



marine auxiliary systems

integrated processing & fluid utility management

modular marine equipment

engineered for versatility;
build for longevity

VOYAGÆR

auxiliary
equipment

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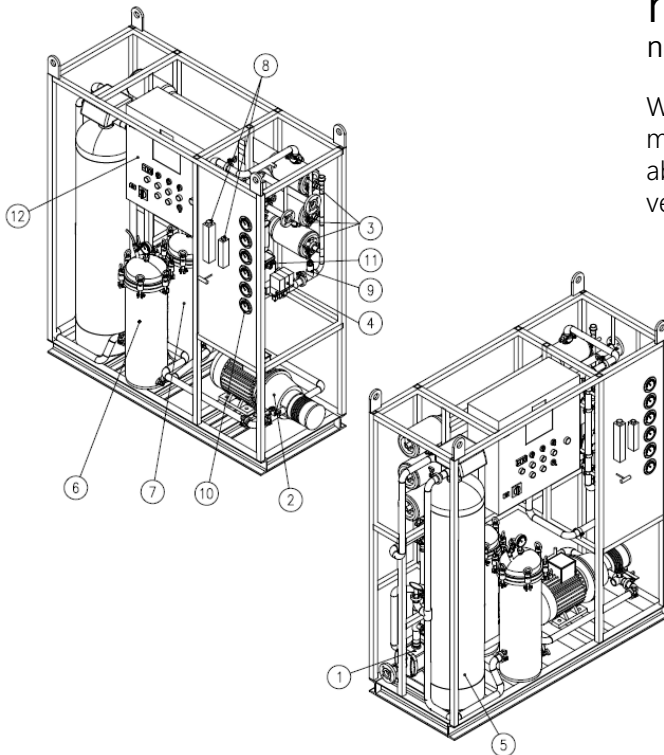
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reverse osmosis
freshwater maker



VWM series

introduction



refine water, multi application next gen marine desalination

Whether out in the open ocean, in brackish water or using municipal waters; self-reliance isn't just an advantage - it is an absolute necessity. Relying on onshore bunkering limits your vessel's operational freedom and drives up overhead costs.

a superior technical solution

Our RO systems bypass the heavy energy penalties of traditional thermal evaporators, utilising advanced multi-stage membrane arrays to secure a steady water supply under the harshest maritime conditions.

It operates independently, eliminating the need for an available heat source.

key technical specifications

Capacity flexibility:

Scalable configurations offering a reliable yield from 0.5 m³ to 200 m³ per day for our marine units.

Premium metallurgy:

Built with Duplex 2205 high-pressure lines and a precision-profile stainless steel chassis to ensure uncompromising corrosion resistance against harsh environment.

High-efficiency pumping:

Outfitted with robust high-pressure radial piston pumps designed for continuous-duty cycles.

Advanced filtration:

Employs industry-leading polyamide thin-film composite membranes for unmatched mineral and salinity rejection.



automatic intelligence & fail safe operations

Managing an auxiliary system shouldn't add to your crew's workload. Voyager RO freshwater maker features a PLC paired with a smart touch-screen telemetry dashboard, putting total control at your fingertips.

smart salinity protection

The system monitors water quality in real time. If a fluctuating sea state alters the input salinity, an automatic diverter valve immediately triggers, blocking out-of-spec water and completely safeguarding your freshwater storage tanks.

energy optimiser

With an optional integrated VFD and energy recovery device installed, the system dynamically scales its power draw based on actual demand, effectively lowering energy consumption and maximising efficiency across your vessel's energy grid.

dual performance potable + technical water

Advanced dual-stage system guarantees absolute water independence by producing both safe potable water and ultra-pure technical water for demanding mechanical loads.

Stage 1:

Potable water generation

Raw seawater is pressurised through heavy-duty polyamide thin-film composite membranes. This initial pass strips away salt, minerals, and organic impurities, delivering high-quality, safe freshwater for accommodations and galley use.

Stage 2:

Technical distillate production

Instead of relying on a separate, energy-heavy thermal distiller, a dedicated stream of the Stage 1 potable water is channeled into a second, ultra-fine RO membrane array. This secondary pass removes the final trace dissolved solids, yielding high-purity technical water ideal for boiler feed systems, machinery cooling loops, and alternative propulsion requirements.



parameters of small production RO freshwatermakers we produce to capacities in access of 200m3/day

MODEL	VWMS-P0.5	VWMS-P2.5	VWMS-P5	VWMS-P9	VWMS-P14	VWMS-P18	VWMS-P24
CAPACITY (L/DAY)	200 - 500	1000 - 2000	3000 - 5000	6000 - 8000	10000 - 12000	13000 - 15000	18000 - 20000
FRAME	STAINLESS STEEL 304						
TRANSFER PUMP	LOOSE SUPPLY						
HP PUMP	ACCORDING TO CUSTOMER REQUIREMENTS						
FINE FILTER	•	•	•	•	•	•	•
FILTER TANK	•	•	•	•	•	•	•
PRETREATMENT UNIT	•	•	•	•	•	•	•
RO MEMBRANE	•	•	•	•	•	•	•
CONDUCTIVITY METER	•	•	•	•	•	•	•
TOUCH SCREEN			•	•	•	•	•
UV STERILISER	•	•	•	•	•	•	•
POWER CONSUMPTION	1.9kW	1.9kW	4.6Kw	5.2kW	5.2kW	8.7kW	9.7kW
SUPPLY VOLTAGE	ACCORDING TO CUSTOMER REQUIREMENTS						
DIMENSIONS (mm)	640*550*550	1200*550*550	950*900*1500	950*900*1500	950*900*1500	1200*1000*1500	1200*1000*1500