

Papermill

Hakle-Kimberly Deutschland GmbH
Koblenz, Germany

Project aim

To treat a heavily loaded effluent from tissue production. The clear filtrate to be of highest clarity to be sent for discharge on to further treatment in the local municipality plant.

Type of Installation

2 x ALGAS Microfilters 45 HPA

Background

The effluent from the plant was high in solids being a combination of flows from the DIP, sludge from flotation units, backwash from sand filters and boiler blow down and general mill effluent. The ash content was high, up to 70 %. Efficient treatment was required in order to provide a high consistency of sludge for further thickening and with a filtrate of good clarity.

Solution

The combined effluents are collected in a holding tank and after adding polymer, the effluent was sent to the two ALGAS Microfilters installed as first step treatment in a cascading de-watering plant. The solids in the Microfilters are knocked off using air, before being sent on to a de-watering table and finally screw presses to de-water up to 60 % dry. The clear filtrate is partially reused back in the process and any excess sent to the municipality treatment plant.

Process data

Inlet ALGAS: 230 m³/h
TSS in inlet: 2-3 % (20- 30,000 mg/l)
Clear filtrate: < 100 mg/l
Reject consistency: from ALGAS ca. 8 %

