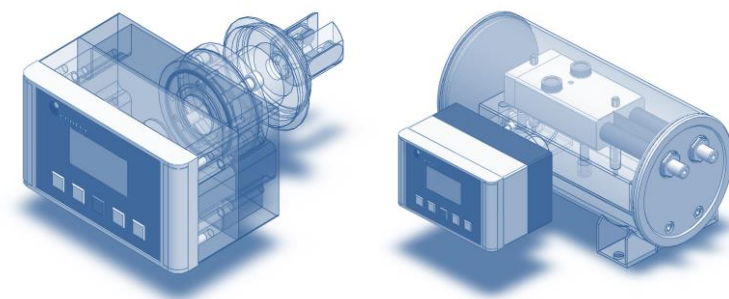


The Centec Group

Centec is a privately owned group of companies. Our automated process skids are used throughout the entire brewing process. For soft drinks, dairy and food industries we offer a large variety of skid mounted systems. We have decades of experience in water purification and deaeration, carbonation, liquid blending and dosing, flash pasteurization and cleaning-in-place. Centec technology includes a range of high precision process sensors for accurately measuring critical product properties such as extract, alcohol, milk fat, O₂ and CO₂. The largest brewery, soft drink, dairy and food groups in the world are among our key customers.



Accuracy. Reliability. Centec.

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REVOTEC

Reverse Osmosis

Centec Beverage Systems



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

REVOTEC

The Principle

The Centec reverse osmosis (RO) system REVOTEC is used for water purification. RO is the reversal of natural osmosis. If a semipermeable microporous membrane is placed between pure water and water with dissolved ions (salts) osmosis will come into play. The pores of the membrane only allow the passage of H₂O, but not of salts, viruses, bacteria and larger molecules. Osmotic pressure due to a concentration difference causes the pure water to pass through the membrane to dilute the solution on the impure side. This will continue until osmotic equilibrium is reached. In the REVOTEC unit this process is reversed. In order to separate pure water from water containing dissolved salts and solids, pressure is applied to the contaminated water. When the applied pressure overcomes the natural osmotic pressure, pure water will pass through the membrane into the pure water side. The purified water (permeate), is practically free of all impurities. Cross-flow technology minimises fouling by quickly removing the impure water (concentrate). However, depending on the feedwater quality, pre-treatment may be required to prevent scaling and chemical attack by oxidizing agents like chlorine.

Technical Data

Capacity	10 - 1.500 hl/h
Pressure of Operation	0 - 8 bar
Temperature of Operation	2 - 60 °C
Temperature of CIP	max. 85 °C
Material	1.4301/1.4404 AISI 304/316L
PLC	SIMATIC S7
Options	pre-filtration softening & demineralization disinfection



The Centec production is certified according to ISO 9001.

- **Application Specific and Energy Efficient**
all stainless steel sanitary execution
multi stage REVOTEC for increased yield
water pre-treatment technologies on demand
- **Modular Design with Standard PLC**
skid mounted for easy installation and start-up
- **Hygienic Execution and Full CIP Capability**
- **Outstanding Price-Performance-Ratio**

Experience. Expertise. Centec.

*Ion Exchange · Reverse Osmosis · Membrane Deaeration · Column Deaeration · Hops Pre-Isomerization
Wort Aeration · Yeast Pitching · Nitrogenation · Carbonation · Carbolending · High Gravity Blending
Multi Component Mixing · Additive Dosing · Flash Pasteurization · Cleaning-in-Place · Dealcoholization*

