SAFE (DRINKING) WATER ON BOARD

WATER, ESSENTIAL FOR ALL LIFE
PRODUCING YOUR WATER
TRANSPORTING YOUR WATER
KEEPING YOUR STAFF HEALTHY
INCREASING YOUR KNOWLEDGE
ONE STOP WATER SHOP
YOUR WATER WORLDWIDE
YOUR BENEFITS...

HATENBOER - WATER
Water for your health
Good and safe drinking water is essential on board. You can find an up-to-date and sophisticated range of products, engineered systems and services at Hatenboer-Water, specialist in providing maritime (potable) water since 1906.

You can rely on us providing safe and reliable (potable) water on board, from production to consumption.

With our specialist expertise, our own engineering and design and a modern operating environment, Hatenboer-Water supplies cut-and-dried solutions for all your water-related challenges.

From the supply of a standard product such as a pump or filter, right up to fully integrated custom-made systems, with all necessary worldwide after-sales service.
Reverse osmosis desalination systems

For your reliable potable water production on board our Demitec RO seawater desalination systems are available in a wide range of capacities.

Your maritime demands and conditions are met in a proven heavy duty design. Your system is designed according to our Hatenboer-Water standards, based on our more than hundred years of experience.

Hundreds of Demitec RO seawater desalination systems are operational on ships & offshore installations worldwide.
**Reverse osmosis**
For the production of your water on board, reverse osmosis has proven to be one of the best technologies available. A reverse osmosis water maker produces good quality product water which requires limited post treatment. Maintenance can, after a good training by a professional engineer, be performed by local staff.

**Demitec water maker**
Why choose for Hatenboer-Water Demitec reverse osmosis?

Your advantages of a Demitec installation:
- Minimal down time and always reliable water.
- Designed for your application.
- (Drinking) water in all conditions.
- Minimal operation time for your engineers.
- Always the required amount of water.
- Worldwide delivery and service.

**Heavy duty offshore design**
In order to guarantee a continuous and good water supply the Demitec systems are designed according to heavy duty offshore operation. This means:
- Heating feed water (optional)
- Large pre-treatment by sand filtration
- Large safety filter
- Solid high-pressure plunger pump
- Anti Scalant dosing unit
- Large membrane surface
- CIP (Cleaning In Place) tank
**TRANSPORTING YOUR WATER**

**Hot and cold water modules**
Plug and play modules ensure a reliable and safe potable water supply. You save costs and time during installation on board, because the units are completely preassembled and fully skid built.

**Skid equipment**
Each skid is assembled according to your specification, containing a mix of hydrophore vessels, pump units, disinfection equipment and hot water calorifiers.

**Hydrophore units**
Hydrophore units provide your water on all decks with the required pressure.

The hydrophore units can be provided with normal or self priming hydrophore pumps in cast iron, bronze or stainless steel. Standard or diaphragm hydrophore vessels in galvanized steel or stainless steel.

Hatenboer-Water is maritime dealer for Grundfos pumps.

**Calorifiers**
For the provision of hot water on board, your module can be equipped with a calorifier. The capacity of the calorifier is based on the size of your crew and type of heating is based on the available source on your vessel or rig. You can order vessels with volumes from 30 - 6,000 ltr, in stainless steel or copper lined steel execution, including Rockwool insulation. The heating can be based on the supply of steam, hot water, thermal oil or electricity. The calorifier can be certified by all major classification authorities.
Keep your water healthy
You can find a wide range of disinfectants at Hatenboer-Water. Each disinfectant has its own specifications. Please ask one of our advisors to determine what disinfection technology suites your application best. Three of the most effective maritime disinfectants are:

**Hadex**
Hadex is a safe, effective and easily applied product, especially intended for disinfecting drinking water in tanks and pipelines.

Drinking water once treated with Hadex remains fit for consumption. Hadex starts disinfecting immediately, and the water is ready for consumption after a short period of only 30 minutes.

Hadex has been tested and approved by a number of (maritime) authorities in the Netherlands and abroad. Hadex has been approved by amongst others the Dutch Ministry of Health (CTGB registration No. 9574 N), the Dutch Directorate General for Shipping and Maritime Affairs - Shipping Inspecton Division NSI (NL), DOT (UK), NMD (Norway), GL (Germany) and NATO.

**Ultra Violet (UV) disinfection**
UV-C light kills bacteria and virusus. Hatenboer-Water manufactures its own Demitec-UV system. Your drinking water passes a stainless steel AISI 316 chamber with UV lamps. The UV light disinfects the water, making it save to use. The Demitec-UV systems are specially designed for maritime application, based on more than 20 years of experience. To ensure that your water is safe to use, several options are available. The UV chamber, can be equipped with a manual or automatic wiping mechanism, UV monitoring system, automatic shut-off valve, mounting brackets, temperature control and maximum flow control. If you require an UV system approved by the strict Norwegian regulation by NIPH, the Demitec Maritime PhiLine UV is the solution.
**Copper-silver ionisation**
Compared to Hadex, copper-silver ionisation provides a slow, long lasting disinfection. For this reason it forms a unique combination with Hadex. Copper-silver ionisation has proven to be an effective technology for Legionella control in hospitals and nursery homes. Now it has found its way into the complex and often highly contaminated piping systems of offshore locations. The flow-controlled dosing ensures the accurate concentrations of ions penetrate the biofilm and prevents the growth of bacteria and viruses. Copper and silver ions have no effect on taste and odour of the water.

**System design**
Corrosion and biofilm may cause serious health risks and an unsafe environment on board. You are able to prevent issues like corrosion and bacteriological growth by using our expertise in potable water equipment and installation technology.

**Risk Assessment and Management Plan**
Existing systems can be upgraded to a safe system by implementing our Risk Assessment and Management Plan. Risk Management is an essential part of a responsible and modern way of running a business. It increases the safety of man and machine on board and the quality of your potable water system. Every Risk Assessment and Management Plan is tailor-made after a visit on board by one of our qualified drinking water experts.

**Worldwide sampling and analysis**
Having your drinking water samples and analysed Hatenboer-Water provides worldwide sampling, analysis, quality reports and on board audits to assess the chemical, microbiological and physical condition of your water.
**Potable Water Course**

Improve the knowledge of your crew on board about water, water treatment and water management with our professional 2-day Maritime and Offshore Potable Water Course. These trainings are held several times throughout the year at our office in Schiedam, The Netherlands, or at your location upon request.

Please contact us for the training dates of this year.

**Become a water expert**

Your engineers and medic learn all about water treatment and water management on board, leaving them with valuable knowledge on how to maintain a good and healthy water system. Topics like chemistry of water, water maker technology & maintenance, disinfection, sampling and analyses, water management plan and trouble shooting are discussed in the course.
Everything for your water
Hatenboer-Water b.v. is your ‘one stop water shop’ for all your water related questions.

All your water treatment needs under one roof:
- Silver sterilizers.
- Water softeners and mineralizers.
- Filters & filter materials (including activated carbon).
- Hot water calorifiers.
- Point of use water coolers.
- Pumps & dosing equipment.
- Test kits & analysis equipment.
- Fresh, sewage and bilge water sampling and testing.
- Spare parts and consumables on stock in our warehouse.
- Water treatment chemicals.
- Demitec-UV.
- Your ‘water item’....

Maritime diagram
Your water from production to consumption by Hatenboer-Water:
Worldwide services
You enjoy the benefit of the worldwide service of our highly skilled engineers. You can find engineers of Hatenboer-Water all over the world at any given time. Our service engineers supervise on the installation of the equipment, commissioning (HAT, SAT), start up, overhaul (service agreement), emergency visits and training of your local engineers.

Worldwide agents
With all modern technologies of this time, the world get’s smaller every year. Despite that, a local representation is often a way to ensure quick delivery and response times, which can be crucial for your process. Down time is limited to a minimum by selecting a good agent, providing an extensive training by Hatenboer-Water engineers, locally stocking key spare parts and consumables.

Hatenboer-Water agents are located in China (Shanghai, Dalian), Singapore, South Korea (Busan, Seoul), India, Malaysia (Miri, Kuala Lumpur), Australia, Brunei and The Emirates. Please contact us for more information for your local agent.
**Your benefits**

By choosing Hatenboer-Water as the supplier of all your water related equipment and services you benefit from:

- Good water from production to consumption.
- Minimal downtime.
- Easy access to spare parts and consumables.
- World wide service.
- Local, skilled, support.
- Support in all water related questions.
- **You can dedicate your time on your job.**

**Hatenboer-Water**

In short, Hatenboer-Water is:

- In water since 1906.
- More than 70 experienced professionals.
- Strong focus on quality and improvement.
- Highly skilled personnel.
- All disciplines under one roof.
- Fully stocked warehouse.
- World wide services.
- **Your partner in maritime (drinking) water treatment & services.**

**Kronios**

Hatenboer-Water is a member of Kronios. Kronios is a joint venture of 5 companies. Together we provide you a total water solution, including water production, transport, piping, flow control and consumption. You can contact Kronios for all your questions regarding your complete (drinking) water system.

For more information please check the Kronios website: www.kronios.com.