

SEAWATER DESALINATION

Independent water supply

RELIABILITY

Safe and reliable water supply from a virtually endless source

FLEXIBILITY

On demand production according to seasonal requirements

INDEPENDENCE

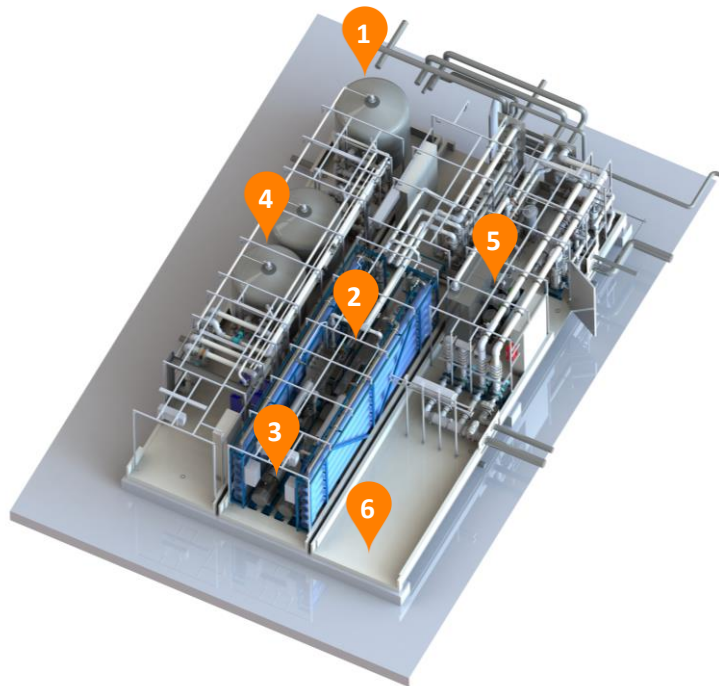
Off the grid connection, allowing independence from local water network

DECENTRALIZED SYSTEM

Suitable to provide water in remote locations

Our Solution

- 1 ▶ MMF
- 2 ▶ Seawater Reverse Osmosis
- 3 ▶ Energy Recovery Device
- 4 ▶ Potabilization
- 5 ▶ Chlorination (dosing pump)
- 6 ▶ Containerization



Special features

- ▶ ERD: optimizes energy consumption by transferring the concentrate pressure to the feed, thus reducing the energy requirements by 60%
- ▶ Remote monitoring: allows to access and control the plant remotely
- ▶ Pre and post treatment: options are available according to the required water quality/application needs
- ▶ Renewable energies: system can be powered by solar or panels or wind turbines
- ▶ Containerization: Reduces on site civil works and installation requirements.
- ▶ Plug and Play solution



SEAWATER DESALINATION FOR GOLF COURSE IRRIGATION

Curaçao, 1200 m³/d

Aim of the Project

Lenntech has engineered, installed and commissioned a turnkey containerized seawater desalination system for irrigation of a golf course on a luxury resort complex in the Caribbean islands.

Due to the scarcity and high procurement cost of fresh water, the **return on investment** of this sea water reverse osmosis system is **less than 6 months**, generating around **€890 000 savings per year**.

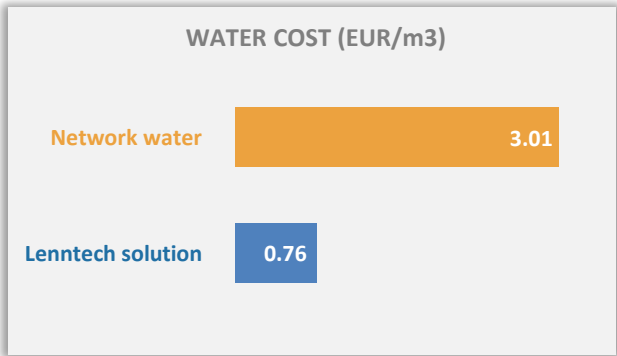
The complete system is equipped with top brand instrumentation and equipment, as well as advanced automation and remote control/monitoring. The system is completely from European origin and is delivered with a certificate of origin.

- ▶ **FEED WATER QUALITY**
 TDS: 34 000 ppm
- ▶ **PRODUCT WATER QUALITY**
 TDS < 400 ppm

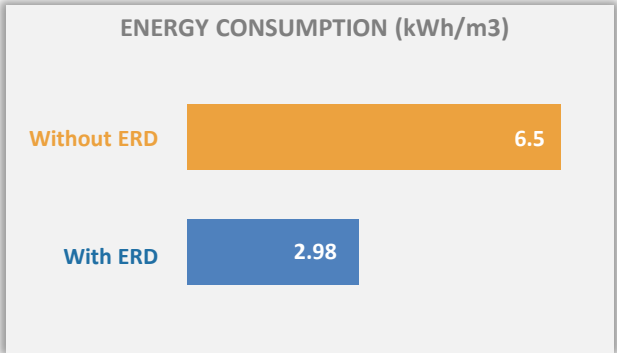
Scope of Work

- ▶ Engineering, manufacturing and assembly
- ▶ Containerized system with air-conditioning
- ▶ Multimedia filtration
- ▶ Reverse osmosis unit
- ▶ Pressure Exchanger for energy consumption reduction
- ▶ Chemical dosing (disinfection, flocculation, antiscalant)
- ▶ Chemical cleaning and rinsing station
- ▶ Distribution and intake pump system
- ▶ Siemens PLC
- ▶ Site commissioning
- ▶ Remote monitoring
- ▶ Service and maintenance

▶ WATER COST 75% CHEAPER



▶ ENERGY CONSUMPTION 55% DECREASE



▶ RETURN ON INVESTMENT 6 MONTHS

