

CLEANTECH SOLUTIONS for cargo vessels



*Cleantech Solutions.
Anywhere.*

Vacuum collection
Wastewater treatment
Ballast water management
Fresh water generation
Marine growth prevention
Dry and wet waste treatment
Corrosion protection



We know your industry

Evac is the world’s leading provider of integrated water and waste management systems, as well as corrosion protection systems, for the marine and offshore industries. We are a complete system provider whose products meet all your needs.

As there are limited opportunities for service and maintenance in this challenging environment, we focus on ensuring construction is simple and reliable. You can rely on our specialist design team to help you to find the best solutions for your waste, wastewater, and fresh water management processes. Thanks to our global service network we can offer support, spare parts and service.

Bespoke solutions for changing needs
Our customers have very different needs, so we pride ourselves on our ability to take customer needs and changing operating areas into account right from vessel construction, with our large offering and flexible processes. Our systems meet the strictest International Maritime Organization environmental regulations, and can also be operated in Environmentally Sensitive Sea Areas and Special Areas.



Vacuum collection



Wastewater treatment



Ballast water management



Fresh water generation



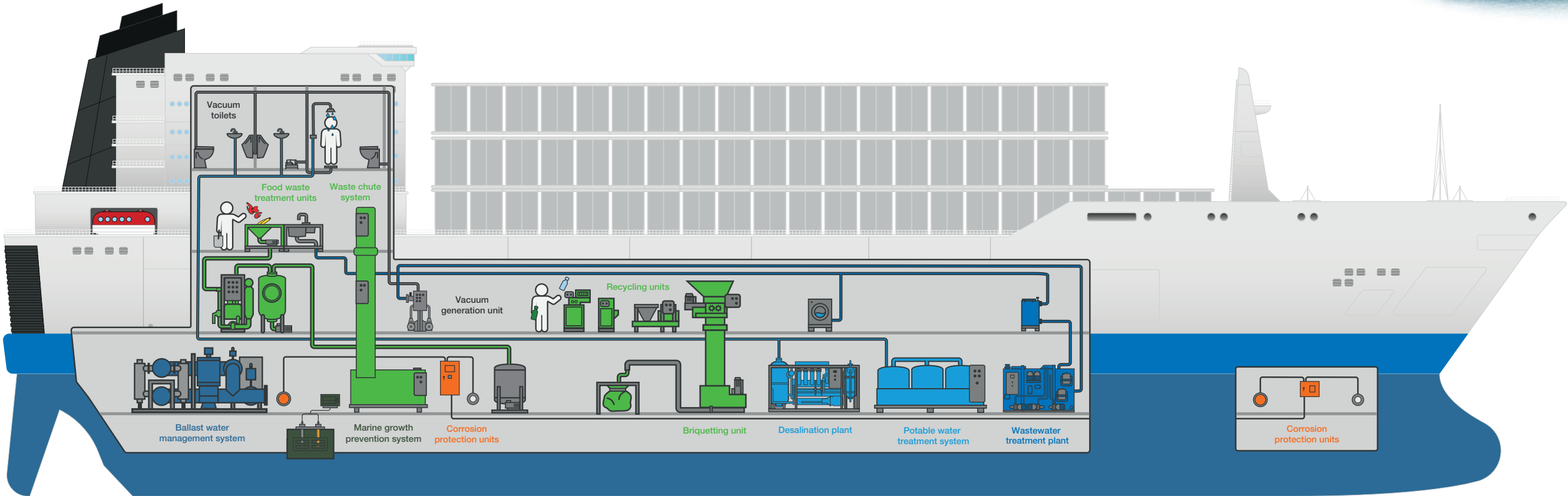
Marine growth prevention



Dry and wet waste treatment



Corrosion protection



Evac Complete Cleantech Solution

The Evac Complete Cleantech Solution covers all your needs in terms of integrated water and waste management and corrosion protection systems. This comprehensive one-stop-shop offering is what sets us apart from the competition.

We are your global service partner throughout the life-cycle of your cargo vessels. Purchasing all your services and cleantech solutions from a single supplier simplifies coordination and integration during your shipbuilding project. Once the systems are installed, it makes managing and maintaining them easier and more efficient.

We also offer retrofit system update projects in the later stages of your vessel's life-cycle in order to meet any future changes in regulations.

Benefits

- Fewer partners means easier communication and saves time in project coordination
- Similar user interfaces and technologies make crew training easier and more efficient
- Smooth and efficient system integration, management and troubleshooting
- Single point of contact for after sales service and spares



Cathelco
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Read more about our recommended solutions for cargo vessels



www.evac.com/cargo



Vacuum collection

Vacuum collection units collect sewage, condensation, and food waste by vacuum pumping it into a sewage treatment plant or collection tank. Since the 1970s, Evac has designed and manufactured a variety of vacuum collection systems including water-saving vacuum toilets, food waste collection units, and vacuum and collection units for condensation, which are typically used in conjunction with cooling equipment both on land and at sea.

Evac EasyFit

Our durable Evac EasyFit ejector vacuum collection units use proven, reliable technology. Their flexible design makes them suitable for a range of different applications and also allows for a choice of holding-tank alternatives.



Evac EasyFit is suitable for a range of different applications.



Evac EasyVac is a durable, low maintenance online vacuum generation unit



Evac Optima 3

This innovative vacuum toilet has a simple design that includes few moving parts, making it highly reliable. Economical, durable, and quiet, the Evac Optima 3 is the ideal cabin toilet for cargo ships.

Evac EasyVac

The Evac EasyVac is a durable, low-maintenance online vacuum generation unit that macerates sewage and generates the vacuum required for the discharge process.

The Evac EasyVac is particularly suitable for vessels with medium passenger and crew capacities. It features extra-strong bearings, heavy-duty mechanical seals.

Evac OnlineFlex

The Evac OnlineFlex uses robust mechanical components to create and maintain constant vacuum in a vacuum toilet system without the need for intermediate tanks.

Evac OnlineFlex with a good discharge head in a simple and compact package.





Ballast water management

The Evac Evolution ballast water management system (BWMS) effectively removes organisms and pathogens from ballast water. This is achieved using a combination of filtration and UV technology, processes which are entirely free of chemicals. The space saving Evac Evolution BWMS is suitable for most cargo vessels and is now in the final stages of achieving revised IMO G8 and U.S. Coast Guard Type Approval (status 12/2018).

The system developed by Cathelco has many innovative features including a unique feedback 'loop' based on the measurement of UV transmission which determines precise dosage. It automatically adjusts to different seawater conditions in harbours and estuaries, ensuring that the optimum UV dose is applied at all times, but saving power whenever possible.

Effective in fresh, brackish and seawater, the Evac Evolution BWMS enables vessels to operate without restriction.

The system is available with capacities from 34m³/h to 1,500m³/h in a single unit. It can be supplied in modular form for retrofits or skid mounted for newbuild applications.



Wastewater treatment

Wastewater treatment systems separate and neutralize organic contaminants in wastewater to comply with national and international legislation. Our offering includes biological and electrolytic wastewater treatment plants that refine black and gray water, as well as grease separators to separate grease from kitchen and galley wastewater.



Evac EcoTreat

The Evac EcoTreat biological wastewater treatment plant provides a cost-effective treatment of black and gray water, it also meets and exceeds the latest environmental standards.

Evac ORCA IV B

The Evac ORCA IV B is a purely electrolytic wastewater treatment plant that fulfills the requirements of IMO MEPC 227 (64) and is also U. S. Coast Guard (USCG) approved. The compact, modular design makes it ideal for both installation on new vessels and retrofitting existing vessels.



Evac EcoTrap separates grease from galley wastewater



Evac wastewater pre-treatment

The Evac grease separators, Evac EcoTrap and Evac SGT, separate grease from galley wastewater. Grease is harmful to piping, valves, tanks, pumps, and other components of sewage and wastewater treatment systems.



Dry and wet waste treatment

We are a leading supplier of dedicated food waste systems and dry waste systems for cargo vessels. Evac's dry and wet waste systems manage mixed or recyclable waste in a way that is safe, convenient, environmentally friendly, and energy efficient, reducing the volume through compaction and shredding. Moreover, they fulfill the regulations defined by IMO Marpol 73/78 Annex V that covers garbage waste types such as food and galley waste, dry waste and dangerous waste.



Evac UBP 30S compactor

The Evac UBP 30S combines a sack compactor for general waste with a baling press for cardboard and plastic film. The Evac UBP 30S compacts general waste into cubic plastic bags that are easy to transport. The baling bands can be used as handles, making it easy for crew to handle the bails.

Evac UMS 2530 shredder

The Evac UMS 2530 is a small shredder designed for shredding various waste materials such as general waste, plastic bottles and aluminium cans. The unit transforms the waste into flakes which enables contained residual liquid to be drained. With the slow rotating shredder the noise level is kept to a minimum.



Evac OWMS food waste management system

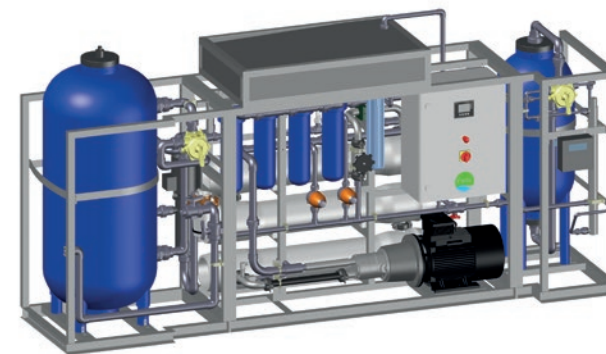
The Evac food waste vacuum collection system is designed for the hygienic collection and treatment of food waste in compliance with IMO Marpol 73/78 Annex V, U.S. Coast Guard and other relevant regulations. Food waste is conveyed reliably, even when it contains large amounts of bulky or starchy substances such as pasta, rice, bread or potatoes, even fish skin, seashells and large bones.

The system can be supplied with a GPS Discharge Control system which ensures that food waste is discharged into the sea only when allowed.



Fresh water generation

Water treatment units turn seawater into process, service, and drinking water. The equipment also filters and disinfects water, adjusts its hardness, and mineralizes fresh water that has been created or stored. We offer seawater desalination units using reverse osmosis (RO), as well as potable water treatment equipment using mineralization and disinfection.



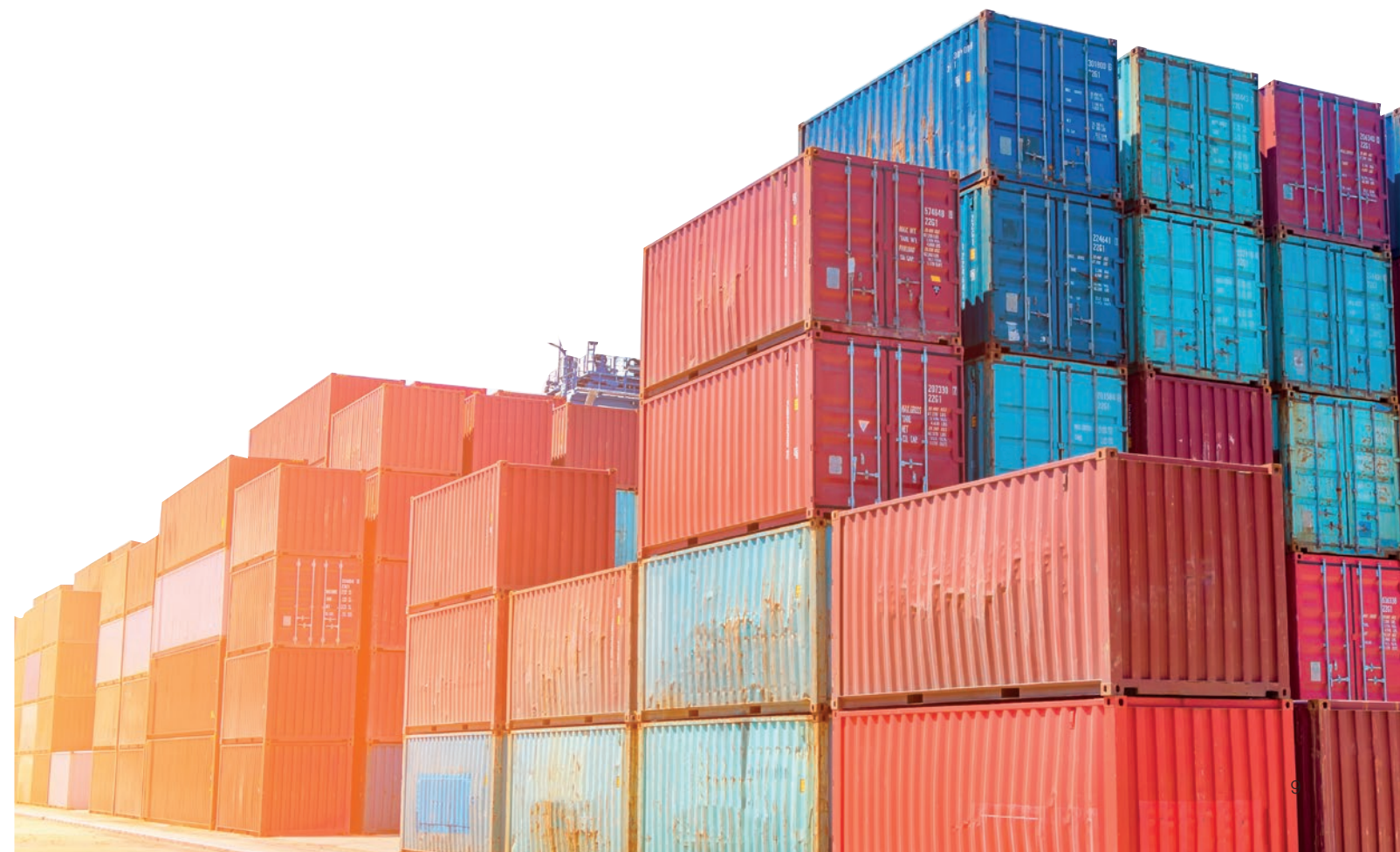
Evac ROSYS M desalination plant

These medium sized, modular reverse osmosis plants with daily generation capacity of 30, 60, 90, or 120 m³ are environmentally friendly, robust, easy to install and operate, quiet, and have an extremely small footprint.



Evac WASYS

Our highly sophisticated systems produce high-quality potable water that meets all relevant regulations, including those from the WHO and USPH.





Marine growth prevention

We provide systems developed by Cathelco specifically for preventing bio-fouling in the seawater pipework of cargo vessels. These have compact control panels and a range of anodes which can be fitted within seachests or strainers. The systems are easy to install and automatic in operation, making very little demand on crew time. In addition, the latest Quantum control panels provide comprehensive information about the performance of the system which can be fed to the ship's bridge computers.

As the world's largest manufacturer of marine growth prevention systems (MGPS) for seawater pipework, Cathelco has a record of more than 50,000 installations.

In operation, the copper anodes produce ions in concentrations of less than 2ppb which are sufficient to prevent barnacles and mussels from settling in the pipes. The organisms are not killed, but pass through the pipework to discharge without any effect on the wider marine environment. At the same time, the aluminium anodes produces ions which create an anti-corrosive layer on the inside of pipes. The system quickly pays for itself by reducing maintenance costs resulting from manual cleaning and premature pipework renewal.



The most widely used marine growth prevention system in the world.

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Corrosion protection

We provide reliable and technically advanced Cathelco solutions to hull corrosion problems using impressed current cathodic protection (ICCP) systems. A range of anodes and reference electrodes are available to suit all hull profiles. The anodes are diver changeable which means they can be changed, if necessary, without the need for drydocking.

The most important feature of an ICCP system is that it automatically detects the electrical 'potential' at the hull/seawater interface and automatically raises or lowers the output to the anodes. In this way, the ship receives the optimum level of corrosion protection at all times.

Reliable and technically advanced solutions to hull corrosion problems.



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Service

Close to you where ever you travel

We are your global service partner throughout the life-cycle of your cargo vessel. We have service hubs in North America, Northern Europe and Southern Europe. We offer a wide range of spare parts and exceptional service through our extensive global network of offices and representatives.

We support our stakeholders by providing:

- Engineering and technical advice
- Supervision
- Installation and start-up
- Service and repair
- Service contracts
- Refurbishment and retrofit
- Spare and replacement parts
- Training and education
- Onboard system and spares analysis.





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Evac offices and
representatives

- Evac office
- Evac representation

Read more about our references on
www.evac.com/references



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Corrosion
protection

Evac is the world's leading provider of integrated water and waste management systems, as well as corrosion-protection systems, for the marine, offshore, and building industries. Our cutting-edge solutions and services have been helping leading global players in these industries to significantly reduce their environmental footprint for 40 years. With offices in 14 countries across four continents and representatives in more than 70 countries, we pride ourselves on being close to our customers wherever in the world they are located.

* Solutions for
building industry
customers are
sold by Bvac

Our contact information at
www.evac.com/contacts

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