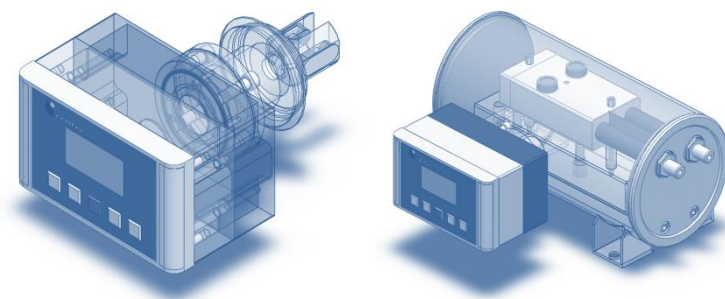


The Centec Group

Centec is a privately owned group of companies. With a focus on the processing industries, we are rapidly growing in the major world markets. We have a global sales and service structure, with our own subsidiaries and a network of qualified distributors. Our international operations include mechanical, electrical and process automation engineering, with skid manufacture and pipework fabrication; as well as our own switch cabinet production. This infrastructure allows efficient logistics, short lead times and strict adherence to delivery deadlines. The quality of our products is excellent, so is the price-performance ratio.



Accuracy. Reliability. Centec.

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DeSaTec

**Desalination of
Seawater and
Brackish Water**

Centec Process Systems



Automated
process skids
and high precision
sensors from a
single source.
Centec.

DeSaTec

The Principle

The Centec desalination system DeSaTec applies reverse osmosis (RO) and is used for seawater and brackish water desalination. Water is referred to as seawater if it has a salinity of at least 2 ‰ (20 g/l). Depending on the region, the salt content of the sea varies significantly. On average, seawater in the world's oceans has a salinity of about 3.5‰ (35 g/l). Ground or surface water with an increased salt content is referred to as brackish water. With the aid of DeSaTec, seawater and brackish water can be processed to be used as drinking water according to WHO standards or as process water for industry. Hotels, offshore platforms, municipal water suppliers, beverage manufacturers, chemical plants – there is a huge number of customers for DeSaTec around the world. The design and construction of all Centec desalination units primarily depend on the salinity of the raw water, the substances contained in the water, and the parameters required for product water. RO is an increasingly common method of desalination, because of its high energy efficiency and low investment costs. RO systems are quick to build and easy to operate.

Technical Data

Capacity	10 - 15.000 m ³ /day
TDS / Salinity of Feedwater	
Seawater	up to 4,5 ‰ (45 g/l)
Brackish Water	up to 1,0 ‰ (10 g/l)
Temperature of Feedwater	10 - 30 °C
Required Inlet Pressure	min. 2 - 3 bar
TDS / Salinity of Product Water	max. 0,05 ‰ (0,5 g/l)
Salt Rejection	approx. 99 ‰
Energy Consumption	
Seawater	3 - 6 kW per m ³ of product water
Brackish Water	1 - 2 kW per m ³ of product water
Options	disinfection mineralization EX protection water storage & distribution



The Centec production is certified according to ISO 9001.

- **Application Specific and Energy Efficient**
applicable for a raw water salinity of up to 4,5 ‰ (45 g/l)
removal of minerals, chemicals, bacteria and viruses
mineralization or water disinfection on demand
- **Modular Design with Standard PLC**
skid mounted for easy installation and start-up
- **Low Installation and Water Production Costs**
- **Outstanding Price-Performance-Ratio**

Experience. Expertise. Centec.

Particle Pre-Filtration · UV & Chlorine Disinfection · Ozonation · Activated Carbon Filtration
Water Softening & Demineralization · Ultrafiltration · Reverse Osmosis · Electro Deionization
pH-Adjustment · WFI Distillation · WFI Storage · WFI Distribution · Pure Steam Generation

