



SHIP'S SYSTEMS

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The World's Largest Watering Hole

WITH A WATERMAKER, THE OCEAN BECOMES A LIMITLESS SUPPLY OF FRESH WATER

Once considered an extravagant option aboard a sport-fishing boat, watermakers are pretty much standard equipment today, with many boats even utilizing two units. Having a steady supply of potable water to shower, cook, live aboard and wash the boat with at the end of the day is a huge benefit. Converting salt water to fresh via the reverse-osmosis process gives you virtually mineral-free water, so it is far less damaging to topcoat finishes and Isinglass curtains than city or dock water. It's also better for ice machines and the entire freshwater system.

Like almost everything else, manufacturers have worked hard to continually improve and update their units with more robust and reliable components. The development of modular components makes a more efficient use of space and conveniently takes up less room in engine spaces and pump rooms. Most manufacturers offer a wide

range of hourly and daily production capacities to fit the criteria for many boats and the required use.

SIMILAR OPERATION

Boatbuilders who frequently install units have their favorite vendors for a host of reasons, and captains do as well, typically familiarity and service. The basic

Many crews now use water made aboard the boat for washing things down since reverse-osmosis water lacks chlorine.

operation of any unit is very similar, so adapting to different manufacturers isn't really a big deal as you move from boat to boat. Having the ability to get parts and reliable service should you have a breakdown wherever you fish or travel is always a top consideration.

With the integration of automated switching, relays and sensors, the ability to start and stop the water-making process without entering the engine room is a major convenience. One of the more recent trends has been the integration of wireless remote control of the units through the use of apps on smartphones and tablets. Not only will these tools start, stop and freshwater flush the units, but they can also be set to run for a specific time or maximum gallon production needed. They can conveniently monitor intake flow, product flow and total gallons, depending on the settings in the app. Several manufacturers also have the ability via a NMEA 2000 backbone to display and operate the units on shipboard monitors.

BLUE WATER

Blue Water Desalination is a relative newcomer to the marketplace with their Legend series of reverse-osmosis marine watermakers. The Legend series offers units with capacities from 475 to 1,850 gallons per day. Available in modular or container configuration, Blue Water units include a full-color 7-inch touch-screen display for simple operation. The large user interface with easily recognizable icons takes a lot of the worry out of operating the unit. Blue Water's proprietary software continually monitors operation, helping to maximize production and quality. Featuring remote operation with NMEA 2000 or optional 3- or 7-inch color screens, the Legend series also features high-rejection membranes, freshwater flush and long-life Monel transducers, making it a full-strength competitor in the market.

SEA RECOVERY

The Aqua Whisper DX series from Sea Recovery has the NMEA 2000 remote-compatibility feature that allows monitoring of all functions on any NMEA-compatible display. These units also have a full-color digital touch-screen display that reads in metric or U.S. standard units for managing all critical

functions. They also offer an optional remote screen that allows for the same control mounted on the bridge or in the salon. Made with special attention to noise reduction, the Aqua Whisper units feature a low-noise manifold system and a unique high-pressure plunger pump that has been designed specifically for reverse-osmosis applications. Sea Recovery also offers an

high- and low-pressure shut-offs, multi-tank control, an LED salinity monitor and auto diverter, as well as freshwater rinse and clean for maintaining membranes. Optional upgrade features include automatic start/stop with a manual override, and unattended rinse and remote operation via separate control panels. The WMS series is widely accepted and commonly

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optional upgraded pump that is water lubricated, eliminating oil and oil changes, and it can operate up to 8,000 hours between maintenance requirements.

WATERMAKERS

Watermakers, Inc. has been supplying reverse-osmosis units to boats and remote locations for many years, and their WMS-1000 is a workhorse unit that can be set up in a container or modular configuration. It features a heavy-duty 316 stainless-steel direct-drive high-pressure pump and plumbing,

found on today's finer custom boats, offering units with daily capacities of 550, 1,000, 1,400, 1,700 and 2,200 gallons per day.

DOMETIC

Industry behemoth Dometic offers the XTC series of watermakers with comprehensive manual control as well as total automatic operation. The XTC series offers a unique and functional platform with the addition of Dometic's Smart Touch

Watermakers come in all shapes and sizes. And modular systems, which allow the unit's components to be mounted separately, make the technology available to the owners of smaller boats with limited space.



Integrated Intelligence Control (STIIC) software that allows users to remotely access the watermaker from anywhere in the world via smartphone, tablet or computer. There is also a mechanical override in the event of a computerized failure of some sort. Available from 600 to 2,200 gallons per day, the XTC Series also features a built-in 7-inch color touch screen with easy-to-see color icons and graphics. With automatic freshwater flush, a 316 stainless-steel high-pressure pump, high-rejection membranes, 316 stainless-steel flow and pressure components and a totally fan-cooled motor with thermal protection, the XTC series offers everything needed for making fresh water aboard.

With the technological advances, computerized controlling, remote access and dramatically improved components, it is hard to argue against having a watermaker aboard. If you travel, cruise or fish daily, having a watermaker increases your travel range and makes living aboard far more comfortable. It certainly helps with boat maintenance by offering virtually mineral-free water to prolong topcoat life. With a good membrane-maintenance program and annual service, your watermaker will give you years of good operation. Having the ability to easily use and maintain these systems will no doubt make your decision to purchase and utilize the full benefits of having a watermaker aboard an easier one. ☀