

SRO-COM Seawater Reverse Osmosis Desalination

RWO

SRO Fresh Water Maker

The SRO-COM is a standardized seawater desalination plant for service onboard ships. Seawater reverse osmosis plants are an advantageous solution whenever desalinated water for drinking, utility and process applications is needed. The technology is simple, the operation easy and only limited maintenance is required.

RWO offers standardized RO units for the common capacity requirements of commercial vessels. Permeate rates reach from 10 m³ per day up to 60 m³ per day.

This desalination plant has a stable permeate flow over the complete temperature range from 1°C to 35°C. The SRO units come with a built-in concentrate displacement device that will extend the membrane operation cycle.

The system is part of RWO's leading **Total Water Management** offer.

Available Options

- > Media Filter as pre-filtration
- > RO-Cleaning Station (CIP)
- > Buffering tank
- > Antiscalant Dosing
- > Post Treatment (Mineralization, Chlorination, UV-Sterilizer)



High-quality fresh water with maximum salinity of 500 ppm

Advanced Membrane Technology

The newly developed SRO-COM seawater reverse osmosis plants from RWO offers state-of-the art technology by using low energy membranes. Compared to conventional systems, they produce the same permeate rate at a considerably lower operating pressure, resulting in lower investment and lower energy costs.

High Reliability Plant Control

The heart of the plant is the integrated electronic control device, with a user friendly digital display. The graphic on the display shows the temperature, conductivity, operating pressure and operating hours. All failure recordings including the alarm and warnings can be checked through the menu feature.

How it Works

A two-stage filter system protects the membranes of the SRO-COM from suspended particles in the feed water. If the seawater has a high content of impurities, it is recommended to install an additional filter (such as sand filter). Generally a high pressure pump is used to provide working pressure up to a maximum of 68 bar.

Permeate, i.e. desalinated water, passes through the membranes, while the remaining seawater takes up the rejected salts and leaves the modules as concentrate back to the sea.

Type	Permeate m ³ /day	Recovery %	Desalination Rate %	Motor capacity kW	Length mm	Width mm	Height mm
SRO-COM 10	10	21	ca. 96-99%	5,5	1654	940	1080
SRO-COM 25	25	35	ca. 96-99%	10	2667	940	1088
SRO-COM 40	40	28	ca. 96-99%	20	2060	1208	1185
SRO-COM 60	60	32	ca. 96-99%	25	2936	1208	1150

Key Features & Benefits

- > Simple technology and modular design
- > Automated operation and low maintenance requirements
- > Designed for operation in unmanned engine rooms
- > Continuous operation: no downtime
- > Simple, compact installation
- > Proven technology
- > High-quality fresh water with a maximum salinity of 500 ppm
- > No chemicals needed