From January 1st 2010, new and more stringent limit values will come into force for effluent water from marine sewage treatment plants.

RWO’s family of wastewater treatment systems has been complemented to fulfill the new MEPC.159(55):

- the membrane sewage treatment series SMT (Submerged Membrane Technology)
- and biological wastewater treatment series WWT-LC (Low Chlorine)
- MEMROD® process (MEMbrane Reactor Operation Device) for larger capacities and custom-made systems

The technologies permit both black and grey as well as galley wastewater to be treated in a single reactor system. The effluent levels for the Membrane Bio-Reactor (MBR) based sewage treatment systems are better than the requirements of the International Maritime Organization (MARPOL, Annex IV) and both the future standards MEPC.159(55) and the USCG/Alaska-Rules 33.CFR 159.309.
RWO Marine Water Technology

is specialised in water and wastewater treatment since 1975. More than 13,000 water treatment systems have been installed worldwide on ships and offshore installations since then.

RWO’s network of more than 50 qualified sales and service stations around the world is taking care of our customers and provides after-sales service at its best.

RWO benefits from its affiliation with the parent company Veolia Water Solutions & Technologies, the world leader in water treatment. With more than 130 subsidiaries in over 57 countries, the group specializes in water and wastewater treatment technologies for municipalities and industries and generates a turnover of more than Euro 2.5 billion per year.

Within the group, VWS Westgarth are the water treatment specialists in Offshore Oil & Gas. World leaders in seawater sulphate removal (SRP) and expertise in produced water treatment, they focus on turnkey design & build projects.

Our reverse osmosis units come with a built-in concentrate displacement, which will extend the membrane operation cycle. Additionally, a chemical cleaning device is provided with the system in order to make cleaning of the membranes easy. RWO’s RO systems are completely assembled on a skid ready for operation. All SKIT units are full scale tested with salt water prior to delivery. A works certificate showing all performance data comes with the equipment.

The standard RWO reverse osmosis units feature:
- automatic backwash filter
- dosing system for scale inhibitor
- fine filter
- high pressure pump
- high performance RO elements
- safety control
- control panel with PLC for automatic operation
- automatic concentrate displacement device
- CIP-cleaning in place system

Optional scope of supply:
- booster pump and strainer
- UV disinfection system
- dosing system for chlorine disinfection
- de-chlorination unit
- mineraliser
- Further demineralization by RO or ion-exchange

Type approved acc. to IMO Resolution MEPC.107(49) by USCG, SBG, MED, MRS, CCS
class notations “Clean Design” and Alaska Rules conformity
complying with 5 ppm standard
EMV-Electromagnetic Compliance
all class certificates
filtration effect
easy to handle & safe operation
most economic operation

Container Unit, type SRO 300 m3/d, built in a 30 ft. insulated container incl. heating and ventilation for outdoor installation on a north sea platform.

Oil/Water Separation

The SKIT/S-DEB oil/water separator complies with the actual IMO Resolution MEPC.107(49) using the combination of the highly effective open porous coalescer together with a second stage emulsion breaking oil and hydrocarbon polisher. Periodic back-flushing keeps the coalescer surface clean and offers long lasting operation without requiring attendance and maintenance.

RWO provides the full range of water treatment equipment for Offshore application

Process Water Treatment
- seawater desalination
- boiler feed water
- gas turbine injection water
- cooling water
- steam condensate
- mineralisers & demin units
- automatic backwash filters

Waste Water Treatment
- oily water separators
- sewage treatment plants

Fresh Water Treatment
- RO reverse osmosis system
- UV sterilizers
- mineralisers & softeners
- chlorination & de-chlorination

Ballast Water Treatment

The standard RWO reverse osmosis units feature:
- automatic backwash filter
- dosing system for scale inhibitor
- fine filter
- high pressure pump
- high performance RO elements
- safety control
- control panel with PLC for automatic operation
- automatic concentrate displacement device
- CIP-cleaning in place system

Optional scope of supply:
- booster pump and strainer
- UV disinfection system
- dosing system for chlorine disinfection
- de-chlorination unit
- mineraliser
- Further demineralization by RO or ion-exchange

Oil/Water Separator SKIT/S-DEB 5.0

RWO’s objective is to provide reliable and long-lasting equipment. The reverse osmosis plants are designed for automatic operation and require little or no maintenance.