

# Research Vessel

## Stowaway Watermaker keeps research vessel on the tail of wild Atlantic dolphins

Market Application Publication



### Application

Tracking Atlantic spotted and bottlenose dolphins along the southeast coast of Florida and in the shallow waters of the Bahamas keeps the R/V Stenella at sea for long periods of time, as it follows a specific pod of free-ranging dolphins to study their behavior, genetics, association, cognition and geography. Operated by the Wild Dolphin Project, a non-profit organization ([www.wilddolphinproject.org](http://www.wilddolphinproject.org)) and docked in Riviera (N. Palm Beach), Fl., this 62-ft diesel-powered catamaran carries a crew of eleven, including the captain, marine research biologists and graduate students.

### Problem

The vessel and crew demand fresh water for a variety of uses, including drinking water, showers, rinsing the equipment and boat, cooking and cleaning. Once the dolphin pod is located, they don't want to lose it or waste time by returning to port to replenish fresh water supplies.



### Solution

To provide all the fresh water they need, the Stenella relies on a Village Marine Stowaway Series model STW-400 reverse osmosis semi-modular watermaker. This compact unit can produce up to 16 gallons (63 l.) of fresh water an hour, and normally runs 8 to 10 hours a day when the Stenella is at sea. The frame, boost pump and prefilters of the semi-modular STW-400 were supplied as loose items, allowing flexible installation to accommodate available space on the Stenella.

R/V Stenella  
▶ Research Vessel

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STW Series  
Watermaker



Remote Control Panel

Touchscreen panel allows complete watermaker control at your fingertips. Remote control panel is included as standard equipment.

ENGINEERING YOUR SUCCESS.

## Racor VMT Stowaway Series Watermakers

Fresh water independence for pleasure boats and commercial applications

- **400-800 GPD**  
Stowaway Series STW reverse osmosis watermakers are rated to produce from 400 to 800 gallons of fresh drinking water per day (1.5-3.0 m<sup>3</sup> / day) and are capable of 24/7 operation if necessary.
- **Triplex Titanium Pump**  
Exclusive titanium pump

head is impervious to seawater corrosion. Shock-mounted pump and motor minimize noise and vibration.

- **Automated Operation**  
Remote control panel and touch-screen controller for easy operation. Controller displays purity of product water output, temperature and total operation hours for accurate service logging.
- **Continuous Quality Monitoring**  
System continuously monitors water quality and automatic diversion valve diverts water to discharge

when water quality drops below acceptable standards.

- **Reusable Pre Filter**  
Racor pre filter that filters salty water before it passes through the pump or across the R.O. membrane is reusable and can be flushed for 3-5 uses before discard.
- **AquaPro® Membranes**  
AquaPro® thin film composite reverse osmosis membranes deliver high salt rejection while maintaining high production rates to obtain the energy efficiency demanded by plant operators.

Model	Part Number	Power Volts/Hz/Amps	Dimensions inch/cm	Capacity GPH/LPH	Weight lbs/kg
STW-400	90-8293 90-8294 90-8295	110/60/13 220/60/8 230/50/8	width 22/56 depth 16/41 height 12/30	16/63	110/50
STW-600	90-8296 90-8297 90-8298	110/60/13 220/60/8 230/50/8	width 22/56 depth 20/51 height 12/30	25/95	116/53
STW-800	90-8299 90-8300 90-8301	110/60/13 220/60/8 230/50/8	400 size plus remote membrane rack 50x12/127x30	33/126	135/61

### Spares and Consumables

Part No.	Description	Part No.	Description
85-0050	Pump Oil, Quart	33-2519	Membrane Element (model 400,600)
33-0117	Pre-filter Element	33-2538	Membrane Element (model 800)
33-0311	Flush Filter Element	90-2512	Membrane O-Ring Kit
90-0005	Filter O-Ring	85-0102	Cleaning Kit
99-6881	Filter Wrench	85-0103	Preservation Kit
70-6182	HP Pump Service Kit		

To maintain peak performance always use genuine Parker-Racor/Village Marine Tec. replacement parts. We reserve the right to change our specifications or standards without notice.

