

Unlimited Water and Energy the way of making potable water from any water

Potable water is affected by two common problems:

A -Veterinary drugs and feed additives excreted on the soil by pets are contaminating the soil, surface waters and then the groundwater.

B -On the human side, agricultural industries disperse fungicides, herbicides, pesticides, and millions of people use Antibiotics, Hormones, Oxycontin, Prozac, Statins, as well as many other pharmaceutical products, psychotropic drugs.

Humans wildly disperse them on the soil or deposit in their toilets the unmetabolized portions of these ingested drugs. All this causes elevated levels of pharmaceuticals in the water cycle (surface water, groundwater, wastewater effluent, and drinking water.

The reverse-osmosis filtration process renders a „toilet water to tap water“ drinkable but does not „deactivate“ nor filter out all the pharmaceutical residues contained. However, the filtration system must filter out all these toxins, and it can't. This is an inconvenient truth.

“Aladin” the water vacuum distill unit removing all, Tritium and radionuclide also:

Here is our drinking water maker out of dirt-water or saltwater. This type of machine (a fully maintainable tritium and radionuclide removal vacuum water distiller) uses <60Wh/L of electricity and it **delivers 0.3m³ (300L) up to 5m³ (5000L) of drinkable water per day**. You will never experience a water shortage, no matter what kind of water-usage habits you might have.

Low temperature vacuum water distillation ultimately removes all pharmaceuticals, radionuclide, radioisotope tritium, nitrate and **microplastic** content from the water. In our case, we add natural Dolomia (Calcium Magnesium Carbonate (MgCa (CO₃)₂), as filtering powder allowing us to balance water and its wonderful taste at your will in concentration from 25 up to 50mg/L of Calcium and Magnesium Carbonate. We strongly suggest using our steel pipes coated with Vortexed Supercement. The unit requires modest filtration costs and simple maintenance once a year.

We store the purified water in multiple, EU-pallet size 1050L Vortexed Supercement tanks. Supercement is ideal for storing water. The tanks are made out of Super cement and are insulated with Supercement foam with a Lambda of 0.0348 W/mK at room temperature. Water is stored @+5°C inside the Supercement tanks under permanent C-UV's confinement. (Pls see our document [Vortexed Supercement](#))

(pls read our document White Paper [The Nightmare of making healthy, storing and piping Pure, Potable, Soft-Water](#))

A reversible solar heat-pump is delivering cold to water as +5°C storage for cold drinkable water and air conditioning cold water also. Water is available to you across the whole building as drinking water, sanitary water or as warm or cold water to remote-

controlled fan coils or ceilings passive capillary-pipes acting as air-conditioners and/or heaters.

Technical specifications to the vacuum distiller “Aladin”:

- any water input
- water declustering vortex-magneto-static on the input
- filter removing 1mm to 10µm particulate
- connector sized 3/4” to and from the vacuum distiller
- connector sized 1” to and from the Supercement tank
- solar heat-pump inverter-driven 700-1500W
- el. power consumption $\lt;60\text{Wh/L}$ to the water vacuum distiller 0.3-5m³ /day
- filter in Dolomia (MgCa(CO₃)₂) 25-50mg/L
- UV-C 100-280nm 24h system
- Supercement 1050L +5°C water tank size 690(D)x1200(L)x1950(H)mm as +5°C storage for cold drinkable water and air conditioning cold water also
- Supercement 250L +45°C stackable water tank size 690(D)x1200(L)x600(H)mm domestic warm water
- Supercement 125L +5°C water tank size 690(D)x1200(L)x400(H)mm for cold drinkable water
- overall size to the water vacuum distiller unit **0.3m³/day (300L)**
600(D)x500(L)x1800(H)mm
- overall size to the water vacuum distiller unit **1m³/day (1'000L)**
1200(D) x 1700(L) x 1800(H)mm.



Optional:

- Supercement tank size and quantity;
- All pipes to your home are Supercement coated: send us the 100:1 CAD file + pics to the path and we will cut and send you the steel pipes and bends coated to the inside and outside with Vortexed Supercement;
- Any type of crystals can be adopted in water conditioning.

NB:

As the first source of energy, to power the vacuum distiller, we use the sun as a daytime operation:

- we collect the sun via SunPower-water-cooled fully maintainable solar cells sets to generate electricity available to you, to your e-car and your e-bike;
- we concentrate the sun in our Archimédes a solar mirror focal concentration system up to 350 ° C.

As a second energy source and choice, we adopt our methane cogenerator delivering 20KW electric and 45KW thermal or 24KW cold water +5°C (pls see our document [Green electrical Cogeneration](#) which adopts Archimédes as the solar source and contains several pictures to Archimédes's mirrors put in place)

As a third energy source and choice, (24/7) we adopt the local electricity supply.

“μ-Cat-HTR“ Your clean water maker in the garden house on the lake

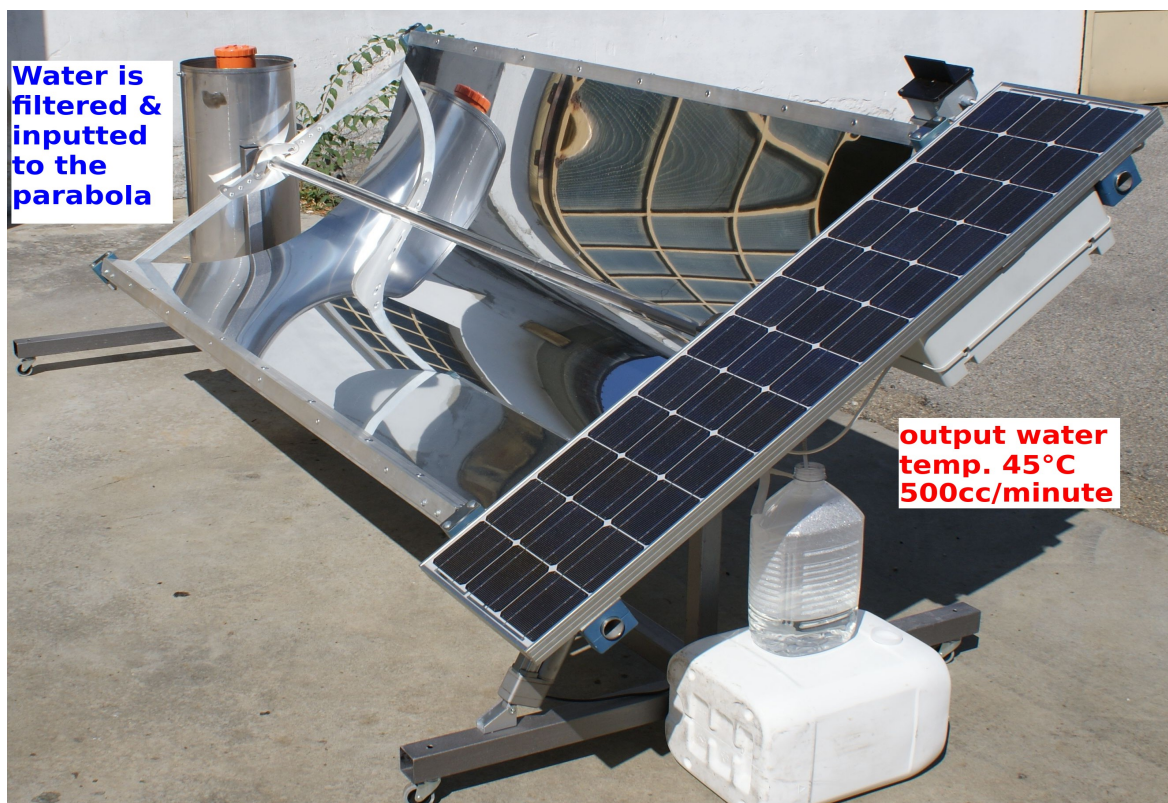
As can be seen in the photo below, it is also possible to have a MODULAR smaller water sterilizer and [μCat-HTR](#) molecules cracking unit @+145°C, inactivating poisonous chemicals (Fungicides, Herbicides, Hormones, Pharmaceuticals, Phytopharmaceuticals, Psychopharmaceuticals, using water and the sun, while processing taken well's, river or lake sweet water (**200 liters/day operation during 7 sun hours**) to **clean water**, therefore using a fraction of the Archimédes technology and of the electrical power needed.

Organic molecules are inactivated because water under high pressure and temperature uses largely available Oxygen and Hydrogen to chaotically bond to the radicals originated by hydrothermal-shredding organic molecules. You will filter out particulate in suspension, micro-plastic and nitrate only. Radionuclides can not be removed.

Technical specifications to the sterilizing, μ-Cat-HTR molecules cracking clean water unit:

- well, river or lake dirty water input
- manually or automatic charging 50L reservoir
- water declustering by vortex-magneto-static on the input
- multilayer active filter removing 1mm to 50μm particulate
- 5 μm-particulate filter
- nitrates filter (optional)
- water sterilizer and μ-Cat-HTR all organic molecules shredder unit @+145°C
- water output @+45°C

- water declustering by vortex-magneto-static on the output
- any type of crystals can be adopted in the water conditioning filter
- the mirror is 2m long and 1m wide 80cm tall
- the system weights 70Kg
- electronic sun-tracking of the mirror on an axis
- 250-400Wp SunPower solar panel 12Vdc
- 150W watercooler @+5°C
- 25W system pumps
- connector sized 1" to and from the Supercement tank
- Supercement 125L +45°C stackable water tank size 690(D)x1200(L)x400(H)mm
- Supercement 125L +5°C stackable water tank size 690(D)x1200(L)x400(H)mm
- UV-C 100-280nm 24h system
- **200 liters/day operation during 7 sun hours**



NB: No nitrates absorption. Nitrates absorption needs an extra apparatus.

Optional:

- Nitrates adsorption unit
- Vortexed Supercement water-tank size and quantity
- Any type of crystals can be adopted in water conditioning.

Your Swiss Team
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