



UK

Centec UK

Serbia

Centec Serbia

11000 Beograd

info@centec.rs

Stalworths, The Street

Tel.: +44 1206 21 19 21

Fax: +44 1206 21 19 16

Bogdana Žerajića 34/III

Tel.: + 381 11 358 11 24

Fax: + 381 11 358 11 24

info@centec-uk.com

Great Tey, Colchester, Essex, CO6 1JS

#### Germanv

Centec GmbH Wilhelm-Röntgen-Strasse 10 63477 Maintal Tel.: +49 6181 18 78 0 Fax: +49 6181 18 78 50 info@centec.de

#### **Czech Republic**

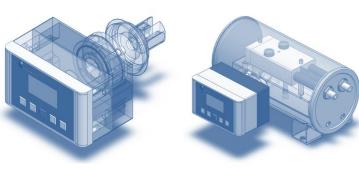
Centec automatika s.r.o. Pekařská 8/601 155 00 Praha 5 Tel.: +420 257 084 111 Fax: +420 235 518 701 prodej@centec.cz

#### USA

Centec LLC P. O. Box 820 Germantown, WI 53022-0820 Tel.: +1 262 251 8209 Fax: +1 262 251 8376 info@centec-usa.com

#### **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.

#### India

Centec RRR Systems & Sensors Pvt Ltd RRR House, Plot 80, Sector 23 Turbhe Naka, Navi Mumbai - 400 705 Tel.: +91 22 2783 3655 & 2783 1348 Fax: +91 22 2783 4814 mail@centecrrr.com

Brazil Centec América Latina Ltda Rua Mexico 148 conj. 1004 Centro 20031 142 Rio de Janeiro Tel.: +55 21 2223 2066 centeclatina@terra.com.br

# U D Π S Ð

# **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.

- 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

### **Technical Data**

10 - 15.000 m <sup>3</sup> /day
up to 4,5 % (45 g/l)
up to 1,0 % (10 g/l)
10 - 30 °C
min. 2 - 3 bar
max. 0,05 % (0,5 g/l)
approx. 99 %
3 - 6 kW per m <sup>3</sup> of product water
1 - 2 kW per m <sup>3</sup> of product water
disinfection
mineralization
EX protection
water storage & distribution

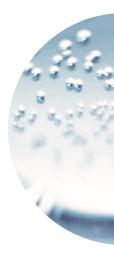
The Centec production is certified according to ISO 9001.











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