

# MEMBRANE TECHNOLOGY

## Membrane Technology/Membrane Bioreactors

Planning, construction and operation of membrane plant for municipal and industrial wastewater purification.

### PROCESS/ENGINEERING:

Membrane plants have been used in the field of water treatment for several decades as a means of removing substances from water. Membrane technology



Example of a membrane plant

was initially applied in the desalination of seawater and brackish water, whereas nowadays it is also deployed to separate valuable substances from small volumetric flows, e.g. in biotechnology and in the pharmaceutical and chemical industry. Membrane processes are also used to purify industrial effluent, and more recently for municipal wastewater treatment.

A membrane essentially functions like a filter. A mixture is separated into several component fractions by the membrane holding back one of the components while allowing a different component to pass through almost unhindered. Separation using membrane technology is a purely physical process in which the substances being removed are not modified, either thermally, biologically or chemically.

### OUR SERVICES

#### Planning, construction and operation of:

- Membrane plant (micro-/ultrafiltration, reverse osmosis)
- Membrane activated sludge plant
- Membrane activated sludge plant in containerised form, turnkey containerised plant with 300 – 2,000 PE capacity

#### For:

- treatment of industrial effluent
- municipal wastewater treatment

### MODE OF OPERATION

