

If it's not on the manifest,
it won't make it to port.



De Nora BALPURE[®] systems for aquatic invasive species.



Ballast water treatment made easy.

Aquatic invasive species transferred via ballast water to non-native waters are a scourge throughout the maritime world. To address this problem, the International Maritime Organisation (IMO) is expected to confirm the ratification of the Ballast Water Management Convention, with the possibility of even tighter regulations under consideration.

Leveraging the world's most advanced electrolytic disinfection technology, Type-Approved De Nora BALPURE® ballast water treatment systems are the preferred method for ballast water treatment in LNG/LPG carriers, crude, product and chemical tankers as well as bulk carriers.

Easy to Install.

Modular design for optimized footprints to fit new builds and retrofits. De Nora BALPURE® modular systems operate in low salinity and low temperature water.

Easy to Place.

All key mechanical equipment can be placed in safe areas.

Easy Compliance.

De Nora BALPURE® systems meet global treatment standards including Type-Approval, AMS and is underway with United States Coast Guard process.

Easy To Treat.

Disinfectant is generated from a 1% slip stream, so installation into the main ballast line is not required.

Easy on Equipment.

Disinfectant will not impact the life expectancy of ballast tank coatings or ballast instrumentation.

Easy to Operate.

Fully-automated process with minimal routine maintenance required.

Easy to Maintain.

Self-cleaning electrodes maximize lifespan and minimize maintenance requirements.

Easy to Operate Safely.

Disinfectant is generated in-situ and on-demand, requiring no hazardous chemical storage or handling.

Easy to Support.

Global network of service specialists and facilities to handle training, operation, maintenance, service and parts questions.



De Nora BALPURE® systems enable new and existing ships to easily, safely and effectively comply with international standards, including the soon-to-be ratified IMO BWM convention.



Certified across the seven seas.

De Nora Water Technologies believes AIS compliance must address the most salient concerns of ship owners. These core issues drove the development of De Nora BALPURE® ballast water treatment systems.

- **Safe.**
- **Reliable.**
- **Accommodate new and retrofit applications.**
- **Comply with international standards.**
- **Aftersales support.**

De Nora BALPURE® systems are safe.

All hypochlorite is created in-situ with no need to handle dangerous chemicals and is approved for use on ships transporting hazardous cargo.

De Nora BALPURE® systems are proven.

More than two thousand installations around the globe rely upon the same electrolytic technology.

De Nora BALPURE® systems are universal.

The modular skid-mount design allows for easy installation into new ship builds or convenient retrofit applications on existing ships.

De Nora BALPURE® systems work.

Type-Approved De Nora BALPURE® ballast water treatment systems meet standards globally, including those set forth by the International Organization for Standards, the Alternate Management System and the International Maritime Organization. Certification with the United States Coast Guard is ongoing, with major third party testing underway.

De Nora BALPURE® systems are supported.

Customers benefit from deep aftersales support when it comes to questions about installation and use. De Nora BALPURE® systems replacement and service parts are readily available. Additionally, De Nora BALPURE® ballast water treatment systems are backed by an industry leading warranty.

Easy compliance for retrofits through modular designs.

Many older ships have earned their stripes with decades of reliable service. But new regulations will make these vessels non-compliant for shipping. A simple, fast and affordable retrofit with De Nora BALPURE® ballast water treatment systems will ensure compliance with the IMO Ballast Water Treatment Convention.

Your water treatment expert.

When it comes to water, De Nora Water Technologies is second to no one. We are recognized as the innovator and technology leader in on-shore and off-shore electrochemical disinfection. Our portfolio is flush with more than two-thousand seawater installations globally and some ninety plus years of insights. De Nora revolutionized the field of electrodes and hypochlorite creation, opening new doors and applications.

De Nora BALPURE® systems are modular.

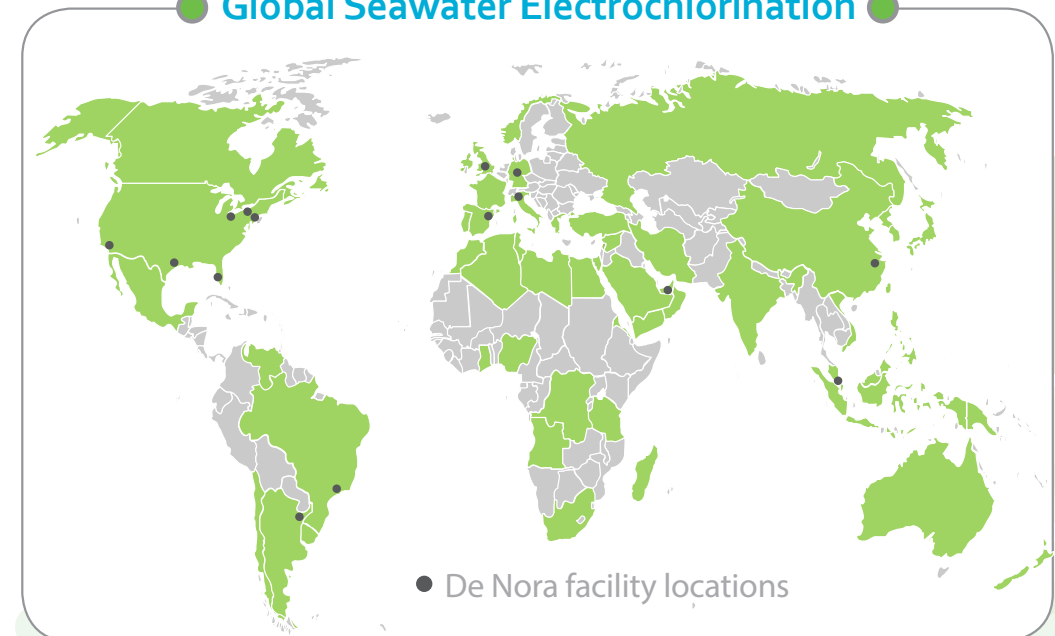
- Modular, skid-mount components.
- Flexible/adaptable installation configuration reduces installation time and cost.
- Safe for operation in hazardous areas.

De Nora BALPURE® systems are future effective.

- IMO, IMS and ISO certified.
- Type-Approved.
- USCG testing is underway.

Our research and development centers continue the work, constantly refining, improving and ever evolving how our products work, and how we can apply our leading electrode technology. From our newest manufacturing plant in China to Brazil, India to the US, Singapore, United Arab Emirates and beyond, De Nora facilities are around the world to build, ship, install or support post-sale as needed.

● Global Seawater Electrochlorination ●



Building confidence among ship builders.

For shipyards, ballast water treatment systems must possess three key attributes to be considered for new ship construction.

- *It has to work.*
- *It has to be easy to install.*
- *It has to be on time.*

De Nora BALPURE® ballast water treatment systems deliver on all three builder needs, plus many more.

De Nora BALPURE® systems comply.

Meets or exceeds regulations set forth by multiple regulatory bodies, including the International Organization for Standardization, Alternate Management System and International Maritime Organization. Testing is underway to prove compliance with the United States Coast Guard standards.

De Nora BALPURE® systems are easy.

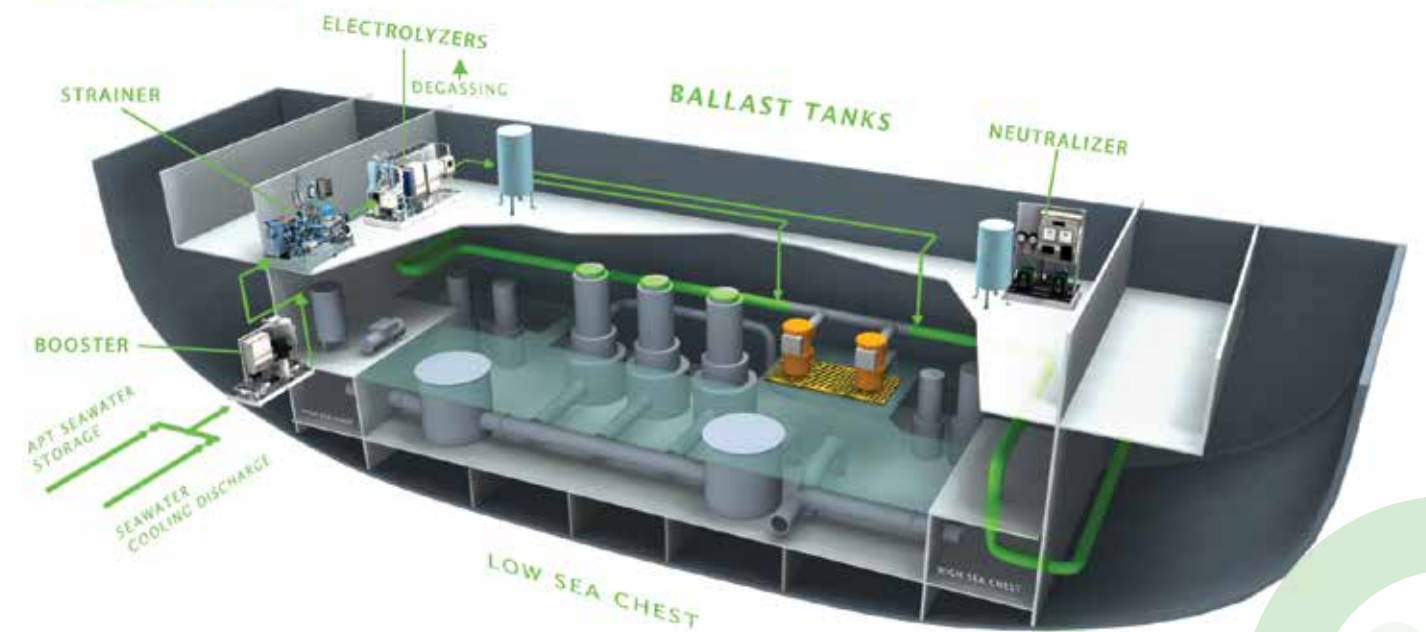
Designed upon skid mounts, the modular De Nora BALPURE® ballast water treatment systems are flexible to accommodate most ship layouts. Nearly every component can be placed wherever the architect prefers.

De Nora BALPURE® systems deliver.

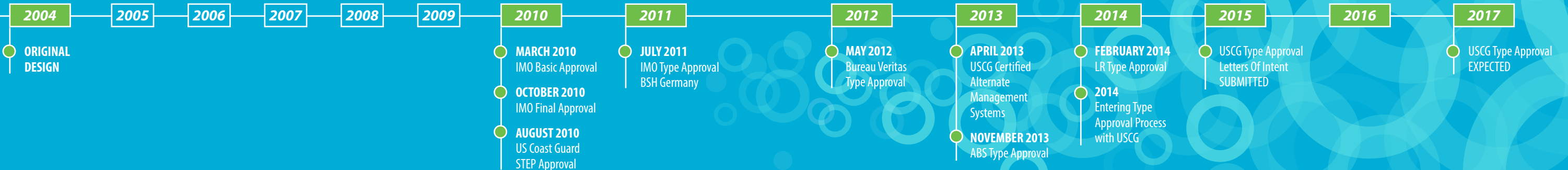
Ship builders can't accept delays in delivery. With facilities strategically positioned around the world, De Nora is well equipped to meet ship builder's needs.



BALLASTING



BALPURE® SYSTEM APPROVAL TIMELINE



Saving our best trait for after the sale.

A great product is nothing without a great support team. It's the assistance you encounter after a sale that distinguishes good products from the truly great.

To provide customers with a premium customer experience, De Nora Water Technologies has segmented the after sale support program into four areas.

Technical service and user training.

On- or off-shore, anywhere in the world, De Nora Water Technologies factory-trained technicians train to properly use and maintain your products.

Spare Parts and Consumables.

Supplied directly from De Nora Water Technologies and guaranteed to be produced to the original specifications and tolerances for exact form, fit and function.

Upgrades & Retrofits.

De Nora Water Technologies will guide you through the process of bringing your ship up to current specifications.

Asset Management and Solutions.

De Nora Water Technologies can help to assess the performance of your equipment in respect to your current and future throughput/capacity or quality goals.



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