

Case study Oil/Water separation BioFlow

OEM Partner

Complete waste water treatment plant for oil/water separation built by EDARMA to Barcelonas container harbour.

UF-process

The separation units consists of:

- Prefiltration with fine screen filter
- Coalescenzseparator
- Ultrafiltration unit

Application : Oil / water separation



Berghof HyperFlux products

UF Configuration

The UF plant split wastewater fro, crane washing process into a clear permeate stream for water reuse and a concentrate for disposal.

UF Membranes/ Modules

Module type	HyperFlux I8
Membrane type	66.03
Membrane material	PVDF
Membrane diameter	5 mm
Cut off	30 nm
Module type	MO43G 66.03 I8
Membrane area	8 m ²

UF design

Loops	1
Modules/Loop	2 , max. 4
Total membrane area	16 m ² , max. 32 m ²
Permeate flow rate	0,65 m ³ /h, max. 1,3 m ³ /h
Temperature	20-45 C
Permeate flux	40 l/hm ²
Working pressure	5 bar
Cleaning intervals	1 week, after each batch

UF analysis

Feed

TSS	< 1 g/l
COD	2.800 mg/l
Hydrocarbon	237 mg/l
pH	7 - 8

Permeate

COD	230 mg/l
Hydrocarbon	< 10 mg/l



UF unit

