

MALT PRODUCTION PLANT - GERMANY

Project Background

The Malzfabrik Rheinpfalz produces approx. 30.000 tonnes of "Pilsner" and "Münchner" malt every year. Organically contaminated process water is incurred during the malting process (approx. 250 m³/d). Both the provision of fresh water and the disposal of waste water are associated with high costs. By using a membrane bio-reactor (MBR), perfectly hygienic process water is generated which can be redirected into the barley separating filter.

Project Description

The plant essentially comprises a 250 m³ equalisation tank, an aerated stimulation reactor (280 m³), an MBR container with the filtration modules and the entire measurement, controls and switch gear.

Project Features

First of all, a pilot test was successfully implemented on site over a period of six months using original waste water. Only a limited construction area was available for the industrial-scale plant. On account of the neuralgic location in the heart of the city, the most stringent requirements apply with regards to noise and sound emissions.

Benefits:

- Reduction in specific water consumption ("water footprint") in production
- Reduction of the operating costs
- Compliance with the emission specifications (noise and smell)

Technical Data

Waste water	250 m ³ /d
COD	2.500 mg/l
pH	6.5-7.5
Temp.	20°C

Project Duration

- August 2011 - June 2012



newterra GmbH, a subsidiary of newterra Group Ltd, is the technical center of development and excellence of the globally successful MicroClear® flat sheet membrane for MBR (membrane bioreactor) applications. The evolution of the filtration module, by specially developed and optimized production machines, to the ISO 9001 certified manufacturing process of the MicroClear® membranes, is 100% produced at the site in Langgoens, Germany (near Frankfurt).