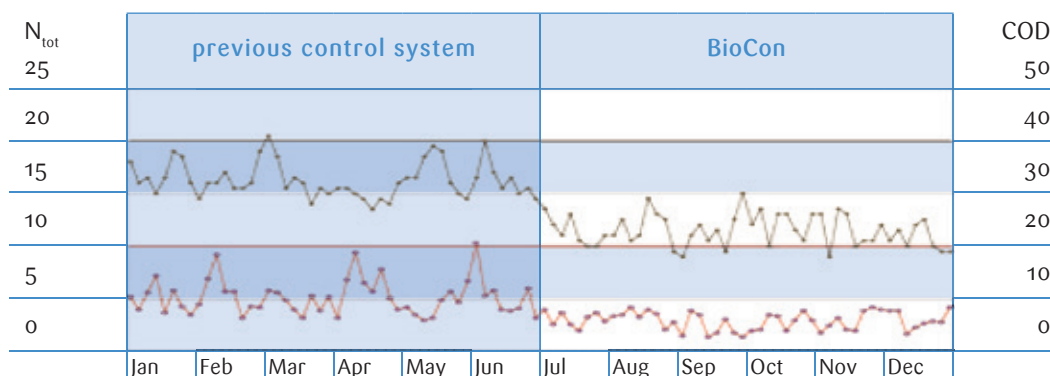
With BioCon the activity of the cleaning stage and thus the performance of degradation increased significantly:

≡ The cleaning performance was increased especially the degradation of nitrogen and phosphor.

≡ The sludge texture was improved due to an optimized sludge management.

≡ The general operational safety increased significantly due to a cleaning process that has been stabilized throughout the year.

≡ The economical operation of the biological stage was improved as the energy consumption was reduced.



—○— N_{tot} [mg/l] - - - Monitoring value of N_{tot}
—○— COD [mg/l] - - - Monitoring value of COD



»We are relieved that even when there is no staff on the plant BioCon controls the entire plant in a safe and optimum way.«

The diagram shows the stabilization of the cleaning process over an extended period of time - an important condition for increasing the overall operational safety.