DRINK BETTER! BRING EVERY DAY NATURE INTO YOUR GLASS OF WATER !

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COMPARATIVE TABLE OF DIFFERENT WATER TREATMENTS

Comparative types of water		Chlorine	Pollutants	Minerals	Sodium	Limescale treatment	Heavy metals	Structure (molecules)	Energy (photons)
	**Filtered & Dynamized** water	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
	**Bottled** water	🟢	🟠	🟠	🟢	🔴	🟢	🟠	🟠
	**Tap** water	🔴	🟠	🟢	🟢	🟠	🟠	🟠	🟠
	**Softened** water	🔴	🔴	🟠	🔴	🟢	🔴	🟠	🟠
	**Osmosis** water	🟢	🟢	🔴	🟢	🔴	🟢	🔴	🔴

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THE BENEFITS OF FILTERED & DYNAMIZED WATER

Water with a **pure, soft and round taste** for the whole family

Water :

- **More Energy**

- **More Hydrating**

- **Less Oxidized**

Water for **the whole house, at all taps, for all baths, showers**

An **ecological solution, no more need for plastic bottles or water softener**

FILTER: THE BIOFILTER

BIOFILTER : THE PRINCIPLE = ACTIVE CARBON FILTRATION

- **Exclusive Bio Pro filtration cartridge (pale blue tip)!**
- **Filtration by adsorption** : **activated carbon, mixed with hollow fibers in which there is ionized silver. This combination will remove most of the pollutants that would still be present in city water** (i.e. *chlorine, bad tastes and odours, pipe corrosion, bacteria, organic pesticides, heavy metals*...) while **preserving minerals** (what a *reverse osmosis* unit does not do!).
- **Minerals** are also essential for our **health**, in particular because they contain **trace elements** (which are fully metabolized), but also **calcium** and **magnesium** which represent between **20% and 50% of the Recommended Nutritional Intake** of these minerals for a person (depending on the mineral content of the water and the age of the people concerned). These minerals have a beneficial role in particular for hypertension, cardiovascular accidents, cancers, fatigue, diabetes, coronary insufficiencies, osteoporosis…

- Inorganic minerals, including **limestone** (**80%** of minerals), are therefore not retained by the filter like a softener would do, but it will be **restructured** by the Biodynamizer in order to render them **harmless** (it will transform the crystalline structure of calcite in aragonite, a white pulverized powder which does not become encrusted and is easily evacuated).

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TECHNICAL CHARACTERISTICS OF THE BIOFILTER

- **Connection after the cold water meter (max 38°C)**
- **Filtration capacity: 150m3 (150,000 L)** and max 1 year, i.e. good performance for 1 family, in 1 house, for 1 year
- **Flow rate:** 1.5 m3/hour (or 25 L/min)
- **Max pressure:** 6.5 bars
- **Housing:** Polypropylene reinforced with glass Fiber (PP GF 10)
- **Legal guarantee (2 years)**
- **Connections:** 3/4 inch
- **Dimensions:**
  - Height: 606 mm x Diameter: 225 mm
  - Weight: Housing: 3.4 Kg + Bio Pro Cartridge: 3.5 Kg = 6.9 kg
- **Sanitary Compliance Certificate awarded by the Carso laboratory: n° 21 ACC LY 990**
- **Material conformity certifications according to European regulations:**

  (EC) 1935/2004 & (EC) 1907/2006 (REACH) & (EC) 2023/2006 & (EC) 10/2011

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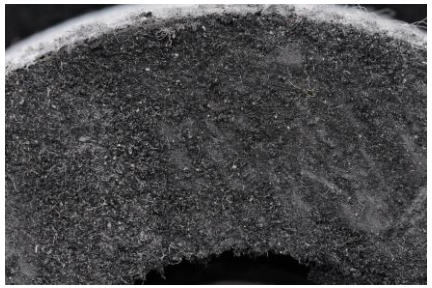
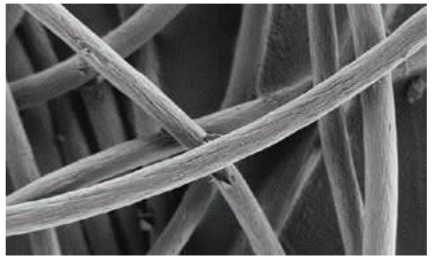
BIOFILTER : HIGH PERFORMANCE TRIPLE FILTRATION TECHNOLOGY

- **PreFiltration 1: Pre-filtration**: ***Spunbond*** (polypropylene tissue whose filaments are thermally welded) **mixed with hollow fiber**. Sediment filter which retains particles of iron, sand, mud, neutralizes the development of germs, bacteria etc ... and protects the activated carbon block



- **Filtration 2: the Carbon Fiber Block** (patent no. 2282494) is composed of **activated carbon in sintered granules** (compressed at high temperature which allows a **porosity of 20 µm**) **mixed with hollow fibers.** Activated carbon is obtained after calcination of **coconut shells** (increases the number of micropores) by injection of pressurized hot water vapor (activation of the carbon by different temperature levels of 900°C-1,000°C for several hours; activated carbon is regenerated by **oxidation.** Chemical filtration of chlorine, nitrates, nitrites, organic pesticides and herbicides, tastes and odors
  - **physically retains pollutants (µg/L) in its porous structure** up to diameters of **5 µm microns** (physical filtration of heavy metals: lead, aluminum, bacteria, arsenic and parasites) ; (patent n° 2429067)



- **Filtration 3: Hollow fiber** (patents n° 20704036 & US n° 6514413) ; fiber with a fiber diameter of **10 µm**, mixed with activated carbon. This fiber resembles the roots of a tree which bind the granules of activated carbon into a dense structure. Its function is threefold, it:
  - allows for **good distribution of water over the entire surface of the activated carbon** (this avoids preferential water channels) which **increases its adsorption surface**
  - incorporates in its structure **ionized silver** which is **bactericidal** (neutralizes microorganisms, antibiotics, drugs etc…), the silver is therefore not mixed with the activated carbon but retained in the microfiber ; (patent n° 2172720)

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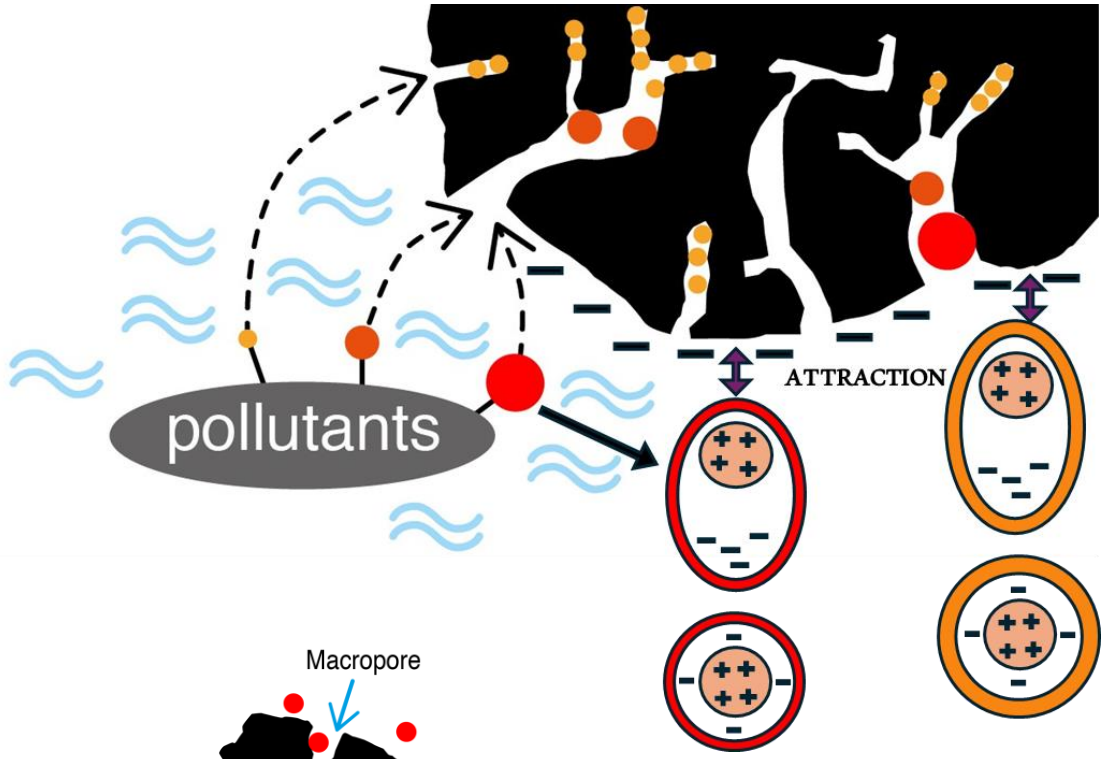
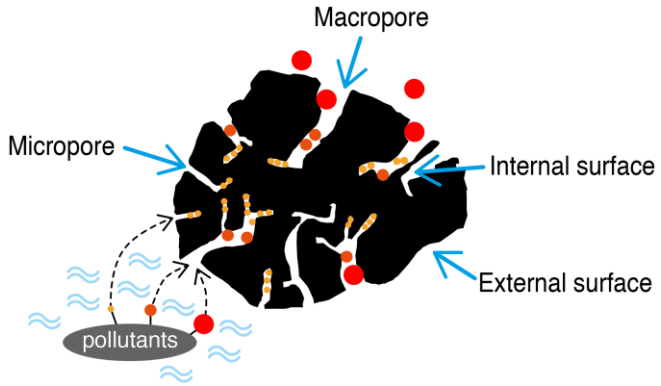
ACTIVATED CARBON FILTRATION PRINCIPLE = ADSORPTION SURFACE

Activated carbon, the **principle**

- **Electro-adsorption**
  - The pollutants (their electropositive parts) will be "***Attracted***", by **potential difference**, by the electronegative surface of the activated carbon (the carbon has available electrons on its surface which will attract the electropositive parts of the polluting molecules = **Van Der Waals forces**: intermolecular bond forces due to low intensity electrical interactions = **electrostatic attraction forces**)
- **Physical adsorption**
  - Activated carbon will also "***Retain***" **non-soluble pollutants** (hydrophobic), i.e. non-polarized or weakly polarized pollutants, in its **porous structure (external and internal).** This is made up of micropores (millions of empty microscopic alveoli) whose size is between **2 nm and 50 nm** in diameter. **The more micropores there are, the more empty spaces there are that can fix pollutants and the greater the adsorption surface.**





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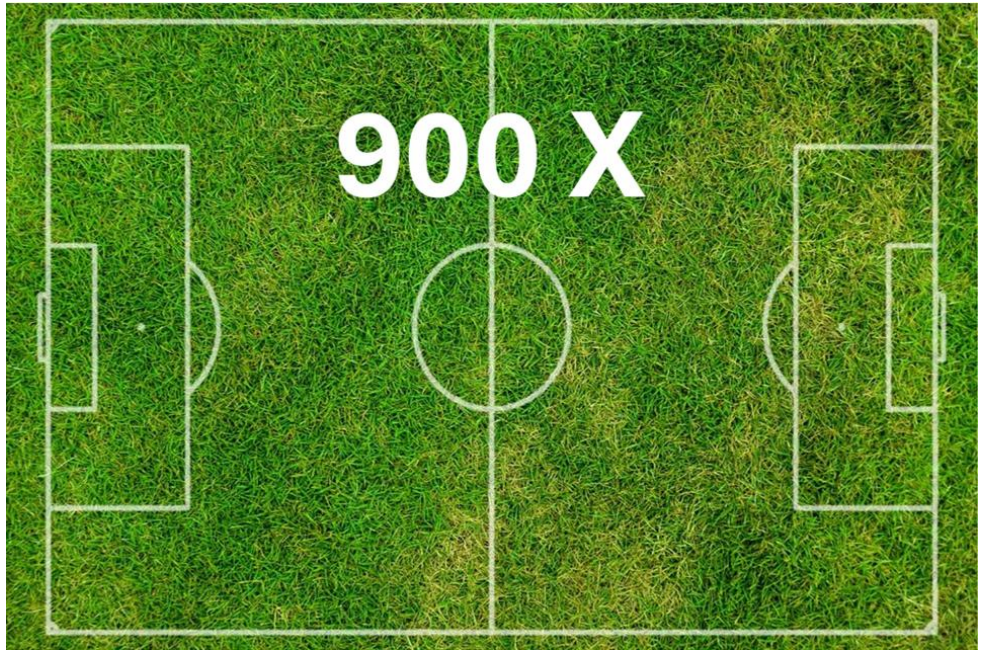
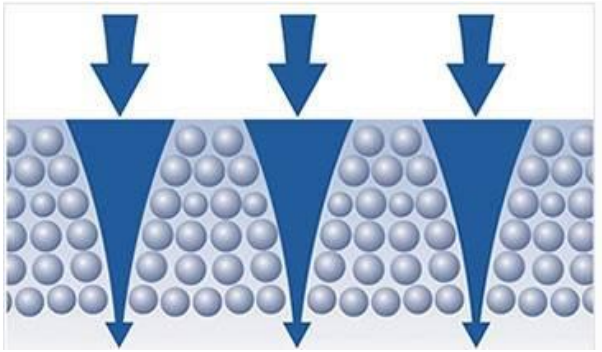
ACTIVATED CARBON FILTRATION PRINCIPLE = ADSORPTION SURFACE

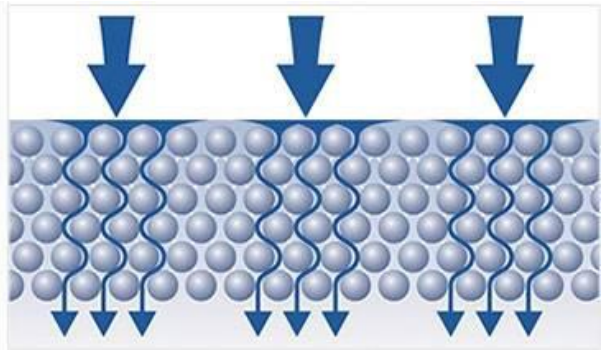
The activated carbon from coconuts in the Biofilter, mixed with the hollow fiber, provide an **adsorption surface equivalent to 900 football fields of 1 hectare** !!! (**3,000 m^2/g of activated carbon x 3 Kg**)



Better distribution of water over the entire adsorption surface of the Biofilter, which allows an adsorption surface 33 times larger than that of conventional filters (and therefore better efficiency)!



Classical filters



Biofilter

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Dynamized Technologies s.a.

Analysis of the filtration efficiency of the Biofilter, December 2022

BELGIAN TAP WATER SITUATION

- **In December 2022, Dynamized Technologies** therefore had a Belgian independent accredited laboratory (Euraceta - Eurofins) **research of 310 pollutants** (heavy metals, pesticides, drugs, plasticizers, phthalates, chlorine etc.) in **legally drinkable tap water in Belgium**, i.e. significantly more than the number of parameters on which city water distribution companies provide information! This analysis confirms that **tap water nevertheless contains several tens of residual pollutants whose concentration rates are higher than the legal limits !** (according to the European Directive 2020/2184 on the Water Intended for Human Consumption) **or exceed the accepted precautionary thresholds (maximum health values)** due to the sanitary caution that makes us consider pesticide metabolites as relevant. These pollutants have therefore not been filtered by the city water treatment plants! This is worrying given that some of them are endocrine disruptors that may eventually cause (through chronic consumption) **a sanitary risk.**

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Conclusions Belgian tap water analysis after treatment

- After the filtration & dynamization of the water by the **Biofilter and Biodynamizer, several residual pollutants are <u>neutralized</u>** (their concentration decreases below the legal concentration thresholds of the EU Drinking Water Directive or the health caution thresholds for these pollutants which can be considered relevant) which allows city water **to become again**, for parameters in excess, **<u>legally drinkable water</u>**!

- This analysis confirms that the combination of the **Biofilter** (filtration) + **Biodynamizer** (dynamization) clearly leads to a **very broad spectrum of water filtration**.

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RESULTS OF THE BELGIAN TAP WATER AFTER TREATMENT

20 Pollutants in µg/L	% of filtration of the Biofilter & Biodynamizer < (until) > (beyond)
Desethyl-atrazine (herbicide)	> 93%
2,6-Dichlorobenzamide (fungicide & herbicide)	> 93%
Atrazine-desethyl-deisopropyl (herbicide)	> 93%
Chlorthalonil M 12 (foliar fungicide)	> 93%
Dimethachlor CGA 369873 (herbicide)	> 93%
Metolachlor ethanesulfonic acid (herbicide)	> 93%
Chloridazone-desphenyl (herbicide)	> 93%
Chloridazone-methyl-desphenyl (herbicide)	> 93%
Metazachlore ethanesulfonic acid (herbicide)	> 93%
Metolachlor NOA 413173 (herbicide)	> 93%
Copper (heavy metal)	90%
Nickel (heavy metal)	> 84 %
Lead (heavy metal)	83%
Aluminium (heavy metal)	79%
Iron (heavy metal)	76%
Aphtiria (parasiticide)	73%
Chlorine	62%
Perchlorates (chlorination residues)	> 55%
Chloroform	51%
Chlorates (herbicide, pesticide inorganique)	14%

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WHAT ABOUT PFAS FILTRATION?

The Biofilter retains PFAS:

- **Activated carbon** is considered the **best media for filtering PFAS (> 80% efficiency)** due to the specific properties of activated carbon: electrostatic & hydrophobic interactions and then adsorption (retention/capture) in its porous surface of PFAS (depending on the size of its micropores) . The adsorption surface of the Biofilter is 3,000 m^2/g of activated carbon x 3 kg, i.e. an **adsorption surface 33 times larger** than that of standard filters, so it will be even more effective in filtering PFAS!
- **Several international scientific analyzes confirm the superior effectiveness of activated carbon in retaining PFAS in water**:
  - ✓ *[**Activated carbon** versus metal-organic frameworks: A review of their **PFAS adsorption performance** Paola S. Pauletto a,b, Teresa J. Bandosz a,* a Department of Chemistry and Biochemistry, The City College of the City University of New York, 160 Convent Avenue, New York, NY 10031, **United States** b Chemical Engineering Department,*
  - ✓ *Universidade Federal de Santa Maria, 1000, Roraima Avenue, 97105-900 Santa Maria, RS, **Brazil**] & [**Adsorption behavior** and mechanism of perfluorinated compounds on various adsorbents*
  - ✓ *A review Ziwen Dua,b, Shubo Denga,b,∗, Yue Beia,b, Qian Huanga,b, Bin Wanga,b, Jun Huanga,b, Gang Yu] **Adsorption** of perfluoroalkyl and polyfluoroalkyl substances (**PFASs**) from aqueous solution - A review D.Q. Zhang a, W.L. Zhang b, Y.N. Liang b,∗ a College of Environmental Science and Engineering, Guangdong University of Petrochemical Technology, Maoming, 525000, **China**]*
- The European Drinking Water Directive *(Directive 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption)* sets the limit for PFAS in water at 100 nanograms per liter (ng/l) for the sum of the concentrations of 20 PFAS and **500 ng/L for all PFAS**.

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DYNAMIZE: THE BIODYNAMIZER

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THE 3 BASIS PRINCIPLES OF WATER DYNAMIZATION

① THE NATURAL VORTICES :
the natural movement of water in nature is the **vortex** (vertical and longitudinal vortices) which dissipates energy in water

② THE MAGNETISM :
The Sun and the Earth emit magnetism which is communicated to water and its minerals

③ NATURAL MINERAL FREQUENCIES :
Water captures the energies of **minerals**

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BIOMIMICRY: INSPIRED BY NATURE TO REGAIN THE NATURE OF WATER

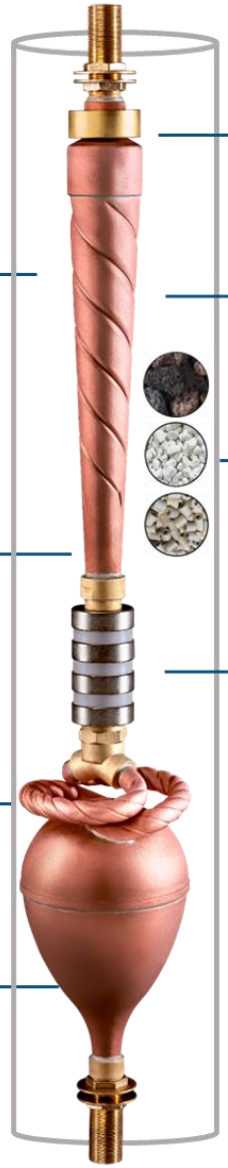
MOVEMENTS

Vertical & centripetal vortices
(Rivers)

Accelerations (Venturi)
(Narrowings)

Longitudinal vortices
(Meanders)

Columnar vortex
(Waterspout)



FREQUENCIES

Magnetic fields
(Sun -> Light)

Noble metals (High frequencies)
- Gold (plating)
- Silver (brazings)
- Copper (plain)

Minerals (Natural frequencies)
- Volcanic lava rock
- Carrara marble
- Informed ceramics
- Himalayan rock crystal

Magnetic fields
(Earth -> Magnetosphere)

The **shapes** of the Biodynamizer impart different **movements** and natural **rhythms** to the water, allowing it to regain all its vitality.
The **materials** of the Biodynamizer and its **magnetic fields** transmit natural **frequencies** which will influence the molecular structure of water.

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THE 21 DYNAMIZATION PRINCIPLES APPLIED IN THE BIODYNAMIZER

① • **1 Ring-shaped gold-plated permanent magnet** with specific orientation of magnetic fields. This magnet restructures water by polarizing water molecules which are dipoles. This magnet transmits magnetic energy to the water (in the form of magnetic waves)

② • **Turitelle: Centripetal funnel** with triple **levorotatory** (anti-clockwise) **and vertical vortices** that accelerate the water and transmit kinetic energy to it, i.e. implosion energy. This funnel reproduces the vortices of the rivers generated by the Coriolis forces

③ • **Magnetic tube** whose flow of swirling water is exposed to **4 nickel-plated permanent magnets** with magnetic fields of specific orientation in order to treat limestone by conjunction of the venturi effect (accelerations of water) and magnetic fields. These magnets transmit magnetic energy to the water (in the form of magnetic waves) which is amplified thanks to the vortexing movements of the water which reach their peak at this point.

④ • The magnets have different **volumes** (different amounts of matter which influence magnetization gradients) and different **axes** of magnetization

⑤ • The magnets are made of an **alloy of natural rare earths (neodymium)** which generate greater magnetic intensity

⑥ • **2 serpentines** which accelerate the water by **double horizontal** (radial/longitudinal) and **dextrogyral** (clockwise) vortices, reproducing the meanders of rivers in which longitudinal vortices are generated by the stones present in their beds

⑦ • **Egg** ending in a **hyperbolic funnel** in which a **columnar vortex** with dextrorotatory orientation and constant diameter is generated. It's a cylinder of air and vaporized water that flows in free flow without friction with the walls (extremely rapid rotation around its axis producing thousands of vortices, ultimate kinetic energy, in the center of a mass of water which surrounds it at its periphery and whose it causes rotation in the same direction but much more slowly). The hydrodynamics of the columnar vortex allows for increased transfer and uptake of dissolved oxygen in rotating water. This vortex replicates a waterspout (which is a column of air mixed with water)

⑧ • The vortices are generated **mechanically**, by the pressure of city water = +/- 3 bars (without electricity which generates electromagnetic pollution)

⑨ • The vortices have **levorotatory** (anti-clockwise in the funnel) and **dextrorotatory** (clockwise in the coils and egg) rotations

⑩ • The vortices have **vertical** (in the funnel and egg) and **horizontal** (in the serpentine) rotations

⑪ • Vortices have **centripetal** (funnel) & **constant** (serpentine & egg) **circular** rotations

⑫ • The shapes of the Biodynamizer alternate moments of **high and low pressure** (during the accelerations-decelerations of the water generated by the shapes of expansions-contractions of its different parts). Hydrodynamic cavitation phenomenon observed a.o. in the columnar vortex

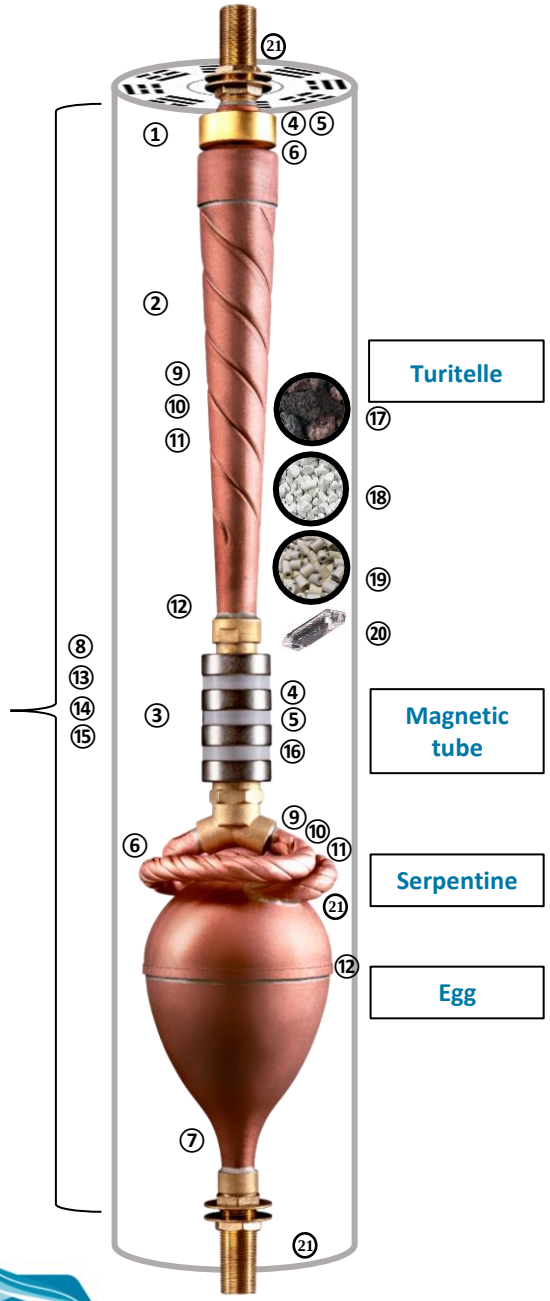
⑬ • The aquifer part in contact with water is composed of **materials compliant with water intended for human consumption** (WIHC) which are **bactericidal**:
- **copper** = bactericide
- **brass** (copper + zinc) = bactericide
- **silver** = bactericide (for all brazing of the 10 metal parts of the Biodynamizer)

⑭ • The **amplitude** of the dimensions of the Biodynamizer (H= 802 mm) & its very **smooth internal surface state** (copper) produce a high speed & kinetic energy (venturi effect)

⑮ • All **interior shapes have rounded corners** to allow a very fluid flow of water as in nature

⑯ • **Interactions between mechanical vortices & magnetic fields** which amplifies magnetic energy

• Transmissions of natural frequencies of dynamization:
- Transmissions of natural mineral frequencies which are not in contact with water:
  - **Volcanic Lava Stones**, ⑰
  - **Carrara marble** pebbles, ⑱
  - **Ceramic informed** by effective micro-organisms (EM's, EMRO certified) which transmits infrared frequencies (low frequencies) to the water ⑲
  - **Bi-terminated rock crystal from the Himalayas** ⑳
- Transmission of **subtle energy frequencies** : ㉑
  - **Gold**: the 1st ring magnet is 24 carat gold plated "Au" which transmits the high frequency of dynamization to the water
  - **Shape waves** emitted by the proportions respecting the golden ratio Phi (1-1.618) found in:
    - ✓ The **8 trigrams** embossed in the 2 lids,
    - ✓ The dimensions of the **pentagonal Egg** and its hyperbolic funnel which respect the proportions of the golden ratio,
    - ✓ The slope of the 2 outlet pipes of the "Y" shape that respects the **golden angle** (137.5° = 360° - 360° * 0.618)
    - ✓ The **dimensions (diameters and height) of the ring magnets** which respect the proportions of the golden ratio (1-1.618)



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TECHNICAL CHARACTERISTICS OF THE BIODYNAMIZER

- **Mechanism**: mechanical vortices & magnetic fields & natural mineral frequency transmissions
- **Maintenance**: no maintenance, no consumables
- **Flow rate**: 3.6 m^3 / hour (60 L / min) at 3 bars
- **Operating pressure**: min 3 bars - max 6 bars. The metallic aquifer part of the device is resistant to pressures up to 80 bars and complies with European Directive 97/23 / EC on pressure equipment
- **Certificate for Conformity of the metals in contact with water issued by Eurofins**: All materials in contact with water (copper & brass & silver) have sanitary compatibility in accordance with the French decree of 25.06.2020 relating to metallic materials and products intended for production, distribution and packaging installations which come into contact with water intended for human consumption.
- **Certificate of compliance in terms of the release of metals (copper, zinc, silver) into water intended for human consumption** after passing through the Biodynamizer issued by **Buildwise** (ISO 9001 certified) on 19.12.2022 which confirmed that the concentrations of metals (copper, zinc, silver in mg/l) in the water do not exceed the European legal standards (EU DIRECTIVE 2020/2184 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of December 16, 2020 relating to the quality of water intended for human consumption) and Belgian standards (Appendix XXXI, Part C indicator parameters, of Book II of the Environmental Code constituting the Water Code) in terms of concentrations after direct sampling and after residence time of 1 hour, 24 hours, 48 hours and 3 weeks in the Biodynamizer
- **Certified conform by Belgaqua according to standard EN1717** (protection in accordance with VIV0442023 - Conform, provided that a non-return valve is installed upstream of the Biodynamizer on the water pipe)
- **Tightness test certificate:** each Biodynamizer is tested at a pressure of 10 bars for 5 minutes under water to check its tightness
- **Legal warranty** (2 years)
- **Fittings**: ¾ ’inch (outer Ø 26.4 mm, inner Ø 18 mm)
- **Dimensions**: length + fittings: 90 cm x outside Ø cylinder : 16 cm, weight: +/- 19 kg
- **Placement**: the device must be connected to the pipes via dielectric hoses (multiskin) after the meter of the city water distribution network delivering drinking water and this at more than 80 cm from an electrical source (arrival of the main electrical supply of the house, electrical panel, photovoltaic inverter, etc.)

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INNOVATION AWARD AT SIRHA 2021 !

WINNER SIRH/+ INNOVATION AWARDS
Salon International de la restauration, de l'hôtellerie et de l'alimentation

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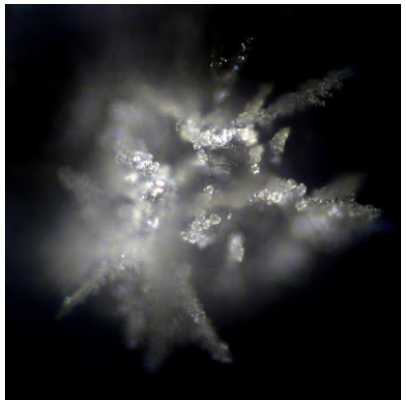
Dynamized Technologies s.a.

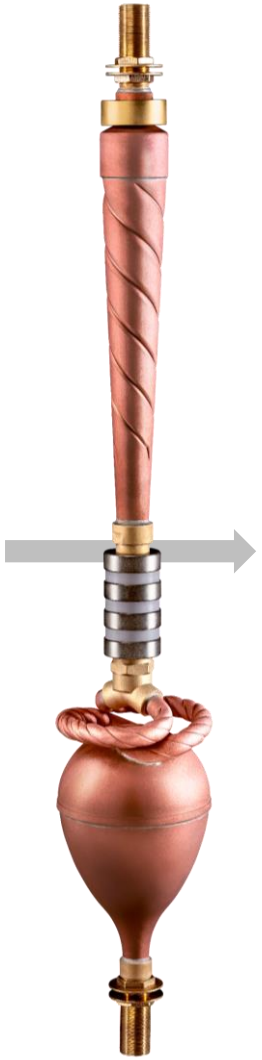
SOME ANALYZES REALIZED BY DYNAMIZED TECHNOLOGIES ON DYNAMIZED WATER:

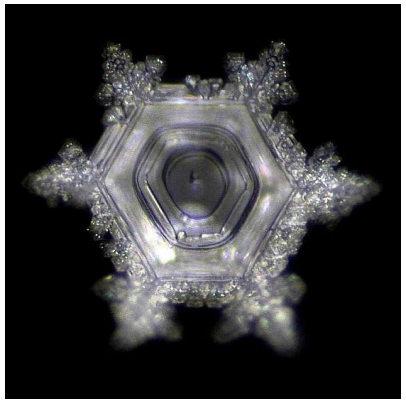
WATER CRYSTALS FROM DYNAMIZED WATER

Analysis done on september 2016 & july 2019 / E. Braun

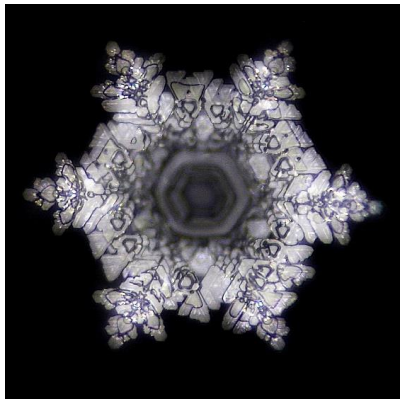


Tap water crystal

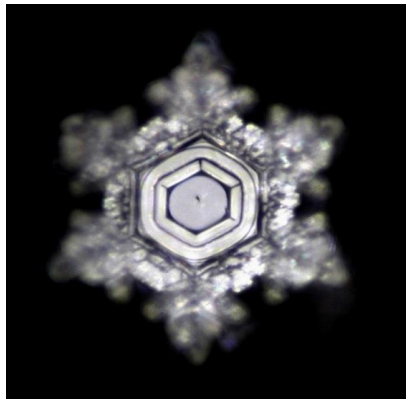




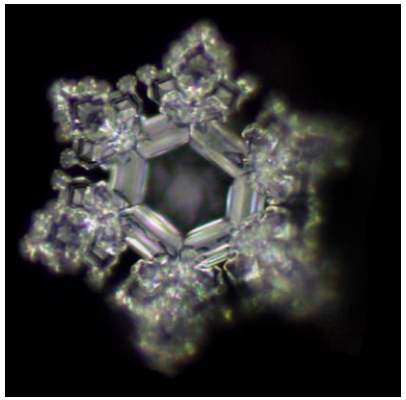
Dynamized tap water crystal
from **France**



Dynamized tap water crystal
from **Belgium**



Dynamized tap water crystal
from **Switzerland**

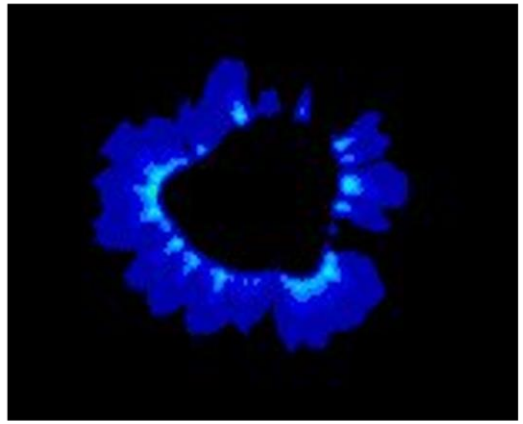


Mountain water crystal
from the **Swiss Alps**

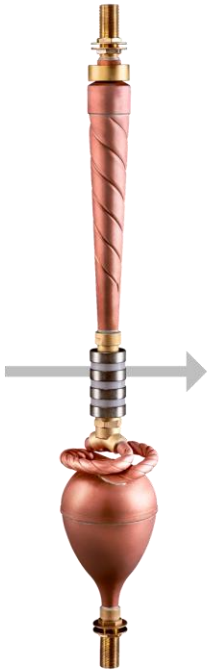
Comparison of a **non dynamized** tap water crystal > < **dynamized tap water crystals** coming from 3 different countries (Belgium, France & Switzerland) => **The hexagonal crystalline structure** of dynamized water is equivalent to that of **mountain water** (6 branches structured in a fractal way and whose superstructure is symmetrical, regular and redundant) !

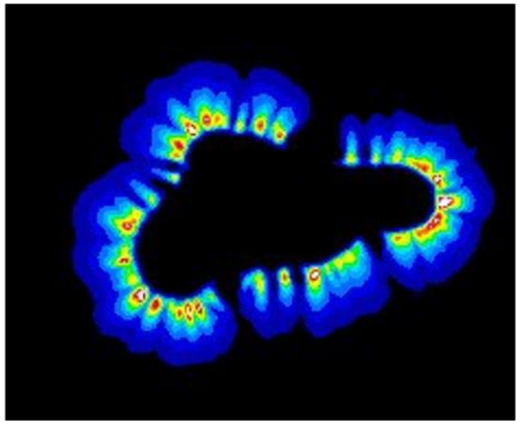
THE ELECTROPHOTONIC CAMERA: ENERGY & SURFACE TENSION

Electrophotonic analysis carried out by the Coramp laboratory (macroscopic imaging by corona effect) on 07/09/2019, the electrophotonic photos of which are processed by scientific image processing software developed by Raymond Herren, an electronics engineer from the CNRS (National Scientific Research Center, France) / + Mathematical and statistical expertise of Prof. M. Henry on 08/29/2019



Tap water: Spherical shape of the water drop
Less intensity and light radiation (crown & streamers)



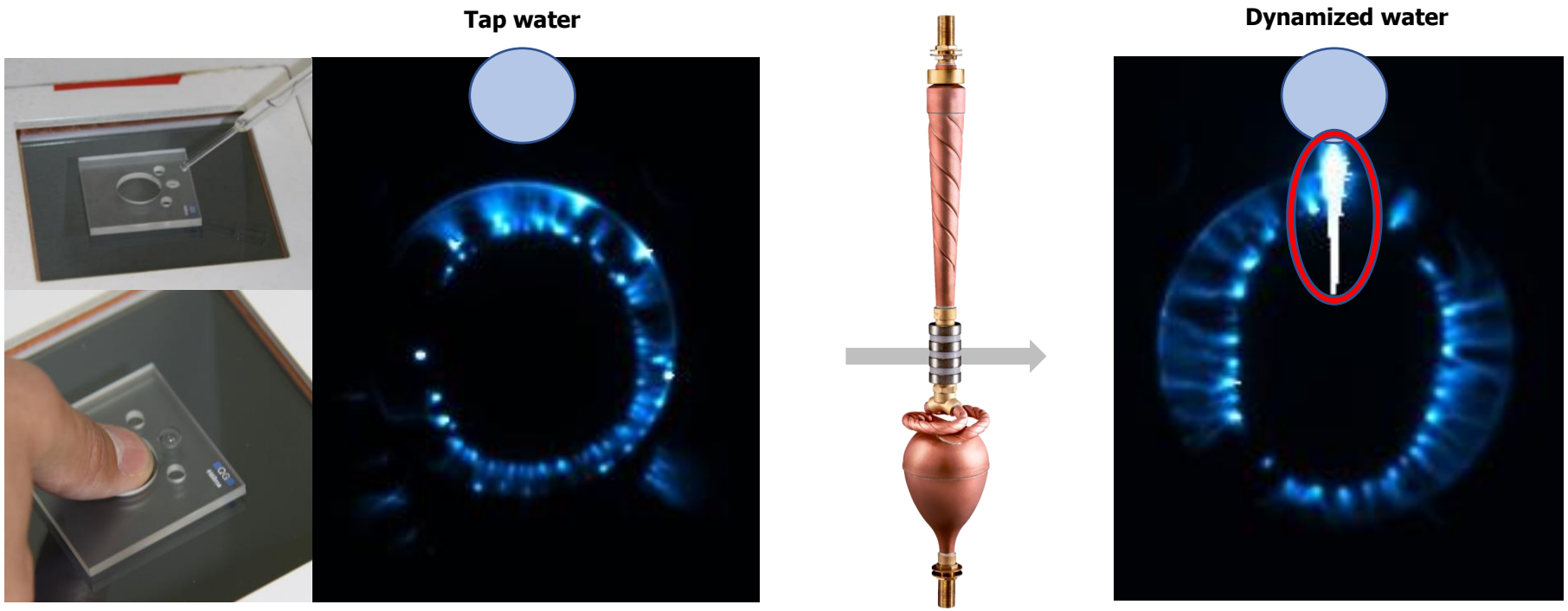


Dynamized water: Spread shape of the water drop
(indicates a drop in the surface tension of the water)
& More intensity and amplitude of light radiation
(crown & sparks/streamers)

The electrophotonic camera photographs the **bioluminescences** (streamers) in water (capture of photons present up to 10,000 photons / pixel which can be converted into energy / joules) and notes for **dynamized water**:

- A **more spread form of the drop of water** on the electrode indicating a **lower surface tension** of the water
- **Water containing more photonic energy, particularly in terms of intensity (focus) and amplitude of light radiation**.

THE ELECTROPHOTONIC CAMERA: PHOTONIC BRIDGES



The electrophotonic camera observes a significant **increase in the energetic biocompatibility of dynamized water with regard to living organisms** (“*energetic af*finity” in terms of **occurrences and quantity of energy transmitted**). This is illustrated in the photo above by the "**photonic bridges**" between the water receptacle and the finger. The photonic bridges produced by dynamized water are :

- **Produced in 100% of the cases on 20 fingers** (which is not the case with tap water)
- **Significantly larger and more intense** (often even penetrating the very interior of the receptacle on which the fingers are placed as seen in the photo on the right above); phenomenon never observed before by the electrophotonic camera in 10 years of existence

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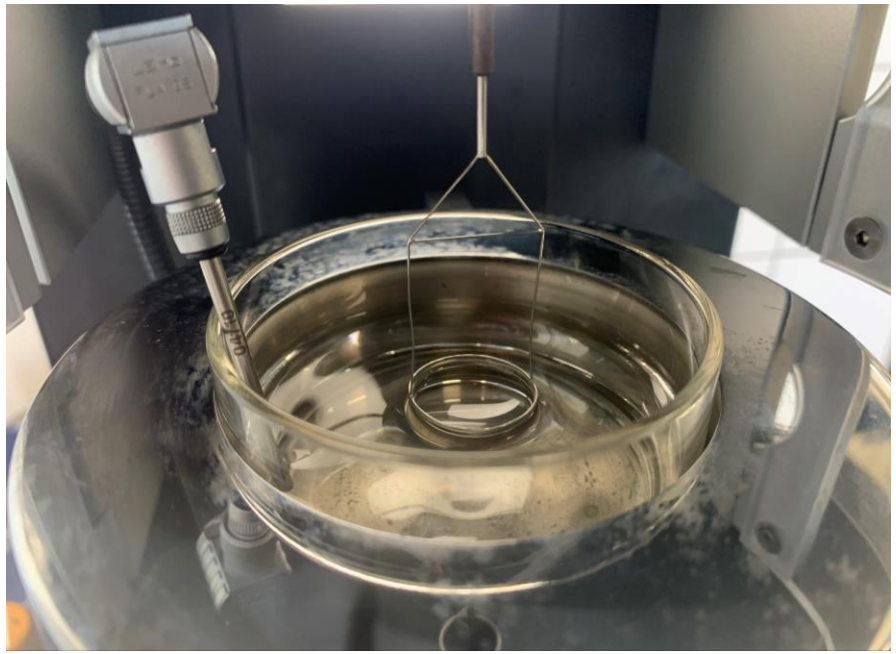
ANALYSIS OF THE SURFACE TENSION OF DYNAMIZED WATER

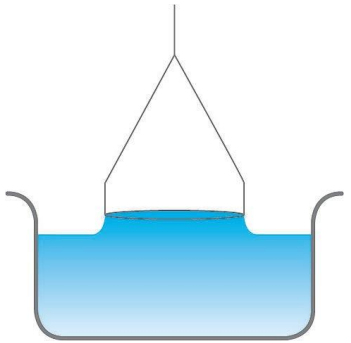
Analysis carried out according to international standards the 22nd of July 2021 by the SGS laboratory in Rotterdam (Krüss Easy Dyne device)

Comparison of the surface tension of dynamized and non-dynamized tap water from Rhode Saint Genèse (Belgium). After analysis, it turns out that the water dynamized by the Biodynamizer has a **lower surface tension of -15%** compared to non-dynamized water (66 dynes/cm -> 56 dynes/cm or mN/m at 20 °C and measured according to ASTM D1331).

The **platinum ring tear-off method** measures the surface tension of water: The ring is submerged and then pulled upward until it crosses the surface of the liquid. The lamella is overstretched until it breaks and gives the measure of the surface tension of the water.



SGS



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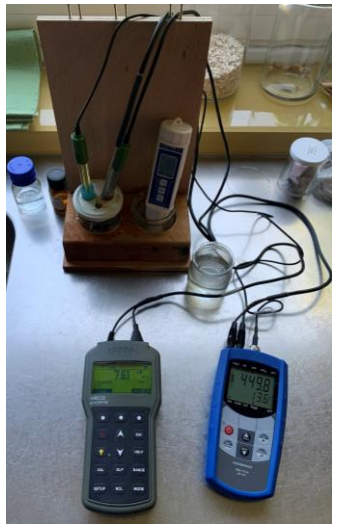
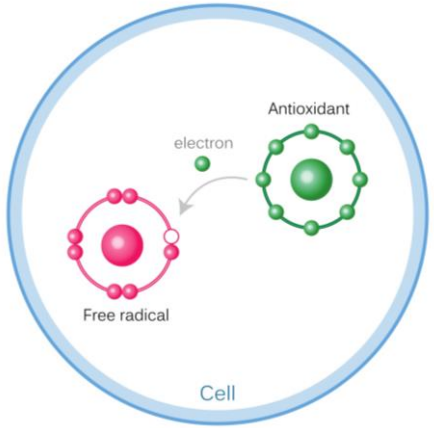
Bioelectronics of Vincent (BEV) analysis

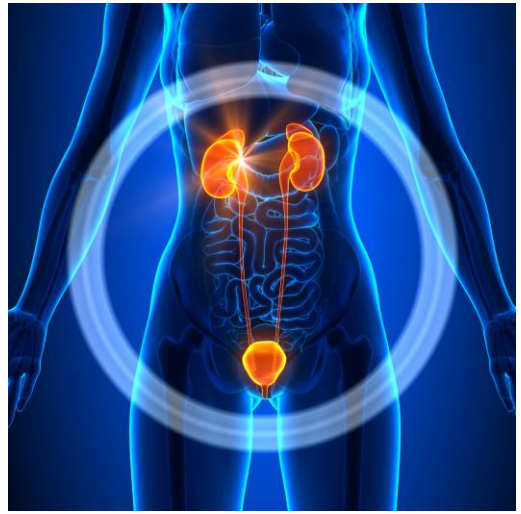
BEV Analysis: **pH** (analyzes **protons** = particle = nucleus of the atom = **matter**) & **rH2** (analyzes **electrons** = electric charge = **energy**); BEV analysis (Bioelectronic of Vincent analysis using Hanna Instruments calibrated electrodes and the formulas of Professor Joseph Orszagh researcher at the University of Mons-Hainaut in Belgium, carried out by Sylvie Henry Réant, ENSCP Chemical Engineer, Master 2 Biology, in Rhode Saint Genèse (Belgium) on 19.05.2020



BEV analysis confirms that the Biodynamizer :

- very significantly reduces the oxidation potential of water = **less oxidized water** (rH2 36.3 -> 29.7 or 4 million times - oxidized; redox potential = 385.2 mV -> 209.5 mV),
- increases the surplus of **available electrons** in water (it donates electrons and is therefore **more reductive**) and therefore helps to fight free radicals,
- makes it possible to increase the **electronegative charge** in water (as reductive water) which should make it possible to better metabolize the nutrients and promote cellular detoxification (by activating ionic channels),
- transforms the ionic form of inorganic minerals into **colloidal** form which should facilitate their evacuation rather by the stools (intestinal) than by the urine (kidneys) and avoid overloading the kidneys,
- preserves much better the **energy** in water





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MUSTARD SEED GERMINATION TEST

Analysis carried out 3 x in October, November and December 2020

Non dynamized water *Dynamized water*

- Parameters of the analysis carried out 3 times:
  - Identical amounts of seeds
  - Identical watering 2 x / day
  - Identical light & heat exposure
- Findings in favor of dynamized water:
  - Earlier germination start
  - Ever larger and luxuriant volume
  - Bigger, more developed germs
  - Maturity faster
  - A greener set

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Comparative observations of 2 groups of cows

Conclusions of the observations made between 2019-2021:

Comparative observation of 2 groups of +/- 60 cows (Warzée farm in Hamois, Belgium), on equal feed in quantity and quality, in stalls all year round, one of the groups drinks dynamized water and the other does not, induce following observations in the group drinking dynamized water by the Biodynamizer:

- ⬈ **23% Water consumption,**
- ⬈ **20% Milk production (and a proportional increase in fat and protein)**

Water consumption	Non - dynamized water	Dynamized water	Δ (%)
From June to Sept.2020	62,11 L/cow/d	76,63 L/cow/d	+ 23 %

Milk production	2019 (non-dynamized water)	2021 (dynamized water)	Δ (%)
Milk (L)	24,20	29,01	+ 20 %
Fat (Kg)	0,95	1,13	+ 19 %
Protein (Kg)	0,81	0,98	+ 21 %

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MINERALS AND LIMESTONE IN WATER

THE BIOFILTER RETAINS THE POLLUTANTS, NOT THE MINERALS!

- Most people confuse **filtration**, and therefore the **purity** of water, with its **mineral content** (i.e. the quantity of dry residue it contains after evaporation at 180°C)!

- **Filtered** tap water is water from which the **pollutants** that remain despite their passage through a treatment plant and which are measured in micrograms/L = **µg/L** (i.e. 1 millionth of a gram) have been removed. These pollutants must be removed from the water because they are harmful to our health, **but their infinitesimal quantity cannot be measured by a TDS** (Total Dissolved Solids) device which is an indirect indication measure of the **minerals** present in the water in terms of **mg/L** (i.e. 1 thousandth of a gram or **1 ppm**) and which are **beneficial for our health**.

- **The Biofilter filters (retains) pollutants present in micrograms = µg/L, but not minerals present in milligrams per liter of water (mg/l or ppm), and which are NOT pollutants, but which are good for our health** ! It is therefore normal that the minerality of filtered water does not change when measured with a TDS device. This minerality also gives this more rounded, soft and velvety taste to the dynamized water.

- The TDS device by measuring the electrical conductivity of water gives an **indication of the quantity of dry residues** present in the water, i.e. its ion content (inorganic and organic compounds) which are mainly made up, **at 80%, of calcium and magnesium**. The National Sanitary Foundation (NSF) in the United States does not certify the use of TDS measuring devices..

- **Filtered water therefore has nothing to do with softened or reverse osmosis water.**

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IMPORTANCE OF PRESERVING MINERALS IN WATER

- We want to preserve inorganic minerals in water because they are good for our **health**!

- In fact, **the minerals contained in tap water contribute between 20% and 50% to the Recommended Nutritional Intake of calcium and magnesium for a person***. Calcium contributes to bone health and has a beneficial role in hypertension, cardiovascular accidents and colon cancer. Magnesium is involved in the activation of more than 300 enzymatic systems, fights fatigue, diabetes and coronary insufficiency as well as osteoporosis... Knowing that the average population has an average calcium deficiency of +/- 40% (average nutritional needs) and even 70% for magnesium, **It therefore seems essential to us to drink mineralized water with a mineral content of between 200 and 500 mg/L.****

* Source: Study on the absorption of calcium and magnesium in natural mineral waters, Patrice Fardellone, CHU Amiens, Université Picardie Jules-Verne, 2015; "**The mineral elements present in tap water, by contributing to the daily mineral intake necessary for the proper functioning of the body, have a certain beneficial role in health**. Calcium present in water could also play a role in protection against cardiovascular disease. The role of calcium in the elimination of fats and the regulation of blood cholesterol is also recognized" (source Ministry of Health, France 2006).

** **The WHO** (World Health Organization) speaks of an "**optimum below 1,000 mg/liter"**. The **Superior Council of Public Hygiene of France** sets in its decrees of 1990 and 1995 relating to the quality of water intended for human consumption the **quantity of dry residues, after desiccation at 180°C, at a maximum of 1,500 mg/liter**.

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Importance of minerals for water dynamization

Water dynamization transmits **energy** (in photonic-light form) to the water. This requires the presence of **minerals** in it (you need, among other things, **conductive** water to dynamize the water).

These minerals also help **structure** the water and **store** the energy generated by dynamization.

Importance of dynamization for the evacuation of minerals in excess

Dynamization will transform the **ionic** form of the mineral salts into **colloidal** form which will allow them to be evacuated through the **stools rather than through the kidneys**!

THE BIODYNAMIZER: ECOLOGICAL LIMESCALE MANAGEMENT

However, it is also important to treat limescale (scale composed of calcium & magnesium) in order to preserve your boiler and your household appliances!

This is why the Biodynamizer will **treat the limescale from all the water in the house in order to make it harmless** (i.e. limescale which becomes **much less encrusted**): the limescale becomes a **pulverized white powder**. The limescale is therefore not removed as a softener does (ionic exchange between the limestone and salt) but **transformed to make it easier to clean.**

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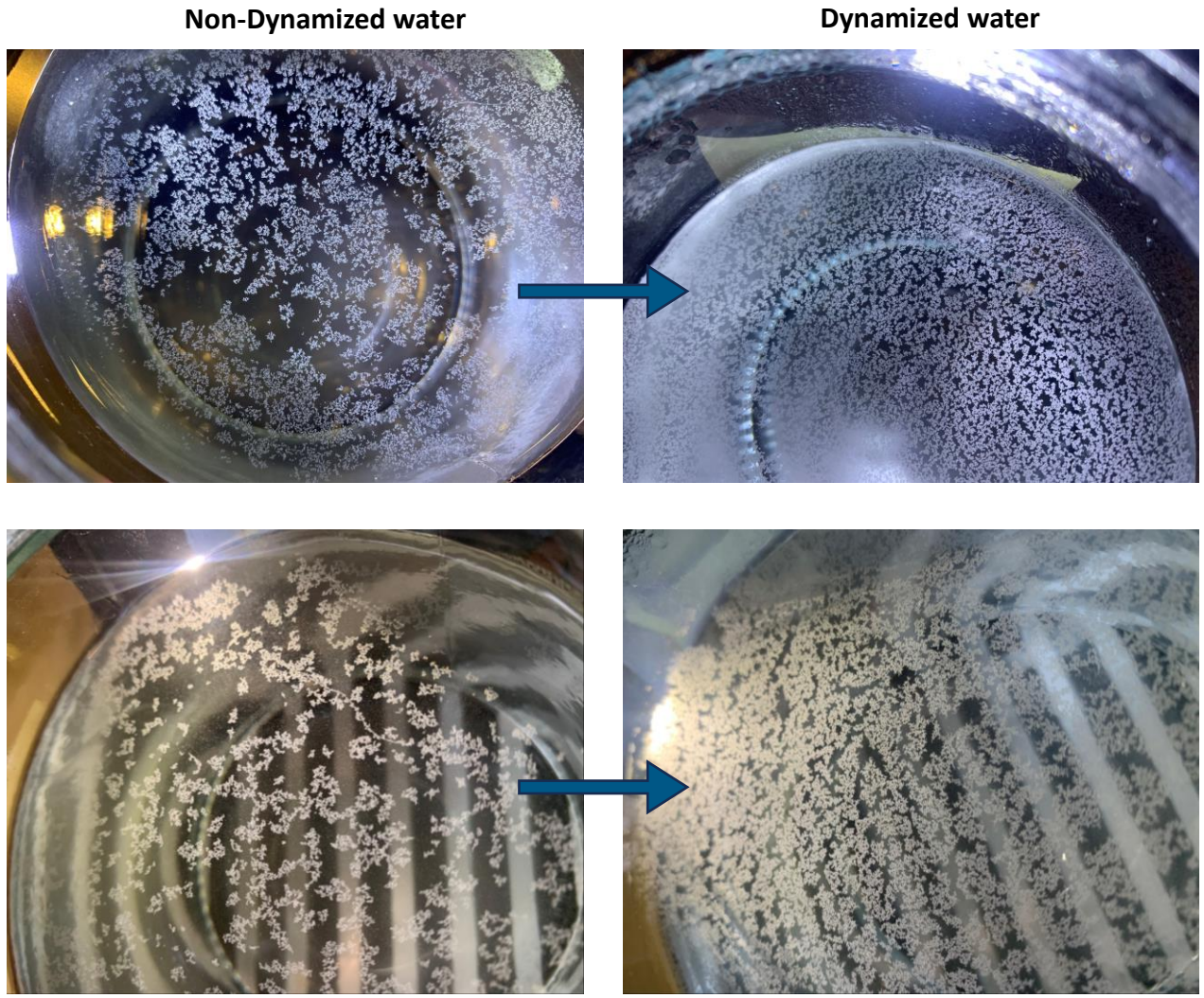
THE BIODYNAMIZER: ECOLOGICAL LIMESCALE MANAGEMENT

1/ Kettle test (October 2023): Water heated to **60°C & 90°C** in identical containers and visual observation of the **difference in crystalline structure of the limestone** which floats on the surface of the water.

- Limescale in non-dynamized tap water **aggregates into limestone clusters** (which clump together) suspended on the water, distributed **sparsely** over the surface of the water.
- Limescale in dynamized tap water appears in the form of a **fine sprayed film suspended** on the water, distributed over the **entire** surface of the water.



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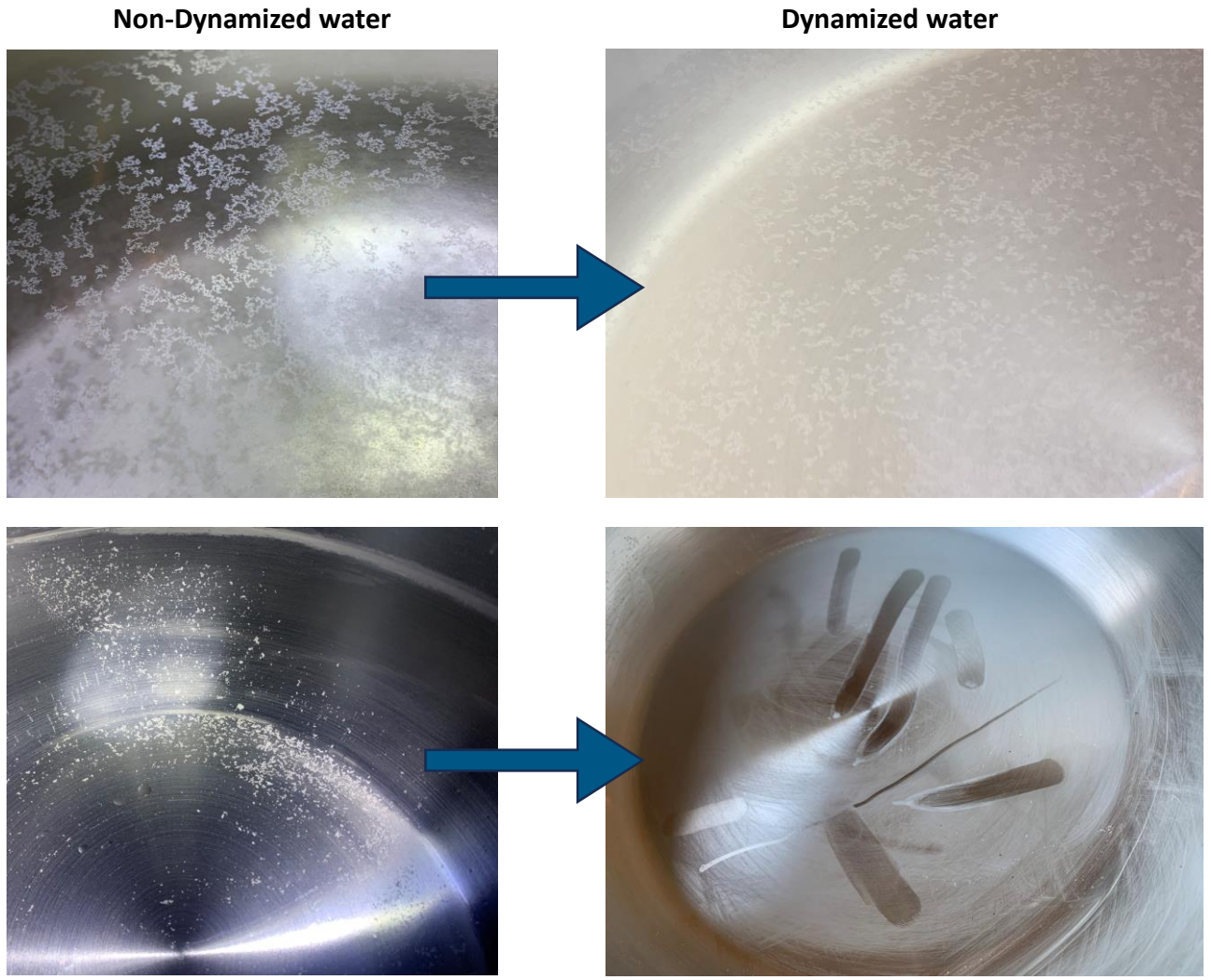
THE BIODYNAMIZER: ECOLOGICAL LIMESCALE MANAGEMENT

2/ Pan test (October 2023): Water heated **at 60°C & 90°C** in identical **pans** and visual observation of the **difference in crystal structure:**

- Limescale in non-dynamized tap water is suspended **sparsely** on the surface of the water where it **aggregates** (transparent water); after evaporation, it settles at the **bottom of the pan** on a more concentrated surface, being **stickier and encrusting**.
- The limescale in dynamized tap water **dissolves** in the water (more opaque water), it has a **finer and pulverized structure**; after evaporation, it settles at the **bottom** of the pan, spreading over a larger surface and having a **silkier texture** (like a fine white powder), **less encrusting, which makes it easier to remove**.



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THE BIODYNAMIZER: ECOLOGICAL LIMESCALE MANAGEMENT

3/ <u>Buildwise test</u> (March 2024)

Observation of the difference in the quantity of limescale in a **boiler/water heater** (open circuit: 10 liters taken every 30 minutes) set at **75°C** for 30 days (01/11/2024 to 03/08/2024) in tap water (30°F), dynamized >< non-dynamized ; Evacode procedure CCN/PN/NBN-917.

<u>Observation</u> :

In the boiler containing dynamized water there is 12% less quantity of limescale deposits (bottom of the boiler and electrical resistances) because this limescale has been pulverized and has therefore been more easily evacuated:

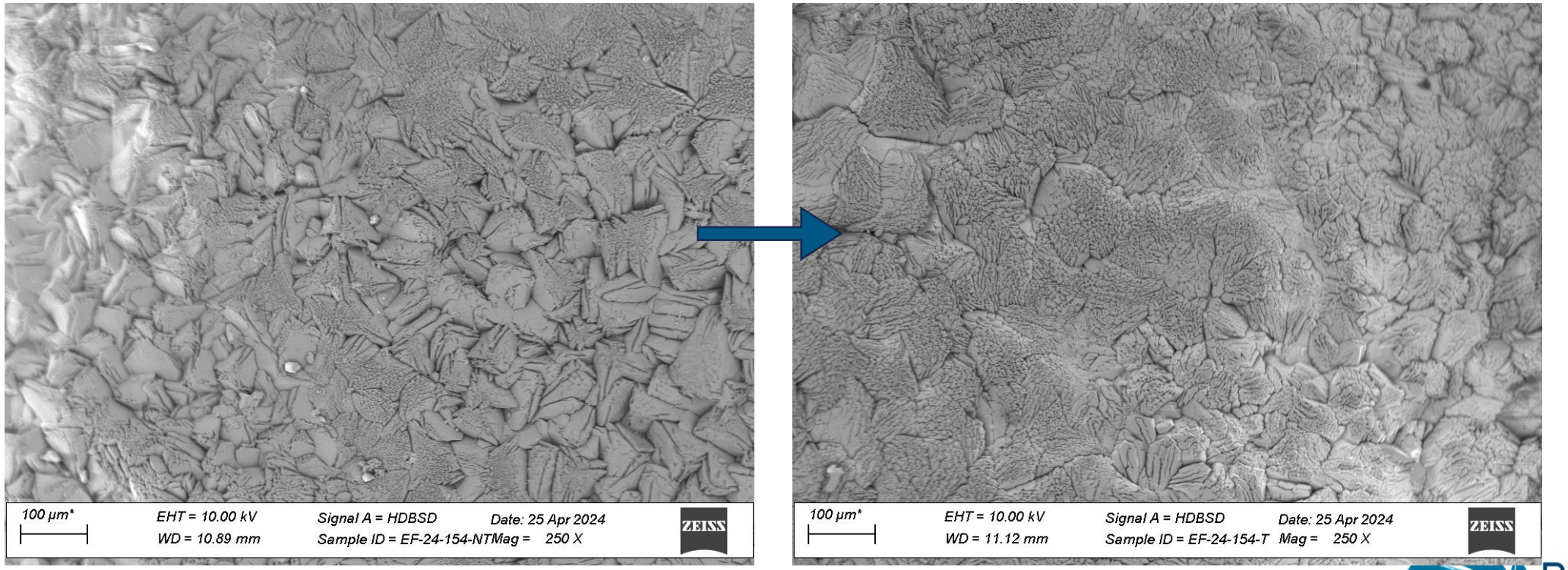
- **The mass of scale remaining around the resistances and at the bottom of the boiler decreases**
- **The Biodynamizer has an effective capacity to reduce the formation of limescale deposits**

THE BIODYNAMIZER: ECOLOGICAL LIMESCALE MANAGEMENT

4/ <u>Buildwise test</u> (March 2024) **Scanning electron microscope** (SEM) analysis with EDS ("Energy Dispersive X-ray Spectroscopy")

Observation of the **difference in mineralogical structure of the scale** (morphology and arrangement) **formed and remaining in 2 boilers**, one of which contains dynamized water and the other non-dynamized water;

<u>Observation</u> : The limescale in non-dynamized water appears indeed more in the form of **fragments** than that of the limestone in dynamized water which appears more in the form of a "***brocoli***") ; *"the crystals observed on the scale coming from the installation treated with the Biodynamizer seem locally a little **more fragmented** and show a slightly more chaotic arrangement"*



COSTS AND PLACEMENT

SAVINGS FROM DEVICES (BIOFILTER + BIODYNAMIZER)

Because tap water costs 140 times less than bottled water!

Savings DYNAMIZED WATER >< COST OF BOTTLED MINERAL WATER
Devices amortized in **4 years**
Savings of +/- **€ 20,000** over 20 years

Savings DYNAMIZED WATER >< COST OF BOTTLED MINERAL WATER & SOFTENER
Devices amortized in **2 year**
Savings of +/- **€ 27,000** over 20 years

Savings DYNAMIZED WATER (devices financed via mortgage loan) >< COST OF BOTTLED WATER & SOFTENER
Devices immediately amortized
Monthly savings of +/- **€ 95**
Savings of +/- **€ 22,000** over 20 years

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THE SIMPLICITY OF A GLOBAL SOLUTION

FILTRATION
LIMESCALE
DYNAMIZATION

The Biofilter and the Biodynamizer are **placed just after the city water meter**. It takes a space of +/- 2 m^2 to place them.

GLOBAL SOLUTION:

- ✓ Filtered water
- ✓ Ecological limescale management
- ✓ Dynamization of water: restructuring & energization

SIMPLICITY :

- ✓ Placement by any professional plumber
- ✓ Standard measures (3/4 '' brass fittings: outside Ø 26,4 mm - internal Ø 18 mm)
- ✓ The devices operate without electricity, without draining water and without the use of salt or chemical agents (only the filter cartridge must be replaced every 150m^3 and max every year)
- ✓ Biodynamizer: **No maintenance, no consumables**
- ✓ **In the event of a move, you take it back with you!**

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Dynamized Technologies s.a.

In conclusion

Your benefits thanks to the Biofilter & Biodynamizer

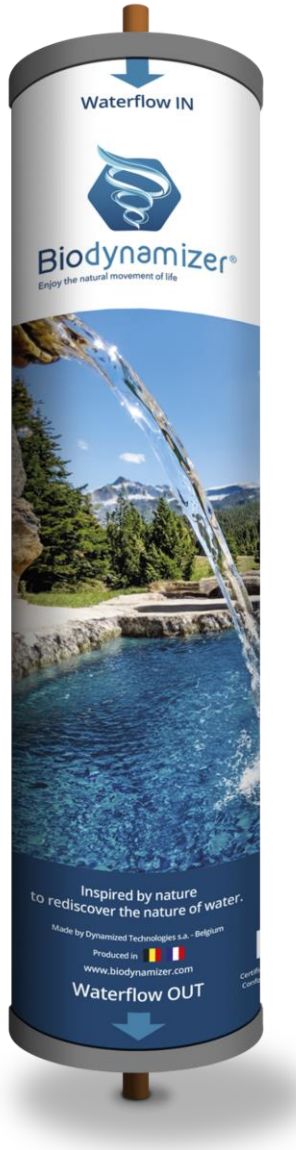
Filtered tap water

A sweeter taste

A global solution

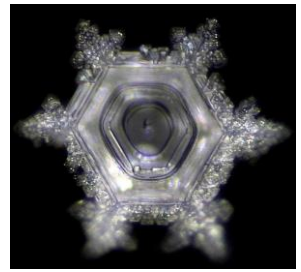
An ecological solution

An economic solution

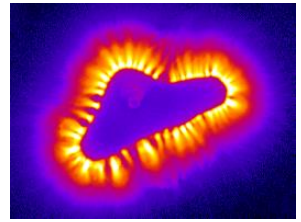


More hydrating and less oxidized water

Restructured water



Water containing more photonic energy



Ecological limescale management

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