



Drinking With the Wind

Wind RO in short

Windy tropical island and coastal areas often have a problem in providing good quality drinking water. The ground water is saline and a reliable source of electricity to power water plants is often not available.

AAWS is solving this the problem with the introduction of a compact, mobile Drinking With the Wind. We use a combination of state of the art solar- and wind to power a Reverse Osmosis plant that is capable of desalinating even the saltiest seawater.

The techniques applied are all tested and proven. The price of the produced water is low and the system is durable. The impact on the environmental is minimal.



Water Production

The Wind RO system can produce up to 7.000 liters of drinking water per day dependant on the salinity of the water intake.

Target Groups

On island ridges, along coastal areas and in windy tropical climates the DTWT is best used to facilitate:

1. Communities, hospitals and schools ;
2. Hotel and Eco-lodges;
3. In Emergency & aid situations.

How the system works

The DTWT is based on high quality membrane technology to desalination salt/brackish water. These membrane are also used to remove possible microbiological impurities in the water. The pumping of the water through these membranes is done using a high pressure pump in combination with an energy recovery unit. This unit reduced the energy consumption of the system with up to 40% compared to conventional systems. The energy is provided solar panels and by a small wind turbine.

Mobile system easy to install

The complete installation, including the wind turbine is delivered in a small 8ft container. This container can be easily transported and is quickly installed. The construction of the system is professional, sturdy and sustainable

Usage and limitations

The DWTW is designed for windy regions around the world. For proper usage, the wind velocities should be 3 m/s or higher (gale force 2-3). During severe storms (25 m/s and higher) the system will automatically shut down preventing damage to occur. In case of a irregular wind and sun patterns, the system can be also installed in combination with a small generator.



System components

The Wind RO consists of the following components:

- Automatic disinfection unit for production of water
- Working wind turbine
- Solar panels
- Product and storage tanks
- Batteries
- Feed pump
- Coated steel 8 ft container

Technology guaranteed

The DWTW is engineered by the Dutch firm by Hatendoer Water, specialized in a production of a broad range of RO systems. The wind turbine is maintenance free, and is having an average lifetime of 20 years. The solar panels are of a high quality and come with a 15 year guarantee .

The DWTW has been intensively tested both in The Netherlands and the Dutch Antilles.

Technical specifications

Feed water : brackish or sea water (salinity up to 35.000 mg/l TdS)

Capacity : up to 7.000 liters per day (using sea water)

Capacity Wind turbine : up to 5 KW

High pressure pump : Including Energy Recovery Unit

Energy use : ca 2,5 KW

Pre-filtration : multi media filter and absolute candle filters

Solar Cells : optional (2,5 to 5 m2, to be folded out on top of the container)

Generator set : optional (diesel or biogas/fuel)

Interested?

For specific quotations, please contact us at the address below:

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