



Brewery wastewater reuse

Denmark, 2160 m³/d

Aim of the Project

Lenntech has engineered, manufactured and commissioned a fully automated closed-circuit reverse osmosis (CCRO) plant with remineralization (calcite) for the reuse of wastewater generated by brewery processes. CCRO purifies the wasted stream at a recovery rate of 90% enabling its reuse in the factory.

The advanced CCRO process allows working at a high recovery while minimizing fouling and scaling, even with challenging feed water quality, minimizing cleaning frequency.

After remineralization with calcite, pH is adjusted and water is disinfected with ClO₂ to ensure potabilization of the water.

Scope of Work

- ✓ Engineering, manufacturing and assembly
- ✓ CCRO unit
- ✓ Calcite filters
- ✓ pH adjustment and antiscalan dosing
- ✓ Cartridge filtration
- ✓ ClO₂ and NaOH post treatment
- ✓ Automatic Cleaning In Place (CIP)
- ✓ Automated backwash of calcite filters
- ✓ Automatic calcite refilling of calcite filters
- ✓ PLC controll with SCADA
- ✓ Site commissioning and service after sales

Plant specs

☐ Feed water quality

EC: <3000 µS/cm

COD: 20-50 ppm

☐ Product water quality

According to WHO standards

Project duration

- ☐ May 2020 to January 2021