HATENBOERWATER
Fresh in water since 1906.

ContainRO-275

Containerised Reverse Osmosis system for generation of potable water

Worldwide there is a growing demand for fresh water, often in remote locations without any facilities such as buildings. Hatenboer-Water has developed **ContainRO**, a containerised water treatment plant which is fulfilling this need. With ContainRO, seawater or brackish well water is converted into potable water, utilising pre-filtration, Reverse Osmosis and post treatment (neutralisation & chlorination).

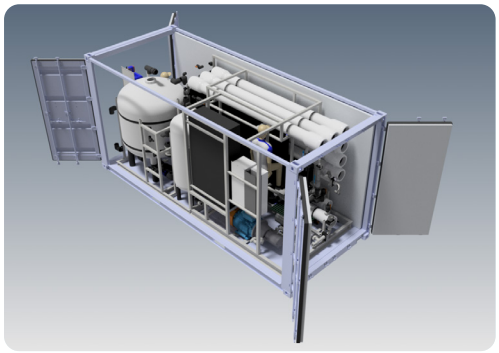
The design of the plant and the container layout are based on our knowledge and experience with similar systems.
After arrival at site the container has to be installed and connected to power & feed water supply at site*. Then commissioning can be carried out by an experienced Hatenboer-Water engineer and the system is ready to supply potable water to the consumers.

Design	vendor standard package	
Housing	20 ft high cube sea container	
Feed water, source	brackish well water, seawater	
Feed water, characteristics	capacity salinity (TDS) temperature pressure	28.7 m³/h (however depending on TDS) 20,000 – 45,000 ppm 5-40 °C 5.5 bar required (optional pump available)
Potable water	capacity quality	275 m³/d ‹ 500 ppm TDS (according WHO guidelines)
Required power	voltage power installed	3x400V-50Hz / 3x440V-60Hz / 690V-60Hz approx. 40 kW
Deliverables	• New 20-ft HC container, provided with internal insulation • Intensive pretreatment with multimedia filters and cartridge filters • Biodegradable antiscalant dosing unit • Energy recovery device, gaining energy from waste brine flow • RO membranes based on reliable (low) membrane flux • Completely automated by PLC / microprocessor • Integrated CIP unit for periodic cleaning of RO membranes • Post treatment of produced fresh water by neutralising & Hadex® chlorination dosing	

** by a third party*

Requirements at site

- Flat/ level concrete foundation
- Feed water available under pressure
- Power supply
- Start/stop signal



Features

- Applicable for a wide range of feed water (salinity between 20,000-45,000 ppm TDS; temperature between 5-35 °C).
- Classic multimedia filtration for a careless and optimum removal of suspended solids (such as debris, particulates, marine organisms, silt, and colloids).
- Autonomous, fully automated system, only requiring some manual intervention for replacing of consumables and an occasional cleaning of RO membranes.
- Accommodated in a 20 ft HC container, no building or shed required.
- Optionally available: remote monitoring and data access.

Available options

- Feed water booster pump.
- Feed water dechlorination dosing unit.
- Air conditioning unit in container.
- 'HORiZON' cloud-based platform of digital monitoring and remote plant management.