

# Drinking with the wind

Producing pure water using wind energy

'Drinking with the wind' is the new concept of water treatment equipment made by Hatenboer-Water, using sustainable energy sources.

Hatenboer-Water is **highly experienced** in water treatment. 'Drinking with the wind' is the answer to questions from the market.

By using solar power and wind energy there are no running costs for diesel fuel and/or electricity. Except clean water, electricity (48 Vdc / 230 Vac) is also available. This enables the production of **clean (drinking) water** even at remote and inaccessible locations.

Hatenboer-Water uses a unique concept. "Drinking with the wind" has been developed in cooperation with TU Delft. In this venture several concepts have been tested extensively on the island of Curacao.



The windmill generates up to 5 kW

The concept is extremely suited for applications in **development countries**, wind-rich coastal areas, islands and disaster areas. The product water can be used as drinking water, irrigation water and **process water**.



Test installation at TU Delft facilities (along A13)

Member of Hatenboer-Neptunus Holding b.v. In water since 1906



HATENBOER-WATER

The installation is able to **convert brackish or salt water to sweet water**. This is achieved with the aid of reverse osmosis membranes. These membranes not only filter salt from the water but also bacteriological contamination.

The water treatment installation is **very economical** in use. It encompasses an 'energy recovery unit'. This recovers the pressure (approx. 48 bars) from the brine water and reuses it to feed the high pressure pump. This yields an energy saving of approx. 45%.

The installation is **extremely mobile** and easy to transport to any destination. The installation (including windmill) can be set up and dismantled rapidly for optimum flexibility. The construction and the container delivery increase the durability even further.



Installation example in a 20' container



Seawater resistant materials

### Technical specifications

Feed water	: (sea) water (salt up to 35 g/l);
Capacity	: up to 7,000 liters / day;
Windmill capacity	: up to 5 kW;
Solar cells	: 4 m <sup>2</sup> , to be mounted on top of the container;
High pressure pump	: Danfoss (energy recovery);
Energy consumption	: 1.2 kW;
Pre-filtration	: sand filter and absolute cartridge filters;
Scope of supply	: disinfection unit for product water product tank and storage tank feed water pump container

Hatenboer-Water b.v.  
Mercuriusweg 8  
3113 AR Schiedam

P.O. Box 6013  
3002 AA Rotterdam  
The Netherlands

Phone: +31(0)10-4091200  
Fax: +31(0)10-4091210  
info@hatenboer-water.com  
www.hatenboer-water.com



**HATENBOER - WATER**

Want to know more about our products? Contact us! Also visit our web sites [www.drinkingwiththewind.com](http://www.drinkingwiththewind.com) and [www.hatenboer-water.com](http://www.hatenboer-water.com).