AN INNOVATIVE SOLAR SOLUTION FOR STAND ALONE DESALINATION

in the world, a system that offers the possibility to desalinate seawater via reverse osmosis only with solar photovoltaic energy, without storage battery and no diesel generator.





The innovative process developed by WATERCLEAN- allows the automatic coupling of a flexible reverse osmosis unit with a variable solar power, while optimizing and controlling:

- Membranes lifetime settings
- Energy consumption Variations of pressure/flow/salinity of permeate

La Micro Potable

Le cœur du traitement d'eau par filtration de la Mini Potable.

Une production d'eau potable en condensé mais un équipement toujours aussi fiable et robuste. Débit : 1,3 m³/h (débit supérieur possible). Son poids de 125 kg la rend aisément transportable (4x4, pirogue, etc...)

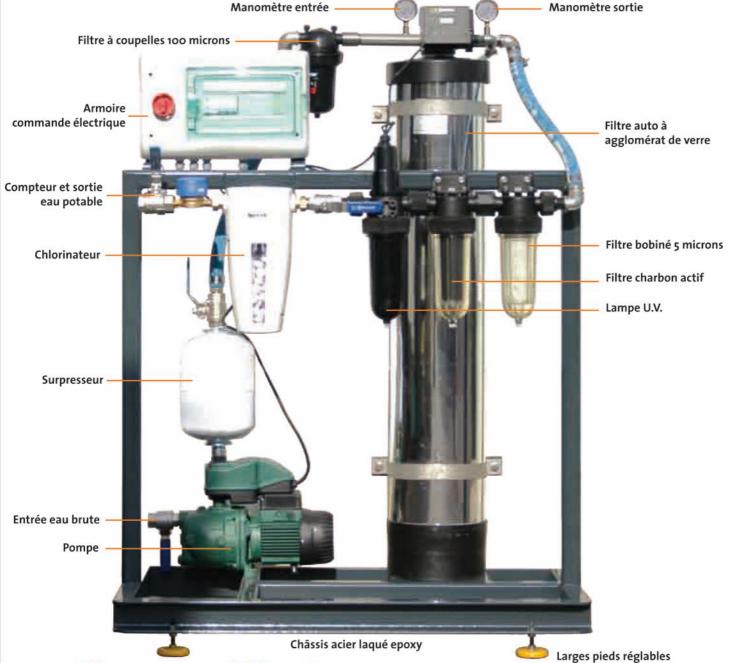
L'énergie doit être fournie par une source extérieure : groupe électrogène, secteur 220 V, batteries, solaire ou éolienne.

The heart of the Mini Potable water treatment filtration

A drinking water production in a condensed but still reliable and robust equipment. Capacities up to 1.3 m3/hr. Its weight of 125 kg makes it easily transportable (4WD, canoe, etc ...). Power must be supplied by an external source : generator, 240 volts network, battery, solar panels or wind power.



Dimensions hors tout: Largeur 1,20 m x Hauteur 1,70 m x Profondeur 0,70 m



The purposes of this units are:

- Flexible mobile water treatment systems with containers,
- Powered with renewable energy solutions (photovoltaic/wind),
- Guaranteed water quality able to adjust itself readily to raw or sea water
- Specificaly designed for developing countries.

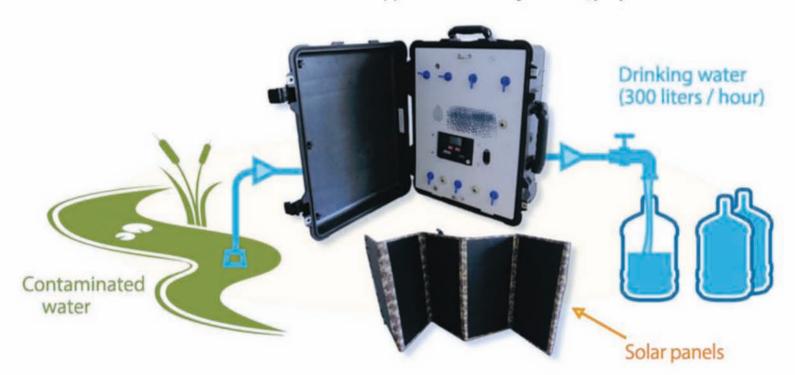
Self-sufficient compact unit:

Renewable energy is clean, affordable, domestic and effectively infinite. Reliable source of electricity stored in batteries included in the system.

The water purification systems

these products are treating and purifying polluted freshwater of any source: wells, ponds, rivers, lakes. These systems collect the water on the surface, make it pass through different filters that remove the bacteria, viruses, amoebas or parasites responsible for diseases such as cholera, hepatitis, gastroenteritis, polio ... The use of filtration membranes ensures a clean water whatever the conditions of hygiene. The system is self-powered with **photovoltaic solar panels** to provide electrical power to the pump.

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TECHNICAL FEATURES

Flow rate	Up to 300 liters per hour
Daily use	8 à 10 hours
Solar panel	130 Wc
Weight	23 kgs
Size	550 x 450 x 270 mm

GENERAL CHARACTERISTICS

- Use two ultrafiltration membranes and a carbon filter, certified NSF-ANSI, which filter bacteria and viruses
- · Conservation of mineral salts
- Complying with the OMS specification for drinkable water
- Integrated in a solid suitcase (NATO specifications)



A compact and modular waste water treatment plant for urban waste water treatment, for remote camps, for tourism areas and hotels, for barracks.

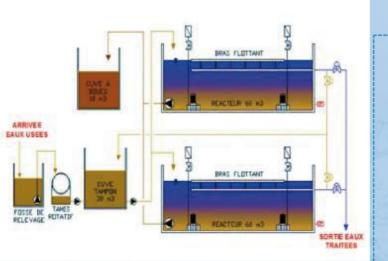
permits to reach high levels of requests for an urban waste water with outlet water to the river (European Standards)



The is a biological treatment as the SBR (Sequencing Biological Reactor), adapted for a capacity from 250 to 5000 IE.

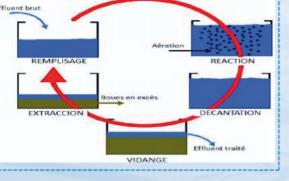
The activated sludge and the extraction are successively operating in the same tank, which the conception is like a maritime container.

consists of the association of one or several aerobic reactors in parallel according the the dimension of the waste water plant desired.



ADVANTAGES

- > Compact: from 15 m2/IE
- > Autonomous and modular units
- > Economical system with the facility of running and the low cost of purchase
- > Fast erection and starting-up: the units containers are ready to be used
- > Quiet equipment: the electromechanicals equipment are submerged
- > Odorless: the aerated biomass and the reactors are redundant
- > Low power installed: 30 Wh/IE



The complete cycle process of treatment including:

- > Filling with waste water
- > Biological treatment by aerated biomass
- > Settling of the sludge
- > Racking
- > Extraction of the excess sludge to a sludge drying or a sludge storage.

Two Units are available: the OB20 and the OB40. They answer to the standards UN for containers 20 and 40 feet and they are easily transportable. Each Oxybatch® unit is autonomous.

It contains:

- > Pumping station
- > Air pumps
- > Electric cabinet with a control/ diagnostic screen
- > Kit of connecting pipes

In option, a sludge treatment kit through plant filtration unit. Foresee a minimum of 75m2 for a 0B20 and 150m2 for 0B40. Without interruption of running, the capacity of the installation can grows up with adding another unit.

In option



OUR REFERENCES



