

Ultrafiltration +Reverse osmosis

Food industry

APPLICATION:

- Treatment of effluent sewage treatment plant as process and drinking water for production

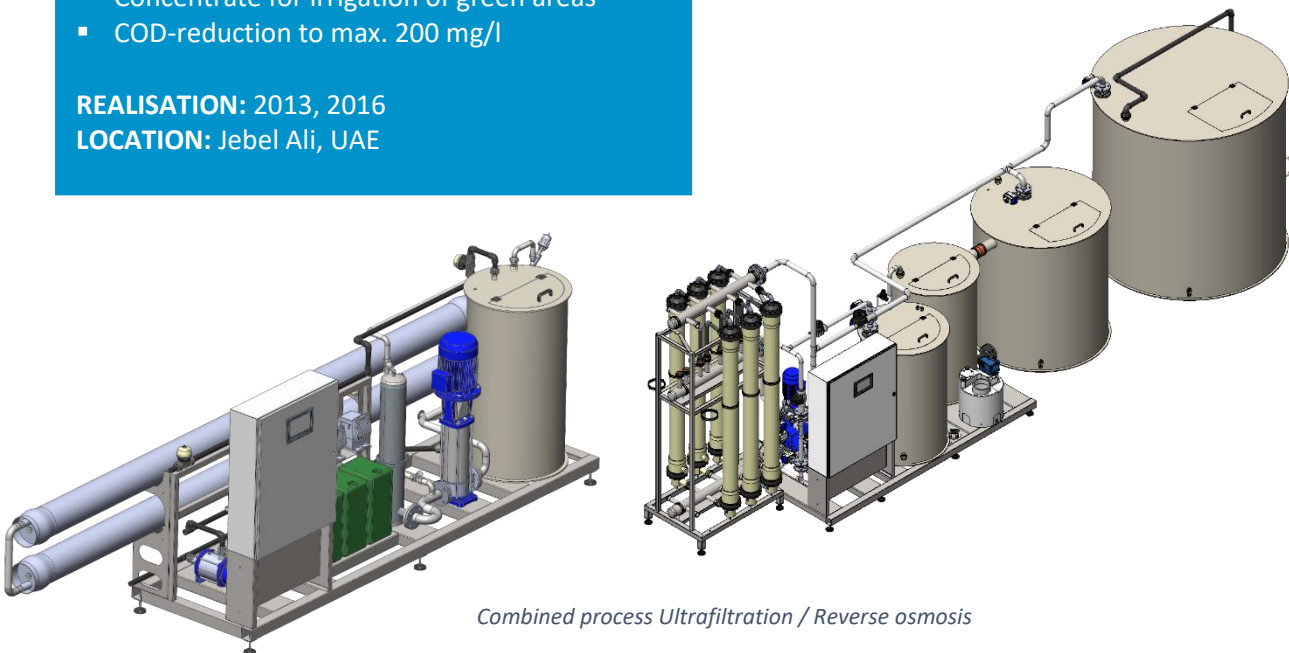
PROCEDURE:

- Pre-treatment: Biological sewage treatment plant, removal of turbidity, heavy metals, COD reduction
- Ultrafiltration, 6 PVDF capillary membranes, membrane area 300m²
- Reverse osmosis for desalination according TrinkwV
- Permeate use for production
- Concentrate for irrigation of green areas
- COD-reduction to max. 200 mg/l

REALISATION: 2013, 2016

LOCATION: Jebel Ali, UAE

Parameter/Technical data	
Performance Permeat UF	15 m ³ /h
Performance Permeat RO	12 m ³ /h
Conductivity Permeat	≤ 10 µS/cm
Salt retention	≥ 99 %
Working pressure UF	6 bar
Working pressure RO	12 bar
Installed power UF	12 kW
Installed power RO	18 kW



Combined process Ultrafiltration / Reverse osmosis



Plant overview – Reverse osmosis (left), Ultrafiltration (right)

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