

Ballast Water Containers
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Ballast water management - Powered by innovation



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- Ballast Water Containers

Ballast Water Containers (BWC) offer ballast water management compliance solutions – if a treatment system retrofit is not a possibility on your vessel, then we are on hand to offer a specialist solution.

We offer a range of products, namely:

- **Mobile containerised BWTS** – a mobile treatment system designed and pre-installed in a container ready for temporary installation on a ship, barge or at the quayside.
- **Deckhouse module** – a treatment system designed and pre-installed in a deckhouse ready for permanent installation on the deck of a ship.
- **Port based BWTS** – a port based containerised treatment system offering vessels a contingency plan if their onboard treatment system fails.

Whether you are a ship owner, OSV owner, barge owner, port operator or BWT system manufacturer, BWC can design and build a system to meet your requirements and the requirements of your customer, if you are a BWT system manufacturer.

We offer the full range of technologies (UV, EC, Chemical Injection and Pasteurisation) and we can adjust the deckhouse or container sizes to provide the required treatment capacity (m³/hr). Single stage treatment or ex rated systems are also available as BWC solutions.

BWC is part of the Malin Group. Through Malin Group, BWC can trace its roots as far back as the mid 18th century with involvement in shipping and ship delivery through the successful years of ship construction and trade on the River Clyde in Glasgow. The Group has grown and diversified, and over the last 15 years has given life to a number of additional, specialist companies including BWC- providing innovative mobile and stand alone compliance solutions .

Malin Group's extensive experience across the marine industry and heavy lift transportation industries, coupled with recent experience in the ballast water treatment retrofit market, provides BWC with an unrivalled combination of deep rooted practical knowledge of our core markets

- Our clients

We offer tailored ballast water treatment options across a range of clients, including sea going barge owners, ship owners, offshore support vessel (OSV) operators, BWTS manufacturers and port authorities.

- Sea going barges

We understand that for most sea going barges, a permanent retrofit of a treatment system is often not possible. Having a mobile containerised system that can be used as and when required, depending on the project type, is therefore an ideal solution for barge owners.

Why? Firstly, the mobile system may be shared between a fleet of barges, saving time and money. The system also enables a fully responsive, agile approach to ballast water treatment. For example, in a domestic project where there is no international voyage, the containerised system can be removed and sent to another barge that is operating on an international project and where treatment of foreign ballast water is required.

A ballast water treatment system capable of treating high capacity flow rates is an expensive and, in many cases, complex task on board barges.

The treatment of high capacity flow rates during operational ballasting introduces significant risk to the operation and, in fact, is generally unnecessary. With most operational ballasting conducted within the same location, it is, in fact, only the sea going ballast that requires treatment.

At BWC our barge solutions are designed around the treatment of the sea-going ballast only – allowing existing operations to remain largely unchanged, and removing the requirement to use high capacity ballast water treatment systems.

Prior to cargo load out and load in operations, barges will require their operational ballast tanks to be empty. However generally after the tanks are emptied there will still be some residual ballast water remaining at the bottom of the tank. To avoid discharging this untreated ballast water during the load out or load in operation, BWC recommends the use of a mobile containerised BWTS to flush or purge the operational ballast tanks prior to the cargo operations commencing.



- Ship owners

If you are a ship owner that requires a ballast water treatment deckhouse then BWC can provide impartial advice to help with treatment system selection, as well as design, fabrication and installation services.

Simply put, a BWC Deckhouse Module provides a number of savings – reducing project duration and minimising costs and risks. As installation processes take place inside a pre-approved housing, off-site testing is enabled. Additionally – since the BWTS is pre-installed – this makes for a far less intrusive final installation when compared to a more standard deckhouse installation project.

The best suited technology for the project will depend on the vessel owner's requirements. As such, the Deckhouse Module designs are suitable for all BWTS technology types, and general arrangements are adaptable to suit ex-rated equipment.

- BWTS manufacturers

If your vessel owner client requires your technology installed in a deckhouse or container, then the BWC team is on hand to support you with design, fabrication and installation services.

Simply put, a BWC Deckhouse Module provides a number of savings – reducing project duration and minimising costs and risks. As installation processes take place inside a pre-approved housing, off-site testing is enabled. Additionally – since the BWTS is pre-installed – this makes for a far less intrusive final installation when compared to a more standard deckhouse installation project.

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- Offshore support vessel (OSV) operators

If you operate a fleet of offshore support vessels in the same area, a mobile containerised system may offer you a range of benefits – cost effective, adaptable, responsive and effective. For example Platform Supply Vessels operating in the same region servicing the offshore oil & gas industry or Offshore Support Vessels supporting an offshore wind farm, by using this system, can effectively and at low cost, share a unit.

Whether OSVs, PSVs or similar vessel type, if you are operating regionally, then there is a likelihood that you will operate in and out of the same 2 or 3 ports closest to the operation. These ports may be in the same country or split between a few neighbouring countries close to the operation.

If these ports are in the same country surrounded by the same body of water then treating ballast water before discharge will not be necessary. However if these ports are in different countries then treatment will be required. If your vessel takes ballast water on in one port, then after returning from offshore, it needs to de-ballast this water in a second neighbouring port in another country, then treatment before discharge will be required. Whilst one option is to fit treatment units on each vessel at considerable cost, you could instead install a port based single stage mobile containerised BWTS in each of the 2 or 3 ports where your vessels operate, so enabling your full fleet to utilise the shared assets when required. Limited ballast water pipe retrofit work will be required on each vessel to allow the port system to connect to the vessel's ballast water line, however these costs coupled with the costs of 2 or 3 port based single stage treatment systems is significantly lower than the cost of having to retrofit every vessel in your regional fleet with a BWTS.

- Port authorities

As a port authority, you will want to ensure that your port is not being polluted with untreated foreign ballast water by visiting vessels failing to comply with IMO ballast water management regulations.

No doubt you will be considering the start of an inspection programme for vessels visiting your port.

Before starting these inspections you should consider the contingency measures in the event that a vessel fails an inspection as a result of a faulty onboard treatment system.

Repairing the faulty onboard treatment system may be one option for the vessel, however for more serious faults, repairs on board may not be possible without the vessel first receiving a delivery of spare parts and / or a visit from a treatment system service engineer. In this case clearly a more effective contingency plan will be required if the vessel is to keep operational delays to a minimum and at the same time avoid polluting the port with untreated ballast water.

A port based single stage containerised BWTS is an ideal contingency plan. This port system can be connected to the vessel's ballast water system, allowing the vessel's ballast water to be treated by the port system prior to discharge.

This containerised system can be located on the quayside or alternatively on a workboat or barge that can then be positioned alongside the visiting vessel that has failed the inspection.

Support equipment in the form of hoses, pumps and a generator can be supplied alongside the containerised system. This complete package of treatment equipment will keep the vessel's operational delays to a minimum and more importantly keep your port pollution free.



- Our products

- Mobile containerised ballast water treatment systems

Our Mobile Containerised Ballast Water Treatment System (BWTS) provides a compliance solution for vessel owners that cannot have or do not want a permanently installed system on their vessel.

For sea going barge owners having a mobile containerised system that can be used as and when required, depending on the project type, is an ideal solution.

A mobile containerised BWTS can also be of great benefit if you have a fleet of vessels that operate in the same area. For example Platform Supply Vessels operating in the same region servicing the offshore oil & gas industry or Offshore Support Vessels supporting an offshore wind farm.

- Deckhouse module

Since 2015, BWC has built expertise, advancing the concept of mobile containerised Ballast Water Treatment Systems – a solution that best serves the needs of many of our clients.

In cases where the permanent more traditional method of deckhouse fabrication is required, BWC has developed the Deckhouse Module product offering.

If you are a manufacturer or vessel owner, you can take advantage of this service, streamlining the fabrication, installation, testing and commissioning processes.

Simply put, a BWC Deckhouse Module provides a number of savings – reducing project duration and minimising costs and risks. As installation processes take place inside a pre-approved housing, off-site testing is enabled. Additionally – since the BWTS is pre-installed – this makes for a far less intrusive final installation when compared to a more standard deckhouse installation project.

The best suited technology for the project will depend on the vessel owner's requirements. As such, the Deckhouse Module designs are suitable for all BWTS technology types, and general arrangements are adaptable to suit ex-rated equipment.

- Port based ballast water treatment

A port based single stage BWTS is an ideal contingency plan for vessels that have failed a port inspection of their onboard BWTS. This port system can be connected to the vessel's ballast water system, allowing the vessel's ballast water to be treated by the port system prior to discharge.

This containerised BWTS can be located on the quayside or alternatively on a workboat or barge that can then be positioned alongside the visiting vessel that has the faulty onboard system.

Support equipment in the form of hoses, pumps and a generator can be supplied alongside the containerised system. This complete package of treatment equipment will keep the vessel's operational delays to a minimum and more importantly keep your port pollution free.





- Our ballast water treatment solutions have been developed from over 30 years of experience in the heavy lift and transportation industry

- Why BWC?

A proven, reliable option

- Cost-effective: We offer cost-effective, efficient solutions on board vessels or in port, to ensure you can effectively treat ballast water, as required by the regulations. Our solutions enable our clients to save money by using mobile containerised systems, deckhouse modules or port based units.
- Expertise: BWC's mobile ballast water treatment solutions have been developed from over 30 years of experience in the heavy lift and transportation industry.
- Quality: We work with a range of high-quality suppliers, ensuring our system is world-leading, effective, and efficient.
- Impartial advice – at BWC we offer impartial advice to vessel owners, who require assistance when it comes to selecting the most suitable ballast water treatment technology for their vessel.
- Global: We are global in our focus, with clients and suppliers from across the world

A focus on quality

BWC operates under the DNV GL certified Malin Group QAHSE system, which is in compliance with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018. This comprehensive quality system ensures that our company can deliver all project deliverables with a high level of efficiency and quality, and in line with all applicable legislative requirements.

Our robust QAHSE system ensures all work is carried out safely, in a controlled and logical manner – which has been the key to our Group's success across a variety of projects.

Respected suppliers

BWC's systems are powered by a range of respected suppliers of reputable technologies.

