
SOLUTIONS FOR SUSTAINABLE SUPERYACHTS



Sustainability is no longer about doing less harm.
It's about doing more good.



Group of Companies

Complete Solutions

About EPE

Environmental Protection Engineering (EPE) S.A. is a global environmental company that provides a wide range of products and services including: Emergency oil & chemical spill response, marine and industrial spill response, management of hazardous and non-hazardous waste, environmental rehabilitation and protection services, consulting services and training services. By continuously investing in research, development and implementation of innovative technologies, Environmental Protection Engineering S.A. (EPE) is now considered to be the largest Environmental Services Provider Company in the Eastern Mediterranean.

About ERMA FIRST

Founded in 2009 and headquartered in Greece, ERMA FIRST is a global leader in ballast water technology solutions. The ERMA FIRST robust systems ensure worldwide compliance, provide operational simplicity and reduce operational expenditure. The ERMA FIRST customer-centric approach also offers flexible and convenient servicing through a trusted network of engineers worldwide. ERMA FIRST provides sales, maintenance and training to clients via a network of offices in 46 countries. ERMA FIRST is the winner of the Lloyd's List Technical Achievement Award (2013) and the Green4Sea Technology Award (2016).

About RWO

For over 45 years, RWO has been supplying future-proof solutions for marine water treatment - made in Germany. The product portfolio includes equipment for the treatment of drinking and process water as well as systems for pollution prevention such as oily water separators or sewage treatment plants. Today RWO is recognized as a technological leader in the field of oil/water-separation with over 16.000 units delivered worldwide. More than 40 sales and service stations ensure short communication links and local availability of trained service engineers.

About oneTANK

oneTANK LLC is a specialty manufacturer of ballast water treatment systems for small vessels such as superyachts and workboats as well as for large ship aftpeak tanks and semi-submersibles. oneTANK is a small scale innovative, low-cost, IMO Revised G8 Code and United States Coast Guard compliant system. Also, its mixing technology is developed and patented by U.S. Geological Survey. The oneTANK system is a game-changer for smaller vessels struggling to comply with stringent ballast water regulations. Founded by Glosten, oneTANK offers applications engineering, installation and commissioning support, and a robust spare parts and service program.

oneTANK

Ballast Water Treatment System

oneTANK is a simple, low-cost ballast water treatment option intended for vessels that do not need the typical complex, high capacity solutions. Its small size and minimal connections offer reliable results, and a fast and easy shipyard experience. The "do it yourself" model allows operators to install and commission their own systems. We provide the applications engineering and include remote support.



USCG & BWMS
Code Approved



SMALLEST FOOTPRINT



CLEANER SKIES

DPF

Black Smoke & Odor Eliminator

I Soot Elimination System offers reliable reduction of harmful emissions of your diesel generator under all circumstances. Exhaust gases free of Black Smoke (BS) and harmful PMs. The diesel particle filters (DPF) of the EGT series collect the BS from the exhaust stream. An powerful catalytic oxidizer upstream the DPF minimizes the regeneration temperature and reduces Hydro Carbons and Carbon Monoxide.



Poseidon FIT & OWS COM

Oily Water Separators

POSEIDON FIT is a versatile 5/15ppm OWS, supplied with a loose pump that can be installed in various locations and has the capability for bilge transfer. It consists of two stages; the coalescer and the emulsion breaking unit. The coalescer, equipped with a self-cleaning filter, works on a continuous mode, by-passing the second stage and thus prolonging the lifetime of the filters. If the Oil Content Monitor measures an effluent with oil content of more than 4/14ppm at the 1st stage outlet, then the emulsion breaking unit begins its operation.



More than 16000 ships have already been equipped with RWO's oily water separators since RWO started its business in 1975. The OWS-COM system uses a combination of highly effective open porous coalescer with automatic backflushing, together with a second stage emulsion breaking oil and hydrocarbon polisher. The periodical backflushing keeps the coalescer surface clean and offers long lasting operation according to IMO MEPC.107(49). The OWS-COM is part of RWO's leading Total Water Management offer.



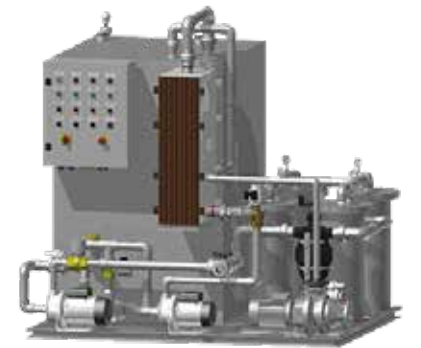
*Available in all sizes and forms.

SUPREME QUALITY

Triton EC & CleanSewage BIO

Marine Sewage Treatment

TRITON EC is a purely electrochemical wastewater treatment plant. It is a completely chemical-free system meeting the requirements of IMO/ME-PC.227(64). TRITON EC is designed for waste water treatment on board merchant ships, Navy vessels, yachts, ferries, small cruisers, offshore platforms and other marine type applications.



CleanSewage-BIO is a compact, type approved marine Sewage Treatment Plant (STP) for cargo vessels. With an incorporated Moving Bed Bio Reactor (MBBR), the CS-BIO requires minimal process volume, still meeting the IMO MEPC.227(64) discharge criteria. The accessibility from one side allows ship designers to plan space in the engine room on a whole new level.



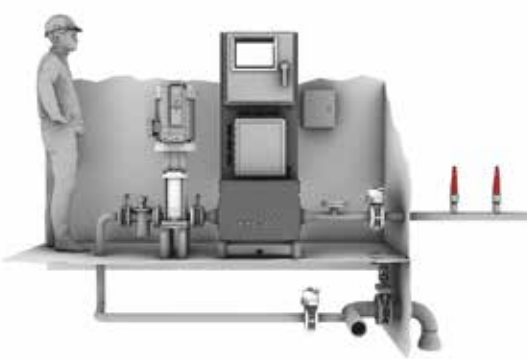
*Custom solutions upon request.

Tech Specifications

Complete Solutions

oneTANK

| Operational Limitations: | Particulars |
|---|---|
| Salinity: Not Applicable Water Temperature: Not Applicable Hold Time: >24 Hours Min. Average Total Residual Oxidant (TRO): 5 mg/L Min. Concentration-Time (CT): 120 mg-hr/L | 604mm x 559mm x 1,651mm, 216 kg 15 Amp 120 Volts, or 7.5 Amp 230 Volts Fully automated controls to vessel alarm and monitoring system |
| Type Approved | Support Services |
| DNV GL, IMO Revised BWM Code US Coast Guard | Applications engineering Installation and commissioning On-site service and spare parts |



Poseidon FIT

| Model | Capacity m³/h | Length mm | Width mm | Height mm | Power kW | Empty Weight kg |
|-------|------------------|--------------|-------------|--------------|-------------|--------------------|
| 0.25 | 2.25 | 830 | 510 | 868 | 0.53 | 157 |
| 0.5 | 0.5 | 830 | 510 | 868 | 0.53 | 157 |
| 1.0 | 1.0 | 1100 | 800 | 1210 | 0.91 | 360 |
| 2.0 | 2.0 | 1450 | 860 | 1675 | 4.26 | 720 |



OWS COM

| Model | Capacity m³/h | Length mm | Width mm | Height mm | Power kW | Empty Weight kg |
|-------|------------------|--------------|-------------|--------------|-------------|--------------------|
| 0.1 | 0.1 | 715 | 650 | 1100 | 0.8 | 125 |
| 0.25 | 0.25 | 960 | 750 | 1005 | 2.6 | 180 |
| 0.5 | 0.5 | 960 | 750 | 1050 | 3.2 | 195 |
| 1.0 | 1.0 | 1170 | 800 | 1220 | 3.2 | 270 |
| 2.5 | 2.5 | 1510 | 1060 | 1485 | 3.7 | 457 |



DPF

| Model | Filter | DPF Volume | For Genset of | Length mm | Width mm | Height mm | Weight mm |
|---------|--------|------------|---------------|-----------|----------|-----------|-----------|
| EGT4-10 | 1 | 20L | 100-250K | 950 | Φ500 | | 75 |
| EGT4-20 | 2 | 40L | 200-350K | 1170 | 675 | 585 | 265 |
| EGT4-30 | 3 | 60L | 300-450K | 1730 | 675 | 585 | 390 |
| EGT4-40 | 4 | 80L | 400-600K | 1170 | 675 | 1170 | 450 |

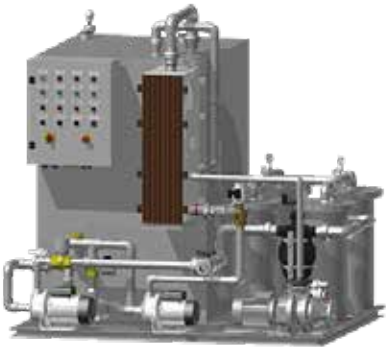
| | |
|-----------------------|---|
| PM (measured as PM10) | >97% reduction |
| Sound Attenuation | Std. Engine Muffle / Additional Sound Insulation on request |

| | |
|-------------------------------|--|
| Application | Superyachts, other high end applications |
| Exhaust System | Suitable for dry or wet systems |
| Environment Engine Room | Clean Ambient temperature -10 +55°C |
| Degree of protection | IP55 |
| Relative humidity | 5 to 95% non-condensing |
| Inspection & service interval | 5000h or 1x per year (normal conditions) |



Triton EC

| Model | Capacity m³/h | Organic Load Kg/d BOD5 |
|---------------|---------------|------------------------|
| TRITON EC 15 | 1.5 | 1.2 |
| TRITON EC 35 | 3.5 | 2.8 |
| TRITON EC 50 | 5.0 | 4.0 |
| TRITON EC 65 | 6.5 | 5.2 |
| TRITON EC 100 | 10.0 | 8.0 |
| TRITON EC 200 | 20.0 | 16.0 |
| TRITON EC 300 | 30.0 | 24.0 |
| TRITON EC 500 | 50.0 | 40.0 |
| TRITON EC 600 | 60.0 | 48.0 |
| TRITON EC 700 | 70.0 | 56.0 |



CleanSewage BIO

| Model | Capacity m³/h | Organic Load Kg/d BOD5 | Lenght mm | Width mm | Height mm | Net Weight kg | Filled Weight kg |
|-------|---------------|------------------------|-----------|----------|-----------|---------------|------------------|
| 02 | 2.16 | 1.38 | 2095 | 1250 | 1480 | 859 | 2923 |
| 03 | 3.24 | 2.07 | 2608 | 1346 | 1612 | 1149 | 4134 |
| 04 | 4.32 | 2.76 | 2559 | 1646 | 1618 | 1335 | 5293 |
| 05 | 6.48 | 4.15 | 2781 | 1656 | 2058 | 1627 | 7407 |
| 06 | 8.64 | 5.53 | 3365 | 1656 | 2058 | 1885 | 9278 |
| 07 | 10.80 | 6.91 | 3365 | 1986 | 2058 | 2121 | 11719 |

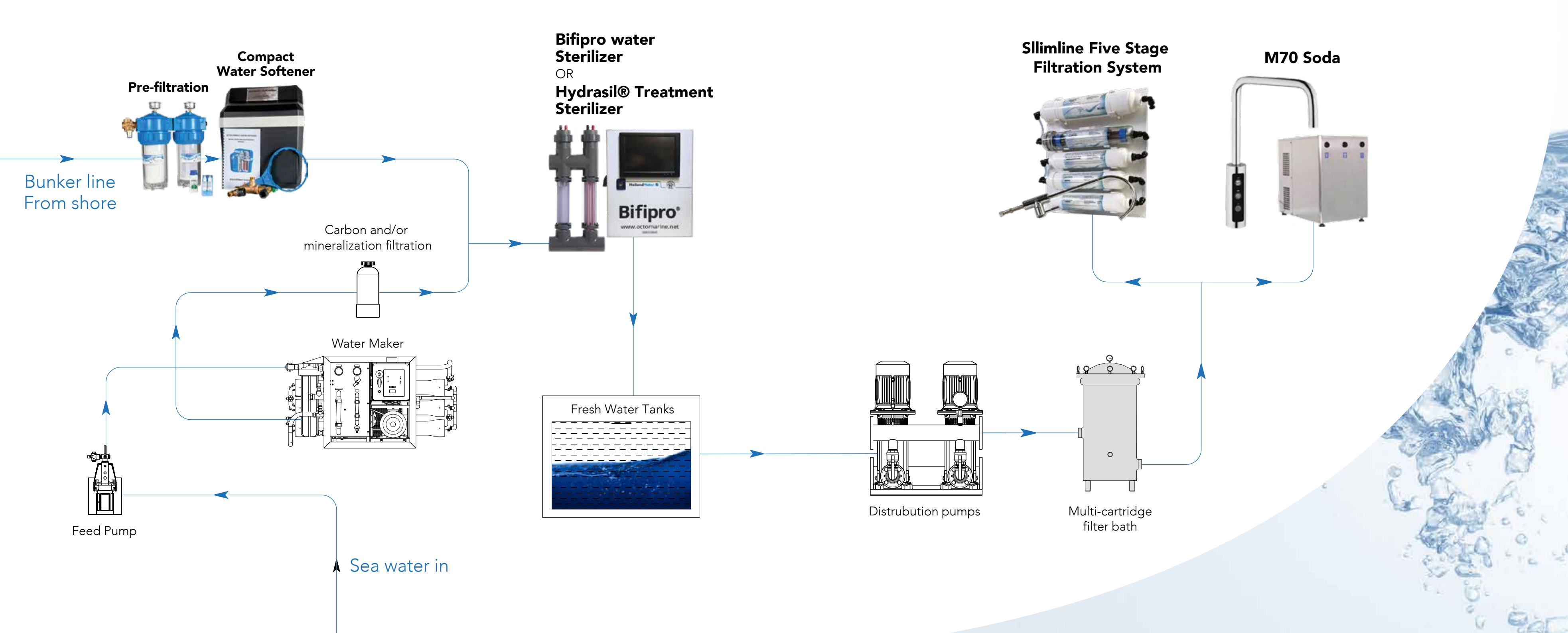
Fresh Water Solutions

Treatment Systems

Sustainability on board also means the elimination of plastic bottles. With the Fresh Water Solutions that EPE Yachting offers, yachts can now independently produce fresh mineral water. Our systems ensure the highest quality water possible, free from any harmful bacteria. You can now get rid of all plastic water containers and enjoy tasteful fresh water at any time.

PURE WATER





Bunker line
From shore

Pre-filtration

Compact
Water Softener

Carbon and/or
mineralization filtration

Water Maker

Bifipro water
Sterilizer
OR
Hydrasil® Treatment
Sterilizer

Bifipro®
www.octomarine.net

Fresh Water Tanks

Distrubution pumps

Slimline Five Stage
Filtration System

M70 Soda

Multi-cartridge
filter bath

Feed Pump

Sea water in

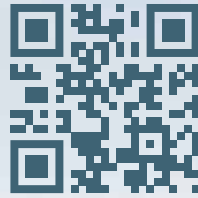
Services

Premium quality professional services

- Quality Water Testing
- Chemical Disinfection & Biofilm Treatment
- Grey & Black Water Drainage System Cleaning
- Integrated Fuel Treatment
- HVAC Duct System Cleaning
- Exhaust Gas System Cleaning
- Galley/Hoods System Cleaning
- Vacuum Sewage System Cleaning
- Scupper Drainage System Cleaning
- Sea Water Cooling System Cleaning
- Grease Traps and Macerator System Cleaning



**COMPLETE
SERVICE SOLUTIONS**



www.epeyachting.com



RWO

oneTANK
AN ERMA FIRST COMPANY