

## Case study Oil/water separation BioFlow

### Container with UF system for clean park waste water treatment

Complete waste water treatment plant delivered to Berliner Reinigungsbetriebe.

### UF-process

The separation units consists of:

- Automatic self cleaning filter
- Ultrafiltration unit

Application : Oil / water separation



Berghof HyPerm AE products

### UF configuration

The UF plant split wastewater from car washing process into a clear permeate stream for water reuse and a concentrate for disposal.

#### UF Membranes/ Modules

Module program	HyPerm AE
Membrane type	66.03
Membrane material	PVDF
Membrane diameter	11,5 mm
Cut off	30 nm
Module type	MO P37
Membrane area	4,0 m <sup>2</sup>

#### UF design

Loops	1
Modules/Loop	4 , max. 5
Total membrane area	16 m <sup>2</sup> , max. 20 m <sup>2</sup>
Permeate flow rate	1,6 m <sup>3</sup> /h
Temperature	20-30 C
Permeate flux	100 l/hm <sup>2</sup>
Working pressure	5,5 bar

### UF analysis

#### Feed:

TSS	approx. 3 g/l
Hydrocarbon	950 mg/l
pH	7 – 9,5

#### Permeate

Hydrocarbon	< 10 mg/l
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