

## Case study MBR BioAir DS

### OEM Partner

Complete MBR waste water treatment plant from hospital waste water built by Pharmafilter in the Netherlands.

### UF-process

The UF system split biomass from a bioreactor process (MBR) into a clear permeate stream and a concentrate back to the bioreactor.

Application: Biomass separation



Berghof HyperFlux products

### UF configuration

#### UF Membranes/ Modules

|                   |                      |
|-------------------|----------------------|
| Module program    | HyperFlux I8LE       |
| Membrane type     | 66.03 I8LE           |
| Membrane material | PVDF                 |
| Membrane diameter | 8 mm                 |
| Cut off           | 30 nm                |
| Module type       | MO 84G 66.03 I8LE XL |
| Membrane area     | 36.7 m <sup>2</sup>  |

#### UF design

|                     |                              |
|---------------------|------------------------------|
| Number of trains    | 2                            |
| Modules per train   | 4                            |
| Total membrane area | 301.6 m <sup>2</sup>         |
| Permeate flow rate  | 10 m <sup>3</sup> /h         |
| Temperature         | 30 °C                        |
| Permeate flux       | 30 - 50 l/m <sup>2</sup> .h  |
| Energy consumption  | 0.2 – 0.5 kWh/m <sup>3</sup> |

#### UF analysis

##### Feed:

MLSS 15 g/l

