

MBR Leipzig-Knautnaundorf, Germany

Task

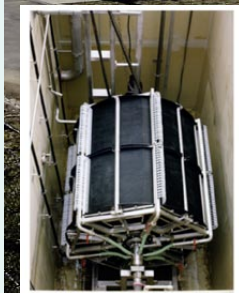
New membrane plant was installed to replace existing WwTP to treat domestic and industrial flows. Client: Kommunale Wasserwerke Leipzig. Commissioning in 04 / 2001.

Inlet

The plant receives flows from the catchment area with approx. 600 connected residents and from an industrial business park with approx. 900 population equivalents. There are high load and flow variations due to the connected business park.

Process Description

The WwTP comprises of an inlet pumping station followed by a mechanical treatment stage with 3 mm fine screen and grid trap. Surplus flows build up in the storm tank. Afterwards the sewage flows into the combined membrane aeration tank (intermittent denitrification). Filtrate is collected by filtrate pumps through the membranes and finally discharged to the local watercourse. Surplus sludge is removed periodically from the process to the storage tank.



Design Data

Population Equivalent (PE)	1500,0
Average flow (m ³ /d)	115,0
Peak flow (m ³ /h)	5,1
Installed membrane surface area (m ²)	702,0
Aeration tank volume (m ³)	135,0