



EVAC REVERSE OSMOSIS



Contact:

Triton-Evac GmbH, Germany
Tel. +49 4101 53450 0

Evac Oy (Marine Head Office), Finland
Tel. +358 20 7630 200

Evac North America Inc., USA
Tel. +1 815 654 8300

Evac Marine Services, USA
Tel. +1 954 719 6976

Evac Vacuum Systems (Shanghai) Co. Ltd., China
Tel. +86 21 6415 9580

Evac E.U.R.L., France
Tel. +33 1 34 21 9988

Evac Asia Branch Office, Korea
Tel. +82 70 7445 5206

Evac Norway As
Tel. +47 35 02 97 00

Best Environmental Systems, Brazil
Tel. +55 11 51 81 68 11

Introduction – Triton-Evac GmbH

Triton-Evac GmbH is one of the leading specialists in the field of maritime freshwater treatment and seawater desalination. We have decades of experience in the maritime market and are experts at meeting the challenges that ship owners are facing regarding freshwater treatment. Since 2012, Triton-Evac has been part of the global Evac network. Our combined expertise allows us to offer the whole package of solutions for any waste, wastewater, and freshwater treatment on board.

Triton-Evac's core area of expertise is tailor-made reverse osmosis plants that fit into any available space on board. Our worldwide locations ensure trouble-free operation and fast service when required.

Our reverse osmosis (RO) plants are available in a range of 20 to 1,200m³ per day of freshwater production. We are able to offer solutions for all types of vessels, including cruise liners and yachts as well as offshore applications.



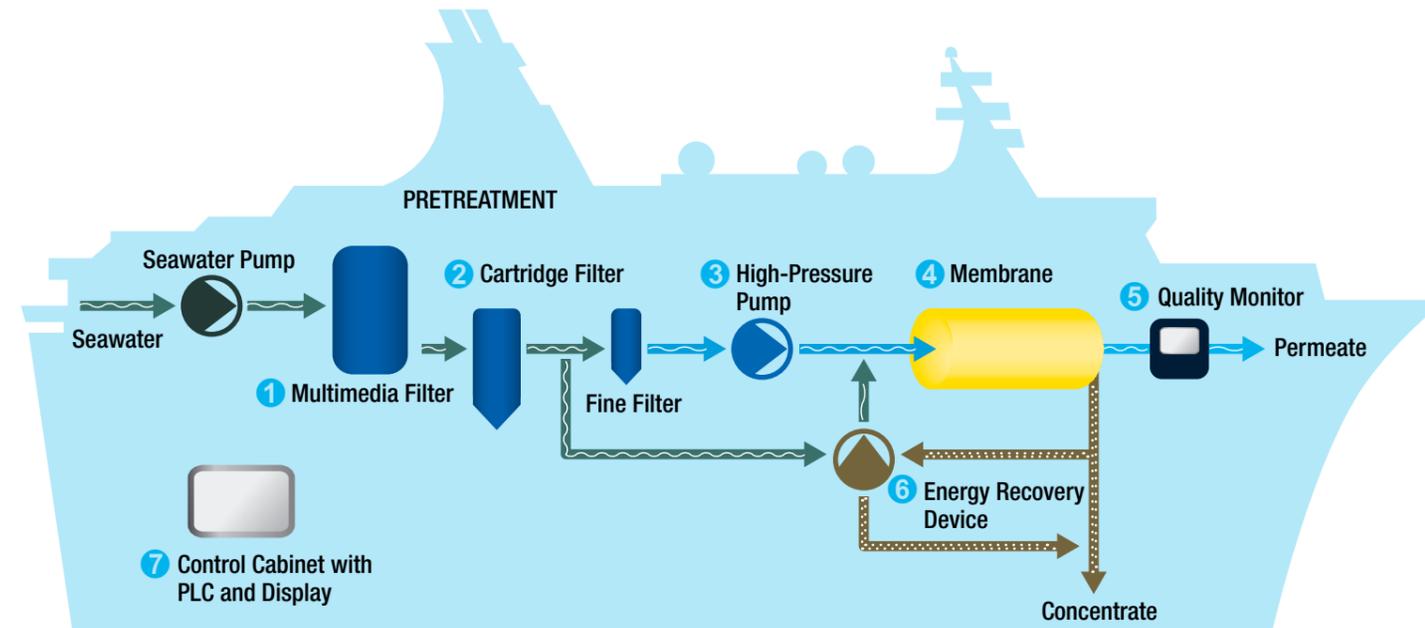
References

We provide environmentally friendly solutions with high energy efficiency. The components we use are of excellent quality and provide long lifetimes and high reliability. Thanks to our professional engineering and business development, our service focuses on turnkey projects including design, construction, delivery, and support, as well as supervision during onboard installation, testing, commissioning, and optimizing of existing plants.

Evac Reverse Osmosis

Triton-Evac's reverse osmosis plants operate automatically and are highly reliable. Our pretreatment process consists of multimedia filters and is designed for low maintenance and less membrane cleaning, which ensures a longer membrane life.

As an option, we are able to offer RO plants, that gain full capacity of design flow rate from 5 to 32°C.



- 1 Multimedia filters:** The filters are filled with garnet and gravel of several sizes and assure the best removal of suspended solids. A low filter velocity guarantees high removal efficiency and less cartridge filter consumption.
- 2 Cartridge filter:** 3 µm (nominal) and 10 µm (absolute) filters are used to remove suspended solids efficiently. The cartridge filter protects the high-pressure (HP) pump, energy recovery system, and the membrane.
- 3 High pressure pump:** The RO is equipped with an axial piston pump that ensures the highest efficiency and therefore low energy consumption.

- 4 Membrane:** To produce highest-quality freshwater, our spiral-wound semi-permeable membrane modules have a high salt retention while using little energy.
- 5 Quality monitor:** Automatic discharge of water that has not met the USPH requirements.
- 6 Energy recovery device:** Our RO systems are equipped with a state-of-the-art energy recovery device. Energy saving of up to 65% is possible with the device.
- 7 Control cabinet:** Our fully automatic RO systems are equipped with PLC and a comfort touch panel.

Highlights:

- High energy efficiency
- High reliability
- Easy and automated operation
- Small foot print
- High-quality components with long life
- Low OPEX

Additional Products

To complete the water treatment system onboard, freshwater conditioning is another part of Triton-Evac's product range. During freshwater conditioning we are able to control and measure the pH, free chlorine, redox potential, conductivity, langelière saturation index and water flow. Thanks to mineralizing and regulation of the hardness of the water our potable water is of excellent quality and fulfills the regulations of WHO and USPH.