

Scum layer reduction

Waste water treatment plant, Kmhelen, Germany



Waste water treatment plant
Kmhelen, Grossenhain

<http://www.azv-grossenhain.de/>

Operation

1 denitrification basin with
125 m³ with one OLOID Type 400

Period

3 month operation in 2001

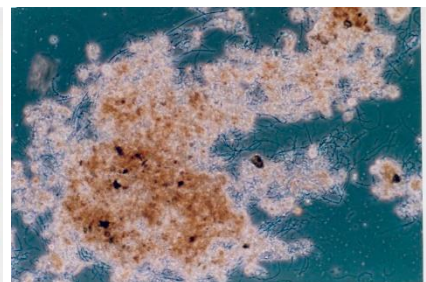
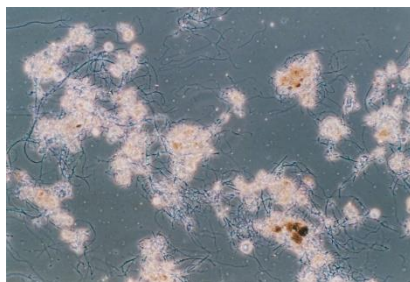
Success

Reduction of the scum layer

Problem: Very strong scum layer on the secondary clarification (up to 6 cm thick) as well as foaming on the activated sludge basin. Strong population of filamentous bacteria (*Microthrix parvicella*).

OLOID-use: Agitator for denitrification in 125 m³ basin: circulation and suspension of the activated sludge during the denitrification phase. Reduction of the scum layer.

Results: In the study period (3 months), non-filamentous organisms increasingly overgrow the filamentous organism's dominant at the beginning of the test. The influence of the filamentous bacteria is reduced (see right picture). There is an increase in the activated sludge floc due to the gentle and pulsating movement of the OLOID. Sludge formation on the sedimentation tank is significantly reduced (see figure above). The OLOID surface agitator Type 400 with a power consumption of 0,25 kW replaces a submersible mixer with 3 kW.



Before

After 2 months with OLOID

After 3 months with OLOID