

Ultrafiltration + reverse osmosis

Pharma industry

APPLICATION:

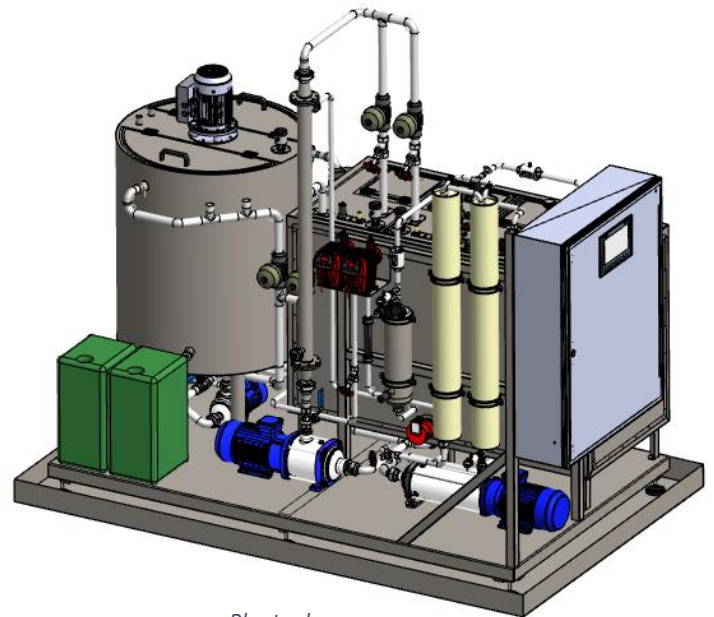
- Production of surgical instruments
- Preparation of distillate from evaporator (max inlet COD 1800 mg/l, NH₄ 1000 mg/l)

PROCEDURE:

- Prefilterer 50 µm
- Neutralisation with sulfuric acid
- Ultrafiltration, ceramic membrane, area 1,6 m² for separation of suspended solids and hydrocarbons
- Reverse osmosis for reduction of conductivity and ammonia, membrane area 2 m²
- Ion exchange plant
- CIP-Station for chemical cleaning
- Fully automatic control
- Permeate indirect inlet

REALISATION: 2018

LOCATION: Germany



Plant schema

Parameter/Technical data	
Temperature	60 °C
pH (reduction from pH 10)	7,0
Performance permeat	100 l/h
Conductivity permeat after RO	≤ 10 µS/cm
Hydrocarbons in outlet	< 5 mg/l
Working pressure UF	Max 10 bar
Working pressure RO	Max 12 bar
Installed power	8 kW



Plant overview



Plant in internal test operation