



aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Racor - Village Marine Tec. Water Desalination & Purification Systems



Racor - Village Marine Tec.

Forward Thinking in Reverse Osmosis Engineering

For over 30 years, Racor - Village Marine Tec. has developed innovative water desalination and purification plants for some of the most challenging environments – the middle of the ocean, 800 feet below the sea, offshore oilrigs, deserts, and disaster areas.

NASA and FEMA relied on Racor - Village Marine Tec. to develop a self-contained reverse osmosis plant for its disaster relief program. The Navy asked Racor - Village Marine Tec. for water so pure, it could be used with the nuclear reactors on its submarines. Catalina Island sought our help to ensure a steady water supply in drought conditions. When Hurricane Katrina hit New Orleans, the Army counted on us to keep a hospital open. The research required for high-profile government projects has enabled Racor - Village Marine Tec. engineers to develop innovative ways to produce the most reliable RO systems in the world.

Always ready to respond.

Racor - Village Marine Tec.'s entire team is prepared to meet the needs of its customers and distributors at any time. Racor - Village Marine Tec.'s flexibility quickly takes ideas from concept to reality and enables the development of field-proven systems to meet the requirements of any application, in any environment, around the world.

A legacy of performance.

Racor - Village Marine Tec. received the prestigious Aegis Excellence Award as the only RO supplier to excel in quality and delivery, surpassing U.S. Navy expectations. After the first Racor - Village Marine Tec. reverse

osmosis system was designed and installed on the U.S. Navy Submarine USS Dolphin in 1983, the systems had to undergo rigorous testing before additional installations could be approved. Passing every test, Racor - Village Marine Tec.'s plants worked flawlessly, 24 / 7 for 90 days straight.

Fresh water for every vessel.

Our customers enjoy all of the luxuries of home – drinking water, ice, showers, dishwashers, and laundry – onboard. A complete range of reliable, power-efficient watermakers for sailboats, motorboats and yachts, as well as custom equipment, is available for quick delivery and allows our customers to cruise with confidence.

Without the noise.

Racor - Village Marine Tec.'s experience in designing RO systems for Navy submarines has helped us create the quietest pleasure and commercial watermakers on the market. A five-plunger pump, a pressure regulation system and other carefully chosen components are engineered in as standard in many of the systems to reduce noise and vibration.

The ultimate barrier to impurities.

Salts, minerals and organics are no match for Aqua Pro® spiral wound membranes, which remove impurities from seawater, brackish water, fresh water and tap water. Nano and ultra filtration membranes are also available. Proven processes are used in the design, development, testing and manufacturing of Aqua Pro spiral wound membranes. This dedicated attention to detail includes using the highest grade of polyamide thin-film compos-

ite materials for standard and custom membranes to ensure their ultimate performance and integrity. Racor - Village Marine Tec. also manufactures cartridge and string filters to fit standard and custom filter housings.

Quality at the source.

The superior quality components that go into Racor - Village Marine Tec. and Offshore Marine Systems ensure that each one is built to the highest standards for safety, maintainability and reliability. The highest grades of raw materials are precisely machined and thoroughly tested to exacting customer requirements and industry specifications. By controlling the source and processes from the raw material to the final product, lead times are reduced to achieve on-time delivery, every time.

Providing the most innovative and reliable RO purification systems for seawater, brackish water and tap water, from energy-saving 160 GPD watermakers to high-performance 100,000 GPD system is what has established Racor - Village Marine Tec. as a leader in industry.

Meeting the fresh water requirements of military ships to working marine vessels to luxury yachts to seaside properties has always been the mission of Village Marine Tec. Their development of energy-saving 160 GPD watermakers to high-performance 100,000 GPD systems has established VMT a global leader in the innovative application of reverse osmosis technology.



Global Water Technology®

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WARNING – USER RESPONSIBILITY

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- This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.
- The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.
- To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.



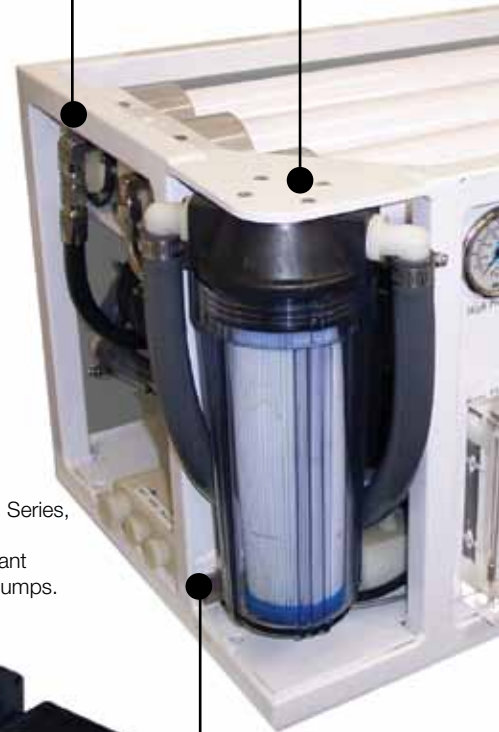
The Inside

Aqua Pro, magnetic drive, low pressure pumps



Corrosion resistant, powder coated, aluminum frame and mounting brackets

All 316 Stainless Steel mounting hardware



TRUE 316 Stainless Steel high pressure regulator – Eliminates risk of over pressurization

Aqua Pro, Titan Series, Titanium head, corrosion resistant high pressure pumps.

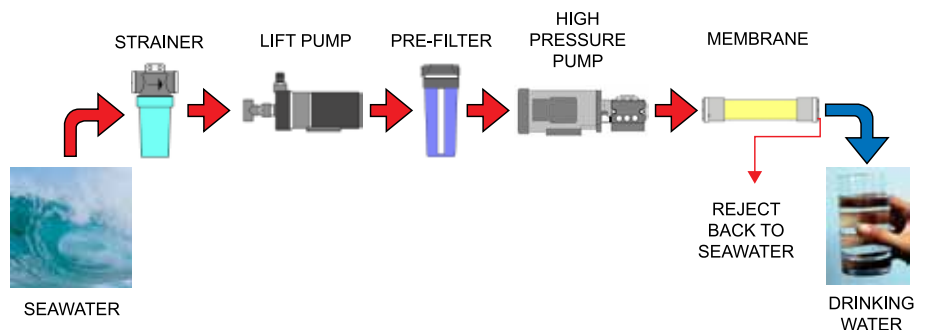


Aqua Pro, industrial grade, pleated pre-filtration



Convenient oil drain

Reverse Osmosis System



de Story



Fresh water automatically diverted to tank

VMT-Squirt 600
Plug and play, Self contained model.

Integral, closed loop cleaning system

Corrosion resistant fresh water and brine flow meters



High pressure bypass valves, 316 Stainless Steel



Water Quality Monitor – LCD readout displays fresh water quality and sea water temperature, adjustable set point, high salinity alarm, hour meter on a corrosion resistant Inconel panel



Master Control Panel – LCD readout, push button operation, low pressure protection, high salinity warning, check system indicator for diagnosis and maintenance on a corrosion resistant Inconel panel

Glycerin filled, high and low pressure gauges



Custom made seawater membranes



Fiberglass pressure vessels



Corrosion resistant, machined nylon end caps and manifolds



Air/Oil separator– Maintenance FREE! No Filters to Replace



Remote Control Panel – Push button operation, LCD ppm display, audible high salinity alarm and warning lights on a corrosion resistant Inconel panel



Industrial Strength reinforced high pressure hose with Titanium wetted fittings



316 Stainless Steel Vibration isolation mounts

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.



Standard Features and Benefits include

- Monel mesh strainer and dual sediment prefilters.
- Maintenance-free air/oil separator allows operation while underway.
- Low RPM five plunger titanium pump for minimum vibration and noise with unsurpassed corrosion resistance.
- Magnetic drive low pressure pump provides up to 10 psi of boost pressure to the filtration system. No mechanical seal to reduce maintenance requirement.
- Stainless steel, glycerine filled pressure gauges.
- Freshwater flush system included. Optional automation of the flush system is available.
- Adjustable 316 SS pressure regulating valve allows use in fresh, brackish or seawater.
- Easy to operate 316 SS high pressure bypass valve controls the operating mode and allows high pressure bypass for start-up and low pressure flushing without readjustment of regulating valve.

Pure Water Series

400-2,000 GPD (1,500-7,500 LPD)
For Commercial Marine Applications

The Pure Water (PW) Series is designed to provide installation flexibility, superior performance, and extended service life in the most rugged conditions.

Designed for 24/7, continuous-duty applications, where reliable fresh water supply is critical.

The fully framed unit is standard, however semi-modular and fully modular versions are also available.



VMT-PW 400-2,000 GPD (1,500-7,500 LPD)
Horizontal Frame System (See bulletin no. 7783)



Manual Fresh Water Flush
VMT-PW 400-2,000 GPD (1,500-7,500 LPD)
Modular System (See bulletin no. 7783)



Included Standard



VMT-PW 400-2,000 GPD (1,500-7,500 LPD)
Semi-Modular System (See bulletin no. 7783)

Pure Water Series

3,000-20,000 GPD (11,000-75,500 LPD)
For Commercial Marine Applications

The PW Series reverse osmosis desalination systems are the preferred choice of fresh water generating equipment for the most discriminating marine operators (such as major oil companies, The United States Navy, The United States Coast Guard and The Cousteau Society).

Thousands of installations have proven this series to be the most reliable on the market. They are designed to provide performance and longevity under the most rugged conditions.



VMT-PW 3,000-20,000 GPD
(11,000-75,500 LPD)
Horizontal Frame System (See bulletin no. 7831)

Also available in explosion proof configuration
for installation on oil and gas rigs.
NEC rating, Class I, Division I, Group D
(See bulletin no. 7857)



Optional modular configuration allows freedom to install components where space permits, and the modules are small enough to fit through hatchways for installation.



Key Feature:



At the core of each PW series watermaker is the Aqua Pro[®] 3 or 5 plunger high pressure pump:

- Titanium head for maximum corrosion resistance.
- Balanced drive for lowest noise and pulsation.
- Ceramic Plungers and nylon valves for long service life.



Pure Water Vertical Series

800-2,000 GPD (3,000-7,500 LPD)
For Large Yachts, Commercial Marine
Applications and Seaside Properties



VMT-PWV 800-1,200 GPD
(3,000-7,500 LPD)
Vertical Frame System
(See bulletin no. 7913)



VMT-PWV2000 Vertical Frame System with
front door open for maintenance access.
(7,500 LPD) (See bulletin no. 7913)

With the same high quality features of the horizontal Pure Water Series, the vertical frame Pure Water Series offers a more compact foot print for flexible installation options and optimal use of space. All components are on a single skid, in one frame, and include a multi-media pre-filter and flush system.

If the requirement is high volume potable water, delivered on a reliable basis, in a harsh environment, the Village Marine Pure Water Series in either configuration meets the requirements.

LT Series

400-1,800 GPD (1,500-6,750 LPD)
For Power Boats, Sail Boats and
Commercial Vessels Applications

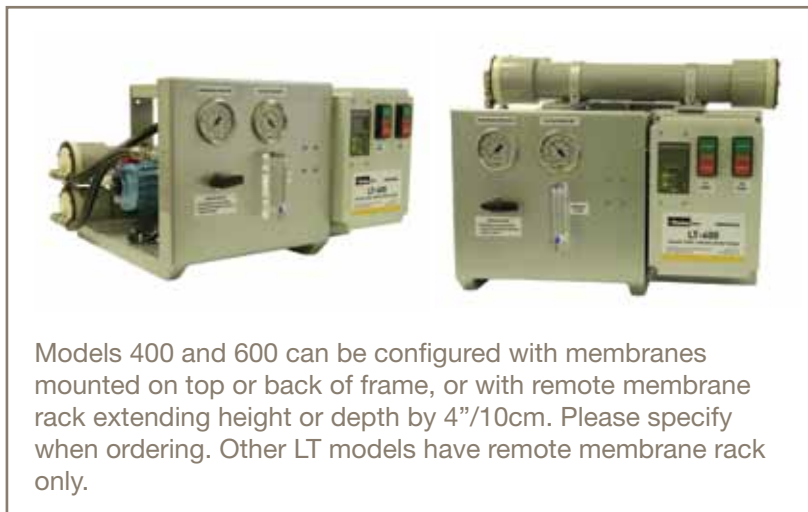
The LT desalinator offers fresh water independence for ocean crossings, extended voyages or cruising where dock water supplies are unreliable.

The units feature a semi modular frame format, for installation flexibility. The frame is compact and can be above or below the water line. The boost pump and prefilters are supplied as loose items.



LT 1,800 (6,750 LPD)
(See bulletin no. 7935)

Key Features:



Models 400 and 600 can be configured with membranes mounted on top or back of frame, or with remote membrane rack extending height or depth by 4"/10cm. Please specify when ordering. Other LT models have remote membrane rack only.



Standard Features:

- Compact stainless steel high pressure pump is resistant to the corrosive seawater environment
- Sediment prefilter at 5 micron rating
- Magnetic drive low pressure pump provides up to 10 psi of boost pressure to the filtration system. Never requires seal replacement
- Glycerine filled pressure gauges
- Flowmeter to monitor freshwater production
- Freshwater flush system included standard. Optional timed automatic flush with adjustable interval and duration for set-and-forget flushing
- 316 stainless steel pressure regulator is adjustable to allow operation in brackish or fresh water
- Electrical control panel Nema 4X with motor starter and pump controls
- Automatic diversion valve diverts water to overboard if quality drops below acceptable standards
- Digital water quality monitor displays purity of product water produced



Squirt Series

400-800 GPD (1,500-3,000LPD)

For Sport Fishers, Trawlers and Ocean Yachts Applications

Key Feature:



Aqua Pro® Pump 708-3

Triplex Titanium pump for low vibration and low noise with unsurpassed corrosion resistance.



Remote Control Panel

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



VMT-Squirt Horizontal Frame
(See bulletin no. 7860)

The Squirt Series offers fresh water independence for ocean crossings, extended fishing trips or cruising where dock supplies are unreliable.

The Squirt packages a full feature watermaker in a compact frame. Simple connections allow straight forward installation. The watermaker can be operated and monitored from the electronic remote control.

Stowaway Series

400-800 GPD (1,500-3,000 LPD)

For Power Boat and Ocean Yachts Applications



VMT-Stowaway Semi-Modular
(See bulletin no. 7861)

The Stowaway features a semi modular frame format, which maximizes installation flexibility. The frame is compact and can be above or below water line. The boost pump and prefilters are supplied as loose items. The watermaker can be operated and monitored from the electronic remote control.

MPW Series

400-1,300 GPD (1,500-5,000 LPD)
For Sport Fishers, Trawlers and
Ocean Yachts Applications



Village Marine MPW
(See bulletin no. 7860)

Complete modular system for maximum installation flexibility. Fully operational from the included remote control.

Standard features and benefits include

- 5 micron sediment prefilter.
- Maintenance-free air/oil separator allows operation while underway.
- 3 Plunger titanium pump for low vibration and noise with unsurpassed corrosion resistance.
- Magnetic drive low pressure pump provides up to 10 psi of boost pressure to the filtration system. Never requires seal replacement.
- Glycerine filled pressure gauges
- Freshwater flush system included
- Optional automatic flush system is available.
- Adjustable 316 SS pressure regulating valve allows use in fresh, brackish or seawater.
- Easy to operate 316 SS high pressure bypass valve controls the operating mode from cleaning/rinse to reverse osmosis. Allows high pressure bypass for start-up and low pressure flushing without readjustment of regulating valve.
- Automatic diversion valve channels the water to discharge if water quality drops below acceptable standards.
- Digital water quality monitor displays purity of product water output. Also displays temperature and total hours for accurate service log.
- Cleaning valve for easy cleaning or sterilization of the system including membranes.





Little Wonder Series

145-200 GPD (550-760 LPD)

For Sail Boat Applications

The Little Wonder (LW) is the watermaker of choice for the experienced sailor. The Little Wonder comes equipped with a corrosion resistant, single piston, belt driven, low RPM high-pressure pump. Result is the most reliable, field serviceable, quiet, efficient and economical source of fresh water available in the industry. Available in self contained frame or completely modular configurations with water output ranging from 145 to 200 GPD.



VMT-LWM Modular with Pump/Motor
(See bulletin no. 7829)

The modular Little Wonder watermakers are designed for cruising sail boats where space is limited and reliability is required.



VMT-LW-Vertical Frame System

Standard Features:



The Little Wonder vertical systems are in compact frame for easy installation and simple operation. Operating on DC power, they are ideal for sail boats or as back up watermakers on larger yacht. (See bulletin no. 7829)

Standard features and benefits include

- Raw water boost pump provides extra feed pressure.
- Racor Village Marine Tec's exclusive titanium high pressure pump is impervious to the corrosive sea water environment and designed for maximum efficiency, producing more water with less battery power.
- Adjustable 316 SS pressure regulating valve provides constant pressure. No fluctuating pressure and low noise.
- Product flowmeter to monitor gallons per hour of product water being produced.
- Glycerine filled high pressure gauge to assure accurate reading of pressure from high pressure pump.
- Easy to operate high pressure bypass valve controls the operating mode from cleaning/rinse to reverse osmosis.
- Supplied with cleaning and preservative chemicals to keep your system in prime working condition, plus a spare pre-filter cartridge.
- 12V, permanent magnet motor has significant reserve capacity for long life (on DC powered units).
- Special hi-rejection Aqua Pro membrane(s).
- Manual fresh water flush.
- Product sample valve.
- Cleaning valve.

Optional salinity monitor and diversion valve available



Optional remote instrument panel available for modular units





Sea Quencher Series

145-200 GPD (550-760 LPD)

For Power and Sail Boat Applications



OML-SQ 200
Semi-Modular
(760 LPD)

(See bulletin
no. 7829)

The Racor - Offshore Marine Sea Quencher (SQ) Series offers durable, high value desalination systems. Driven by AC or DC power, the Sea Quencher models use low electrical consumption in relation to their water production. The SQ Series is a best value for the investment and are in operation around the world.

No-Frills Series

450-2,000 GPD (1,700-7,500 LPD)

For Sail Boats and Motor Boats Applications

The No Frills Series offers all of the best of Racor - Village Marine Tec. engineered components while operating independently of any electrical connections or requirements. Driven by AC or engine power, the modular configuration comes with an Aqua Pro membranes and titanium pump and fittings. Integral to the No Frills Series are a stainless steel pressure regulator and connectors and pressure vessels.



VMT-No Frills 450
Modular
(1,700 LPD)

(See bulletin
no. 7853)

Sea Water Series

24,000 - 93,000 GPD
(91,000-352,000 LPD)

For Offshore Rigs, Work Camps,
Seaside Properties and Cruise Ships

The Sea Water Series reverse osmosis desalination systems are designed to provide potable water in demanding environments. Its rugged, efficient design allows high through-put of water with minimum electric power use. The Sea Water Series systems are quiet because the mounting of the motors and Aqua Pro pumps isolates and minimizes vibration transfer to the vessel's hull or the RO system enclosure.



VMT-SW32 Skid Mount (See bulletin no. 7832)



Aqua Pro Pump
5 Plunger
Titanium Head

The Racor - Village Marine Tec.- SW32 Model is installed on a single skid with two complete, independent RO systems. The two trains can run together or can be operated on a duty/stand by basis. Top quality components, manufactured by Racor - Village Marine Tec., provide maximum corrosion resistance. Straight-forward, easy to understand controls, result in reliable operation.



OML- SW66 Modular



(See bulletin no. 7833)



Prefilter Skid



Optional Media Prefiltration



High Pressure Pump

Purified Water for Disaster Relief

The Problem

- The need to supply potable water to people after a disaster.
- When disaster strikes, a clean water supply must be established as quickly as possible.
- The longer a population is without a clean water supply the higher the incidence of disease and other complications.
- Relief agencies struggle to supply clean water in a timely manner.
- In the past, the solution has been to truck in bottled water.
- One tanker truck can only supply 8000 gallons of water. It would take numerous trucks to supply a large population of water.
- Moving this amount water is a resource intensive and costly task.
- The operation of moving this large amount of water on highways is a poor use of a critical logistic resources. The roads could be better used for other tasks in the resource constrained days following a disaster.



The Solution

Provide water when and where it is needed.

Parker Racor - Village Marine Tec. has provided disaster relief units to NASA (part of FEMA), EPA, US Navy, US Department of Interior, and the US Army.

What makes these units unique is:

- Ease of deployment
- Self-contained power supply
- Simple operation
- Air and truck transportable
- Ruggedly built to withstand the harsh environment typical of a disaster situation.

What is available from Parker:

- 200 to 250,000 gallons (.75 m³ to 950 m³) per day systems.
- The smallest system comes in a back-pack format
- Larger systems are contained in standard ISO size shipping containers for easy transport on via Semi-trailer or C-130 airplane.

Racor disaster relief units can effectively treat:

- Seawater and fresh water contaminated with nuclear, biological, chemical agents.

Summary

The Parker Racor - Village Marine Tec. reverse osmosis systems have proven to be a flexible and capable platform providing potable water to communities and hospitals in tough environments globally.



PDRS modules are designed for transport by C130 and other large cargo aircraft



PDRS
Water Purification System
(See bulletin no. 7851)



The Leader in MIL-SPEC Reverse Osmosis Desalination Systems

For over 30 years Racor - Village Marine Tec. has been the leading supplier of RO desalination equipment to the US Navy and US Coast Guard. We are proud that our steadfast commitment to the design, engineering and manufacture of the worlds most advanced RO equipment has helped improve the quality of life while underway for the men and women who serve. From potable water for drinking and showers to high-purity permeate for reactor-grade applications, Racor Village Marine Tec. is your choice for fresh water from the sea.

Our in-house design, manufacturing and testing capabilities coupled with our synergistic family of companies are unequalled in the industry and uniquely position Racor - Village Marine Tec. to provide the toughest most reliable MIL-SPEC RO equipment.

USN surface fleet installations

- ARLEIGH BURKE CLASS (DDG)
- SPRUANCE CLASS (DD)
- TICONDEROGA CLASS (CG)
- TARAWA CLASS (LHA)
- AVENGER CLASS (MCM)
- OSPREY CLASS (MHC)
- FREEDOM CLASS (LCS)
- CYCLONE CLASS (PC)
- SAN ANTONIO CLASS (LPD 24 AF)

USN submarine fleet installations

- LOS ANGELES CLASS (SSN)
- OHIO CLASS (SSBN / SSGN)
- SEAWOLF CLASS (SSN)
- VIRGINIA CLASS (SSN)

USN carrier fleet installations

- ENTERPRISE CLASS (CVN-65)

- GERALD R. FORD CLASS (CVN-78)

USCG installations

- POLAR CLASS (WAGB)
- JUNIPER CLASS (WLB)
- KEEPER CLASS (WLM)
- MARINE PROTECTOR CLASS (WPB)
- ISLAND CLASS (WPB)
- RELIANCE CLASS (WMEC)
- FAMOUS CLASS (WMEC)

Design engineering standards

- MIL-STD-901 (Shock)
- MIL-STD-167 (Vibration)
- MIL-STD-461 (EMI)

Quality assurance

- MIL-I-45208A
- T9074-AS-GIB-010/271
- Dye Penetrant
- Magnetic Particle
- Ultrasonic

Fabrication and weld standards

- NAVESEA S9074-AH-GIB-010/22
- NAVESEA S9074-AR-GIB-010/278
- NAVESEA S9074-AQ-GIB-101/248

Materials and processes

- SMAW/GMAW/GTAW
- NiCu 400
- Titanium
- Hastelloy C276
- CuNi (70/30 90/10)
- A36 Carbon Steel
- Aluminum
- 300 Series SS

Technical support technical assistance personnel who are factory trained to support the US Navy and USCG fleets.

Sales and Service Centers located in Seattle, San Diego, Portsmouth, and three in Florida.

(See bulletin no. 7845)



Bilgewater Membrane Separator

BMS350, BMS500 BMS1000,
BMS2000, and BMS2500
For Bilge Water Treatment

Key Features:

- USCG Certified to meet IMO MEPC 107(49) regulations
- MEPC 107(49) certified oil content monitor included
- Advanced three-stage design for maximum oil separation
- Fully automated system
- Racor VMT membrane technology specifically designed for bilge water treatment
- System employs a self-cleaning cycle for prolonged membrane service life
- Compact design minimizes storage space
- Positive shut-off solenoid valves for operational reliability



Bilgewater Membrane Separator
(See bulletin no. 7882)

Racor - Village Marine Tec's oily water separators meet the IMO Resolution MEPC 107(49). Racor - Village Marine Tec. units are an advanced three-stage system optimizing the separation and removal of free and emulsified oils.

Heavy duty construction, corrosion resistant materials,

permanent oil attractant media, quiet operation, automatic diversion valves and advanced Racor - Village Marine Tec. membrane technology result in an easy to use, fully automated, high quality, affordable solution to meet your bilge water treatment needs.

SPK Portable Water Treatment System

3 GPM (11 LPM)



(See bulletin no. 7954)

Racor SPK portable water treatment systems provide clean water for R.V.'s, motor coaches, boats, yachts and vacation properties. The fresh, safe alternative to costly bottled water. Fill your tanks or cistern with clean water from this Racor 3-stage treatment system--sediment filter plus carbon filter plus ultraviolet treatment.



Specifications:

- Power supply - 14 watts at

P/N 90-0071	110/1/60 Power
P/N 90-0072	230/1/50/60 Power
P/N 90-0073	12 VDC Power

- Capacity - 3 GPM (11 LPM) flowrate provides maximum UV dosage.
- UV dosage - >30,000 microwatt.sec/cm² at 254 nanometers providing a lethal dosage to bacteria, viruses and micro-organisms.
- Size 12" x 12" x 18" LWH (30 x 30 x 45 cm). 20 lbs (9 kg)



Applications:

The Racor SPK provides boat owners with a dockside treatment for marina water supply at locations where water safety is uncertain. Simply fill your tank through the unit for 3-stage treated water in your tanks. Similarly, RV owners can use this system to fill tanks from uncertain supplies. At the cottage or vacation property, add a small pump to use the SPK for treating collected rain water or clean stream water for safe use. Note: the SPK is not a softener or a desalinator and therefore it will not remove hardness, salt or metals.



Aqua Pro[®] Membranes and Filters

Unmatched design capabilities
Proven manufacturing and quality processes

Salts, minerals and organics are no match for Aqua Pro spiral wound membranes. They remove impurities from sea water, brackish water, fresh water and tap water. Selecting the highest grade of materials and thoroughly testing their performance and integrity, results in unmatched membrane quality and efficiency. Flexibility in design and manufacturing capabilities allows maximum quality control and quick response to unique, custom fabrication.

Pleated filters are designed for reverse osmosis application and offer superior service life to wound or polyspun cartridges. The cartridge size to flow rate ratio



is lower than most filters on the market. A wide range of in-stock sizes and micron ranges fit most standard filter housings on the market today.

(See bulletin no. 7905)



(See bulletin no. 7897)

Aqua Pro® Pumps

Innovative engineering
Solid material choices



Magnetic Drive
Dual Voltage Pump
788-1

Titan Series
High Pressure
Titanium Pump
708-3



Titan Series
High Pressure
Titanium Pump
708-5

Titan Series
High Pressure
Titanium Pump
3P20



Titan Series
High Pressure
Titanium Pump
5P50HD and
5P100HD

Titan Series
High Pressure
Titanium Pump
10P200HD



(See bulletin no. 7885)



Titan Series High Pressure Pumps

Quiet and durable, Aqua Pro Titan Series Pumps are dependable and specifically designed for reverse osmosis applications. Specific pump components are made of titanium which is impervious to sea water corrosion. The positive-displacement pump design uses less energy than most pumps.

Key features of the Titan Series High Pressure Pumps:

- Titanium pump heads ensure reliable operation and minimal maintenance.
- Titanium fluid ends and titanium-backed nylon valves are impervious to sea water corrosion.
- Heavy-duty industrial drive end and corrosion/wear-resistant plungers extend service life in high pressure applications.
- The combination plunger pump and pressure regulation design reduces noise and vibration to provide quiet, smooth operation.



Accessories & Options

Spares and Consumables



The Racor - Village Marine Tec. consumables and spare parts are stocked at Parker marine distributors worldwide. Protect your investment and warranty by using only authorized spares. (See bulletin no. 7905)

RMF Remineralizer Systems



The Racor - Village Marine Tec. Remineralizer Systems offer pH neutralization of RO water and are specifically engineered to operate with Village Marine PW and SW Series Watermakers. The media restores a buffer capacity to raise pH and reduce fresh water “aggressiveness” against metal pipes and fixtures. (See bulletin no. 7903)

Filter Housings



100-X

30-S

The Racor - Village Marine Tec. offers stainless steel (SS316) filter housings specifically designed for seawater use. Simple but secure closure systems allow quick cartridge change. Powder coated shells offer superior corrosion resistance. Fasteners and clamps are stainless steel. (See bulletin no. 7914)

Pressure Vessel Assemblies



The Racor - Village Marine Tec. RO membrane pressure vessels feature non-metallic wetted surfaces for excellent corrosion

resistance. Simple end plug design allows quick removal for element servicing. If the size you require is not shown please contact us for custom builds. (See bulletin no. 7898)

Ultraviolet Light Germicidal System



The Racor - Village Marine Tec. Ultraviolet Light Germicidal Systems effectively kill bacteria and viruses with a 99.9% efficiency.

Built to last, the VMS-3 is constructed with a stainless steel housing, high purity quartz flow tube and high output, long life bulb.

The VMS-3 is typically installed in the distribution system or near the point of use to ensure safe, pure drinking water. There are no chemicals added to the water and no chemical aftertaste.

(See bulletin no. 7909)

Commercial Media Filtration Systems



(See bulletin no. 7868)

Extend micron filter life and reduce maintenance cost by adding a commercial media filter. Designed for commercial operation but practical for private operation. The media filter uses a back-washable, reusable media, which effectively removes particulate matters down to 10 microns, as well as, soluble Iron. System comes complete with boost pump, control box, pressure gauges and valves for easy installation and operation.





Accessories & Options (Cont.)

Racor Stowaway Watermaker Master Control Panel



Racor - Village Marine Tec. brings customers a new level of watermaker control and ease of operation. The Racor Watermaker Control Panel delivers advanced Parker technology at your fingertips. (See bulletin no. 7972)

Available now on the Stowaway series of watermakers from Racor - Village Marine Tec. See bulletin 7861.

IMF Media Filtration Systems



The Racor - Village Marine Tec. Media Filtration Systems offer multi-media performance and are specifically engineered to operate with Village Marine PW Series Watermakers. The media layers are optimized to remove particulate matter from the feed stream ahead of the micron filtration system.

(See bulletin no. 7862)

Recirculating Brominator



Racor - Village Marine Tec. offers a simple and proven recirculating brominator for maintaining a safe level of disinfectant in potable water storage tanks. The brominator provides thousands of gallons of safe clean drinking water without the issues associated with chlorination and ultra-violet sterilization. (See bulletin no. 7917)

Racor Products and Systems



Fuel 7529

Key Products

- Diesel Spin-on
- Pump Cartridge
- Pump Spin-on
- Turbine Series
- Biodiesel Systems
- Alternative Fuel
- Electric Heaters
- Service Indicators
- Bowl Upgrade Kits



Air 7539

Key Products

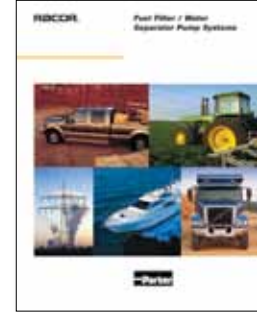
- ECO Spin-on Systems
- Ember Separators
- Pamic High Capacity
- Single Stage Dynacell
- Heavy-Duty Standard Air Filters Small/Medium Applications
- Pre-Cleaners
- Replacement Elements
- Service Kits



Crankcase 7790

Key Products

- Closed Crankcase
- Open Crankcase
- Hose Kits
- Marine Air Filters
- Hose Adapters
- Bulk Hose
- Conversion Kits
- CCV Heater Kits
- Filter Gauge
- Tap Sleeves



Pump 7683

Key Products

- Smart Pump System
- Integrated Filter/Separator Pump
- Fuel Conditioning Modules
- Turbine Series Electric Primer Pump Kits
- Manual Primer Pump



Fuel Dispensing 7537

Key Products

- Filter Cartridges
- Filter Vessels
- FBO Filters
- RVFS Series Vessels
- Microfilter Vessels
- Industrial Filter/Water Separator Vessels
- Fuel Monitors
- Fuel Conditioning



Fuel Additives 7518

Key Products

- Biodiesel Challenges
- Diesel Performance Plus+
- Diesel Conditioner Plus+
- Diesel Biocide
- Diesel Winter Plus+
- Gasoline Conditioner Plus+



Lubrication Filtration 7460

Key Products

- Integrated Oil/Fuel Systems
- Media Research
- Bypass Filtration
- Hydraulic Filtration
- Oil Analysis Kit
- Par Fit Oil Filters
- Engine Oils



Sentinel Protection 7330

Key Products

- Master Control
- CPV Coolant Valve
- SVK Fuel Solenoids
- STV Self Test Valve
- Orifice Selection
- Testing
- Heat Sentinel
- Troubleshooting

Parker's Motion & Control Technologies

At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 1 800 C-Parker (1 800 272 7537).



AEROSPACE

Key Markets

- Aircraft engines
- Business & general aviation
- Commercial transports
- Land-based weapons systems
- Military aircraft
- Missiles & launch vehicles
- Regional transports
- Unmanned aerial vehicles

Key Products

- Flight control systems & components
- Fluid conveyance systems
- Fluid metering delivery & atomization devices
- Fuel systems & components
- Hydraulic systems & components
- Inert nitrogen generating systems
- Pneumatic systems & components
- Wheels & brakes



CLIMATE CONTROL

Key Markets

- Agriculture
- Air conditioning
- Food, beverage & dairy
- Life sciences & medical
- Precision cooling
- Processing
- Transportation

Key Products

- CO₂ controls
- Electronic controllers
- Filter driers
- Hand shut-off valves
- Hose & fittings
- Pressure regulating valves
- Refrigerant distributors
- Safety relief valves
- Solenoid valves
- Thermostatic expansion valves



ELECTROMECHANICAL

Key Markets

- Aerospace
- Factory automation
- Food & beverage
- Life science & medical
- Machine tools
- Packaging machinery
- Paper machinery
- Plastics machinery & converting
- Primary metals
- Semiconductor & electronics
- Textile
- Wire & cable

Key Products

- AC/DC drives & systems
- Electric actuators
- Controllers
- Gantry robots
- Gearheads
- Human machine interfaces
- Industrial PCs
- Inverters
- Linear motors, slides and stages
- Precision stages
- Stepper motors
- Servo motors, drives & controls
- Structural extrusions



FILTRATION

Key Markets

- Food & beverage
- Industrial machinery
- Life sciences
- Marine
- Mobile equipment
- Oil & gas
- Power generation
- Process
- Transportation

Key Products

- Analytical gas generators
- Compressed air & gas filters
- Condition monitoring
- Engine air, fuel & oil filtration & systems
- Hydraulic, lubrication & coolant filters
- Process, chemical, water & microfiltration filters
- Nitrogen, hydrogen & zero air generators



FLUID & GAS HANDLING

Key Markets

- Aerospace
- Agriculture
- Bulk chemical handling
- Construction machinery
- Food & beverage
- Fuel & gas delivery
- Industrial machinery
- Mobile
- Oil & gas
- Transportation
- Welding

Key Products

- Brass fittings & valves
- Diagnostic equipment
- Fluid conveyance systems
- Industrial hose
- PTFE & PFA hose, tubing & plastic fittings
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



HYDRAULICS

Key Markets

- Aerospace
- Aerial lift
- Agriculture
- Construction machinery
- Forestry
- Industrial machinery
- Mining
- Oil & gas
- Power generation & energy
- Truck hydraulics

Key Products

- Diagnostic equipment
- Hydraulic cylinders & accumulators
- Hydraulic motors & pumps
- Hydraulic systems
- Hydraulic valves & controls
- Power take-offs
- Rubber & thermoplastic hose & couplings
- Tube fittings & adapters
- Quick disconnects



PNEUMATICS

Key Markets

- Aerospace
- Conveyor & material handling
- Factory automation
- Food & beverage
- Life science & medical
- Machine tools
- Packaging machinery
- Transportation & automotive

Key Products

- Air preparation
- Compact cylinders
- Field bus valve systems
- Grippers
- Guided cylinders
- Manifolds
- Miniature fluidics
- Pneumatic accessories
- Pneumatic actuators & grippers
- Pneumatic valves and controls
- Rodless cylinders
- Rotary actuators
- Tie rod cylinders
- Vacuum generators, cups & sensors



PROCESS CONTROL

Key Markets

- Chemical & refining
- Food, beverage & dairy
- Medical & dental
- Microelectronics
- Oil & gas
- Power generation

Key Products

- Analytical sample conditioning products & systems
- Fluoropolymer chemical delivery fittings, valves & pumps
- High purity gas delivery fittings, valves & regulators
- Instrumentation fittings, valves & regulators
- Medium pressure fittings & valves
- Process control manifolds



SEALING & SHIELDING

Key Markets

- Aerospace
- Chemical processing
- Consumer
- Energy, oil & gas
- Fluid power
- General industrial
- Information technology
- Life sciences
- Military
- Semiconductor
- Telecommunications
- Transportation

Key Products

- Dynamic seals
- Elastomeric o-rings
- EMI shielding
- Extruded & precision-cut, fabricated elastomeric seals
- Homogeneous & inserted elastomeric shapes
- High temperature metal seals
- Metal & plastic retained composite seals
- Thermal management

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