# www.pooltigerfranceff

The most innovative and efficient technology to purify water in a 100% natural way, through hydrodynamic cavitation.







# Innovation Awards



Baeza Award 2024 to "Best Product Innovation"

Pool Tiger has been recognised as the "Best Product Innovation" during the Piscina Spain event. This award highlights excellence and technological innovation in the water treatment sector.

Finalist in the award of "Innovative Product for Sustainability" at Piscinas & Wellness Barcelona 2024

In addition, Pool Tiger is a finalist in the "Innovative Product Award for Sustainability" at the Piscinas & Wellness event, underlining its commitment to sustainability in the sector. Pool Tiger's unique technology optimises water quality efficiently and sustainably.



8-10 OCT 2024 Málaga - FYCMA

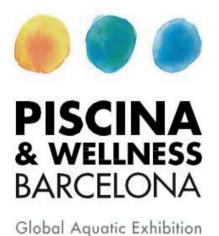


### WINNER





INNOVATIVE PRODUCT AWARD FOR SUSTAINABILITY
FINALIST



# History

Originally developed for the oil industry with a budget of 20 million euros to clean waste water from drilling.



2015

After 15 years of study and development, inventor Gary Powell begins to commercialize the technology.



2016

Polar Vortex, a device designed to increase snow production, is launched on the market.



2017

Pool Tiger, an innovative device for purifying pool water, is launched.



In development

Drinking water purification projects and limestone removal devices in cooling towers.

# Pool Tiger

Features and benefits

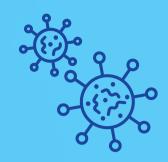




#### Process 100% natural

It does not use electricity or chemicals.

Environmentally friendly.



### **Eliminates contaminants**

Kills bacteria, algae, viruses and parasites, including legionella, which dies at temperatures above 70°C.



### Reduction of chemicals

Reduces the use of chlorine and bromine by up to 85%, keeping the water crystal clear and healthy.



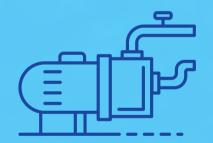
#### pH balance

Controls acids and reduces the risk of disease and the need to use additional acids.



### Crystal clear water

Eliminates suspended particles, maximizing clarity and reducing deposits on walls.



## **Efficient** operation

It works when the pump is running.

It does not generate an increase in electricity costs.

# Pool Tiger

Features and benefits





#### Zero maintenance

No assembly, maintenance or replacement of parts required.



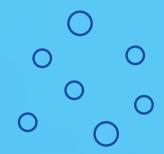
#### **Eliminate waste**

Eliminates bodily waste and organic compounds, virtually reducing chlorine and bromine odors.



# Algae prevention

It breaks down the cell walls of algae and prevents their generation.



# Prevents limescale build-up

Prevents and eliminates scale, and acts as a flocculant, clarifying the water by removing suspended particles.



### Health and wellness

Reduces the risk of disease, improves mood, and hydrates and protects your eyes and skin.



# Eliminates isocyanuric acid

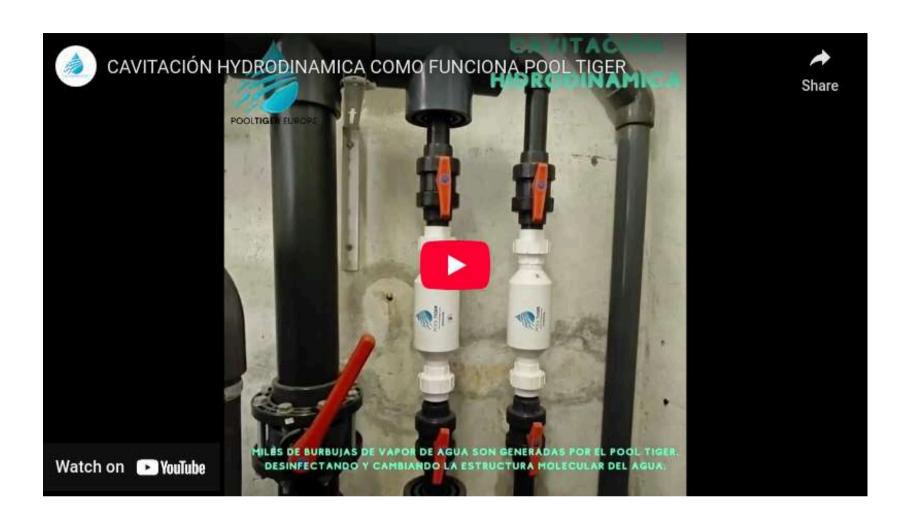
Gradually reduces isocyanuric acid, preventing water renewal due to saturation.

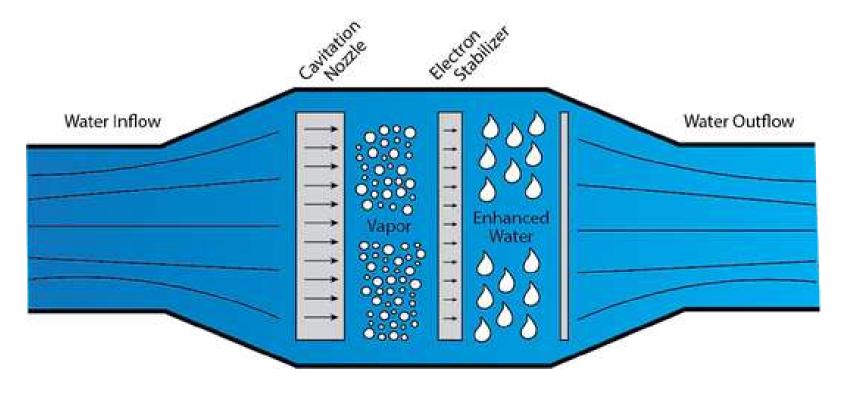
# Hydrodynamic Cavitation

#### **How does Pool Tiger work?**

Part of the water that enters the chamber and is channeled through patented nozzles experiences pressure differences that convert the water into water vapor, releasing a huge amount of energy and leaving a heat signature of more than 200 degrees.

At the nozzle exit, the vapor bubbles return to the liquid state. This instantaneous double conversion creates a thermal signature and a harmonic signature.



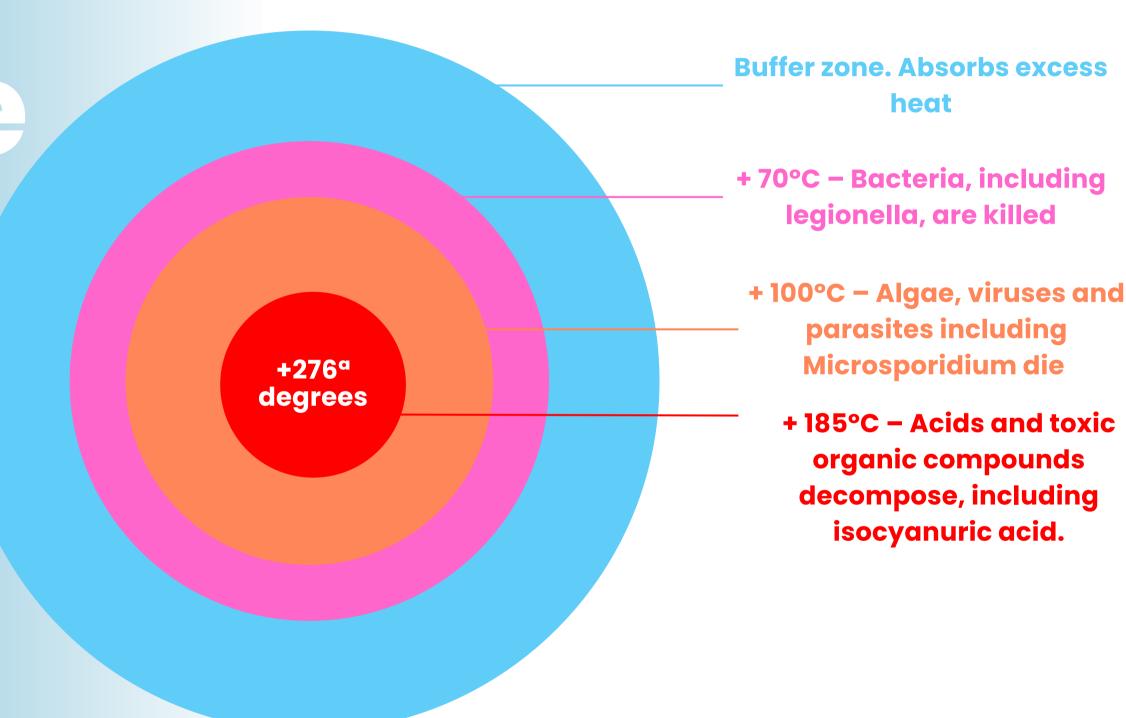


Heat signature

#### **Dissipation stratum**

Pool Tiger is designed with a specific ratio of nozzles in the chamber to remove contaminants, control acids and remove toxic compounds without affecting pool temperature.

Its catalytic process (VICR) generates steam bubbles that release energy, breaking down impurities and microorganisms, and balancing the pH of the water without the need for chemicals, guaranteeing a safe environment for bathers.



parasites including Microsporidium die

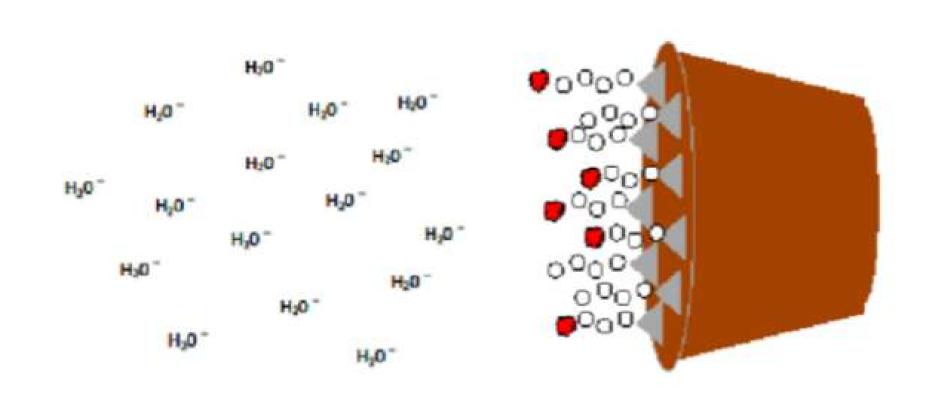
organic compounds decompose, including isocyanuric acid.

# Negative ion cavitation

The rapid formation and then collapse of water vapor bubbles create heat, but they also charge the molecules negatively.

These molecules, called "negative ions," are highly kinetic.

This negative charge is similar to that created by a chemical flocculant, but in this case it is generated physically.



Cavitation infuses water with negative ions. This process also imparts a negative charge to suspended particles.

# Negative lons (H<sub>2</sub>O<sup>-</sup>) = Healthy

Swimming in a pool equipped with the Pool Tiger creates a feeling of well-being.

#### Benefits for the body

- **Natural hydration:** It is easily absorbed, keeping the skin hydrated and protected, preventing the absorption of chemicals.
- Gentle exfoliation: Acts as a natural exfoliant.
- **Serotonin stimulation:** Triggers serotonin production, improving mood, energy levels, concentration, sleep, digestion and organic functions.

Benefits for the pool

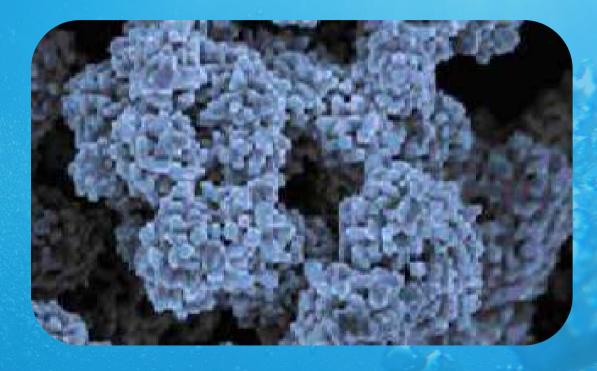
Negative ions not only improve the well-being of swimmers, they also clean and protect the pool.



# Flocculant effect



Suspended particles
Increases water turbidity Accumulates sediment
on pool walls



**Agglomeration** 

Most particles are too small to be captured by the filter.

Assigning a negative charge to the particles causes them to clump together. Once the clump has reached a size sufficient for the filter, it is immediately captured.

Removal of suspended particles = Crystal clear waters

# How do negative ions clean and protect pool surfaces?

#### Cleaning

• Water molecules charged with negative ions are highly active and are used to gently remove deposits on the pool walls. They are also able to penetrate new build-ups of particles, mineral salts (limescale) and algae, to remove lime and dirt deposits from the pool walls. These properties greatly reduce the need to brush the walls of your pool.

#### **Protection**

• In outdoor pools, negative ions build up on the pool walls and form a highly ordered water state called the exclusion zone. The exclusion zone (EZ) repels floating particles, salts and minerals and even algae.



#### **PoolTiger Installation Tips**

- PoolTiger does not require an electrical connection.
- Installs quickly (15 minutes on average, depending on the site).
- As soon as the device is installed, it is ready to use.
- It should be installed last, just before the pool water return flow.
- Works in all positions (horizontal, inclined, vertical, ...).
- As soon as the water pump is running and water is flowing, PoolTiger is working.
- 2 models: 21m3/h and 57m3/h and installation in 50 or 63 mm pipe.
- The pressure drop is between 2 and 4% of the flow rate.

#### **Steps to follow**

- Stop the leak.
- Make sure the pipes are drained before starting the installation
- Place the PoolTiger in the installation. It is the last device before the water returns to the pool,
- Check that it is positioned in the correct direction, the blue arrow on PoolTiger indicates the direction of water flow.
- Thoroughly clean the pipes and joints with a detergent.
- Use PVC glue to assemble the pipes to the joints.
- When the glue is dry, turn on the water pump to check for leaks.

Before







# Install your Pool Tiger in less than 30 min!



# Spectacular results with a simple installation





### The Optimal Solution for Irrigation and Agriculture

**Rigid roots devoid** 

of a hairy

structure

**The Grow Tiger Lawn & Garden** represents an extension of the innovative **TIGER WATER SYSTEMS**, specifically tailored for irrigation in agricultural and garden settings. It leverages the same advantages of Hydrodynamic Cavitation technology, ensuring superior water quality for your plants, crops, and orchards. Engineered for user-friendliness, the Grow Tiger connects directly to a standard tap, making it an ideal tool for optimizing irrigation and enhancing soil productivity. For agricultural plantations, we provide customized systems.

#### 1. Effortless Installation

The Grow Tiger is engineered for straightforward installation. Just connect it to a hose-ready faucet outlet and attach the hose. It operates without electricity or moving components, rendering it a fully self-sufficient, low-maintenance solution. Ideal for any farmer, gardener, or cultivator seeking to adopt advanced technology with ease.

#### 2. Enhances the Quality of Irrigation Water

The hydrodynamic cavitation employed by the Grow Tiger disinfects, purifies, and structures water, effectively eliminating contaminants and enhancing its oxygen content. This process yields water that is healthier and more advantageous for plants.

Water Structuring: Water molecules are rearranged, enhancing the absorption of nutrients and minerals by plants.

Oxygenation: Water treated with Grow Tiger contains higher levels of oxygen, fostering enhanced root development and improved overall plant health.

#### 3. Enhanced Nutrient Efficiency

By structuring water, the Grow Tiger enhances mineral solubility, enabling plants to absorb nutrients more effectively. Consequently, you can decrease fertilizer usage without jeopardizing the health of your crops.

It enhances water infiltration into the soil, facilitating uniform moisture distribution and augmenting water retention. This not only conserves water but also guarantees a consistent water supply for plants.



with Grow Tiger

Flexible, fibrous

roots encased in

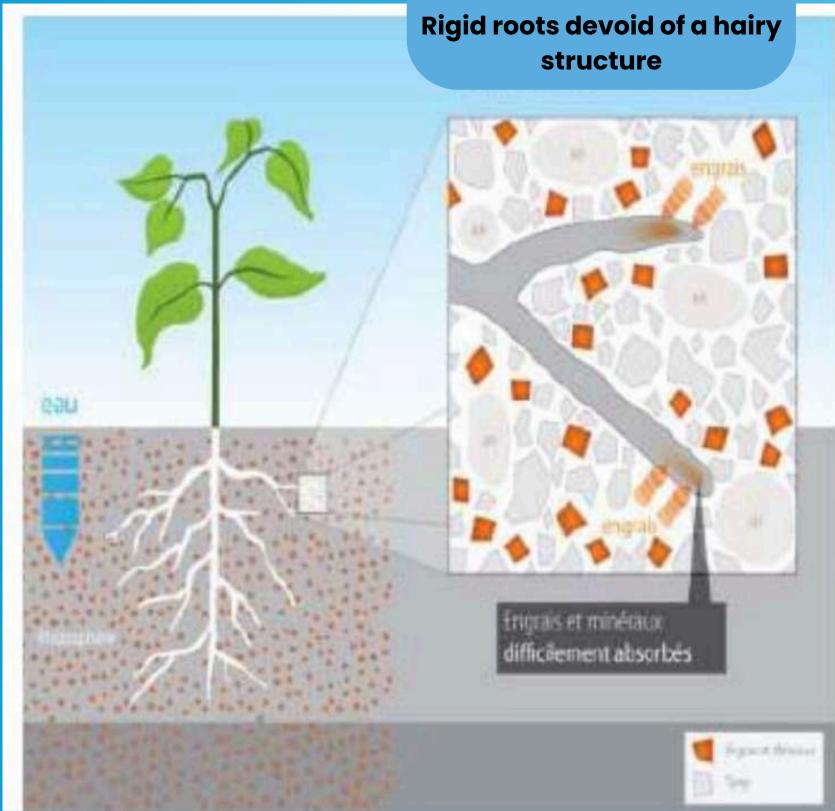
soil

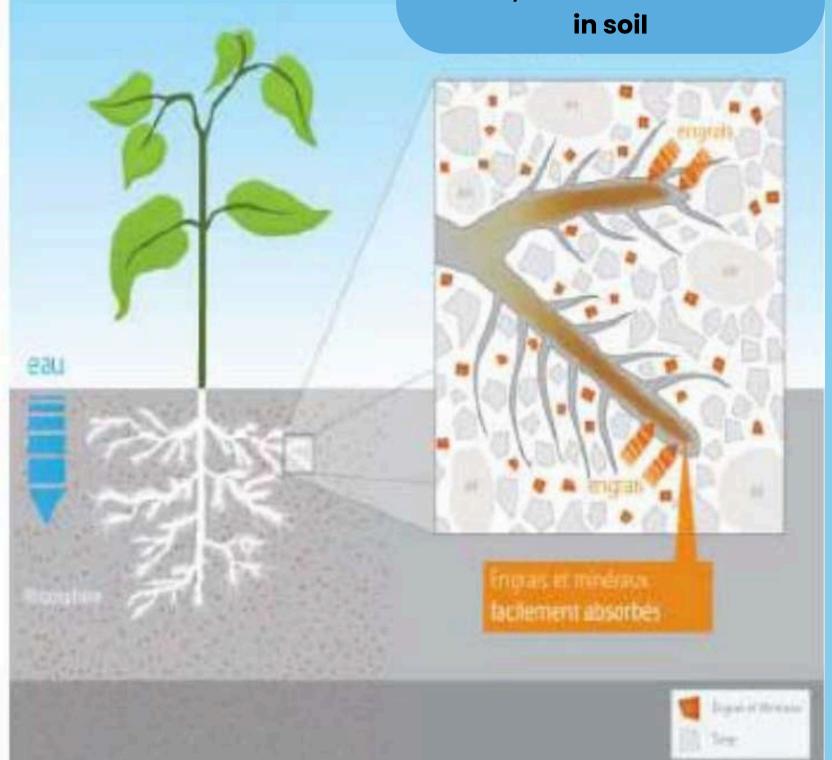
The Optimal Solution for Irrigation and **Agriculture** 

**Untreated Water** 

**Water Treated with Grow Tiger** 

Flexible, fibrous roots encased





- Improved dissolution and distribution of fertilizers in water
- Improved water infiltration into the soil results in a more uniform distribution of minerals within the soil.
- Enhanced root development increased root/mineral contact area

#### The Optimal Solution for Irrigation and Agriculture

#### 4. Prevention of Soil Scale and Salinization

The Grow Tiger aids in preventing the buildup of salts and minerals within the irrigation system, thereby extending the lifespan of your irrigation equipment and mitigating soil issues.

In agricultural settings affected by salinization, Grow Tiger effectively dissolves salts, thereby preventing crystallization at the root level. This process enhances soil health and promotes more robust plant growth.

#### 5. Agricultural Advantages and Enhanced Output

Grow Tiger users have reported enhanced crop growth and improved yields. By supplying more structured and nutrient-rich water, crops develop more rapidly, exhibit greater health, and demonstrate increased resistance to disease.

In specialized crops like marijuana, the outcomes have been remarkable, showcasing growth and production increases of up to 70%, alongside substantial enhancements in product quality, including elevated levels of THC and CBD. Additionally, there has been a rise in the sugar content of tomatoes or sugar cane (Grades Brix) and their overall production.

#### 6. Sustainability and Effectiveness

With the Grow Tiger, you enhance water efficiency, contributing to the conservation of this precious resource, particularly during periods of drought.

Minimize the reliance on chemicals and fertilizers, enhancing the sustainability and cost-effectiveness of your crop.



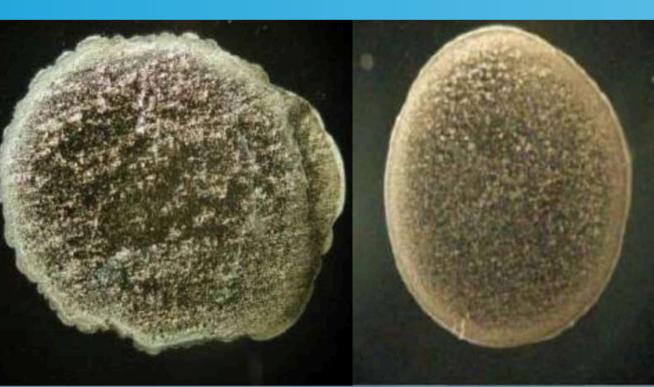
#### **AMAZING PERFORMANCES**







Standard water droplet



**After the Grow Tiger** 

Above, two clones of the identical plant have been watered:

Left with regular water; right with TWS structured water.

After three weeks, the production of one and another will cease at three months.

#### **AMAZING PERFORMANCES AFTER 20 DAYS WIH GROW TIGER**











- ONIONS
- RICES
- YUCA
- CORN
- OIL PALMA
- SUGAR CANE
- BANANASS
- PINEAPLE
- TOMATOES
- MARIHUANA





#### **APLICATIONS**

#### **Key Advantages of Grow Tiger**

- **Effortless Installation:** Rapid connection to any faucet with a hose, requiring no electricity or supplementary components.
- Soil and Crop Enhancement: Structured water that fosters robust root development and overall plant vitality.
- Water Optimization: Enhanced water infiltration and retention in the soil, thereby maximizing yield.
- Fertilizer Reduction: Nutrients are assimilated more effectively, enabling a decrease in fertilizer application.
- **Prevent limescale accumulation:** in the irrigation system to reduce maintenance costs.
- Salinization Prevention: Aids in the dissolution of salts and inhibits their accumulation in the roots.
- **Enhancements in Production:** Crops develop more rapidly and with superior quality, leading to increased yields.

**The Grow Tiger** serves as an ideal partner for farmers and gardeners aiming to enhance their irrigation methods and promote the health of their crops sustainably. Simple to install, efficient, and adept at improving water structure for superior agricultural outcomes, the Grow Tiger represents the future of irrigation in contemporary agriculture.

#### **Agriculture**

#### **Tomatos farm Tarragona:**

#### **Improvements:**

- Faster grow
- increase the harvest in 22%
- Increase the Brix grades



#### **Bonsais**

One remarkable case comes from the use of Grow Tiger in bonsai cultivation. During previous summers, many bonsais would dry out and weaken under high temperatures. However, after incorporating Grow Tiger into the irrigation system, growers reported:

- Stronger, more robust bonsai structure
- Thicker, fleshier leaves that retain moisture longer
- No leaf loss or dehydration during peak heat periods This demonstrates the exceptional ability of structured water to enhance resilience and vitality even in delicate plant species.



#### **Cattle raising**

#### **For Animals:**

- Improves hydration and digestion
- Strengthens the immune system



- Increases productivity (up to 20% more egg production observed in laying hens)
- Reduces disease risk with cleaner water

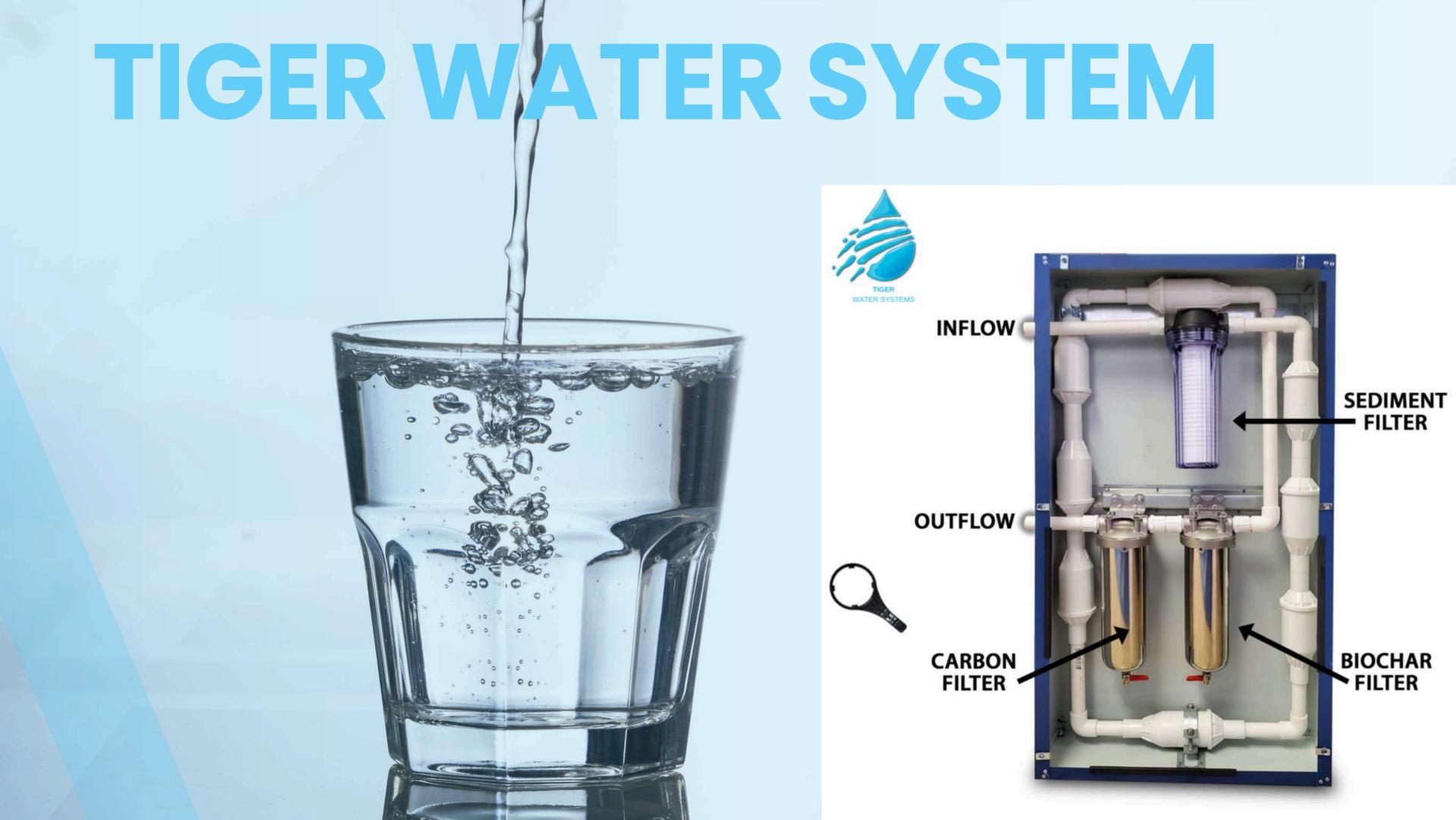
A particularly successful case was observed in Peru, where a poultry farm using water treated with Tiger Water Systems reported an increase in egg production per hen from 6–7 eggs to 9–10 eggs, simply by switching to structured water. This underscores the profound impact that hydration quality can have on animal productivity and well-being. In high-value crops such as medical cannabis, farms using Tiger Water Systems reported up to a 70% increase in yield, with elevated THC and CBD levels.



In addition, community gardens in Madrid using Grow Tiger reported significantly enhanced growth in pumpkins, cucumbers, and Swiss chard, with healthier plants, larger produce, and reduced fertilizer use. Gardeners observed that the plants exhibited more vibrant color, greater leaf thickness, and longer-lasting moisture retention in the soil.







#### **HOW IT FUNCTIONS**

**T**IGER Water Systems was developed to harness a completely natural phenomenon known as Hydrodynamic Cavitation. In our device, this process depends exclusively on the flow of water propelled by the pressure of the water entering the home.

Composed of resilient thermoplastic, TIGER Water Systems features no moving components and operates without electricity.

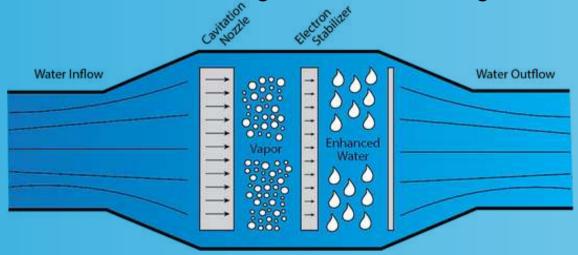
#### **HYDRODYNAMIC CAVITATION**

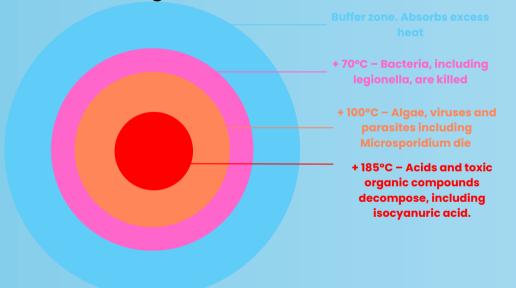
The effects of cavitation have been recognized for over a century; however, it is only in recent years that this phenomenon has been effectively utilized to yield several significant advantages.

Cavitation in our device transpires when water is accelerated within the nozzle. This acceleration diminishes the water pressure below the vapor point, leading to the formation of minute vapor bubbles. As these vapor bubbles exit the nozzle, the pressure of the surrounding water induces their rapid collapse, causing them to revert to their liquid state.

This phenomenon entails a significant release of energy, resulting in a heat signature of up to 200 °C.

It is essential to recognize that the heat generated by cavitation is swiftly absorbed by the surrounding water.





#### These factors are adequate to:

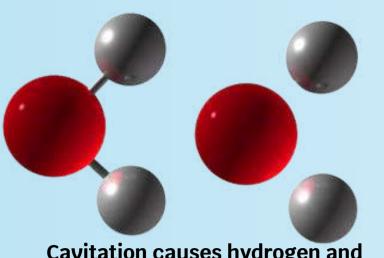
- Oxidize and eliminate exposed contaminants.
- Disinfects, purifies, and clarifies water.
- Influencing the connections between hydrogen and oxygen atoms that constitute water molecules, resulting in a phenomenon referred to as "structured water."
- By altering the physical structure of water, we enhance the behavior of minerals within it.
- Oxygenates the water, enhancing its hydration and health benefits.
- Enhances water solubility
- Lowers the surface tension of water.

#### **BENEFITS OF THE CORBAN WATER SYSTEM**

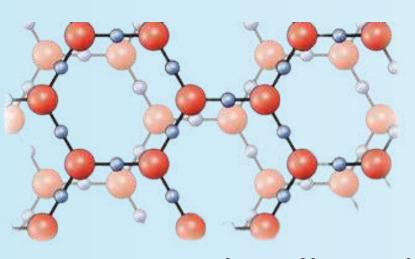
- Disinfects water and purifies water, leaving it free of viruses, bacteria and organic matter. Including Legionella.
- Changes the state of minerals making them more soluble and healthy for the human body
- Prevents limescale deposits and eliminates existing ones.
- Improves maintenance of pipes and facilities.
- Structured water increases cellular recovery through net energy savings (greater absorption, greater hydration).
- Greater Metabolic Balance
- Energized water can help balance the cellular stress response.
- Greater hydration of the skin and hair.
- Better hydrated cells reduce the spread of viruses and diseases.
- Greater Detoxification
- Removal of heavy metals
- Prevents and eliminates limescale
- Better absorption helps dissipate harmful chemicals from the body and neutralize harmful frequencies that cause disease.
- Deep intracellular hydration and optimal mineral absorption.
- Pollutant Reduction
- Structured water expels contaminants while preserving minerals and nutrients.

#### Improvements in agriculture:

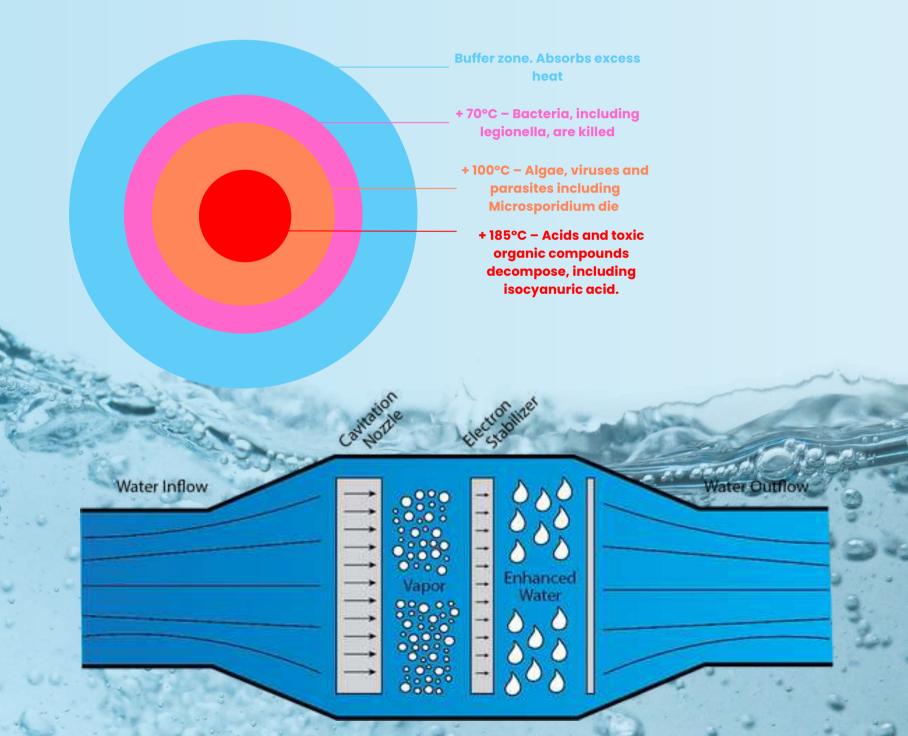
- penetration of water into the soil pores uniform humidification
- Water Retention Capacity Soil Wet Longer, Water Saving
- Dissolution of salts without crystallization of salts at the root level
- At the plant level, the following is improved:
  - Root development more numerous and hairier
  - Nutrient absorption more efficient fertilizers with corresponding savings.
  - Increase in plant growth and production.
    - Used in marijuana plantations achieving increases in growth and production of 70%. THC and CBD levels increased.
- Improves the biological life of the soil
- Improves the natural resistance of plants to diseases
- Improves the physiological activity of plants and humans.





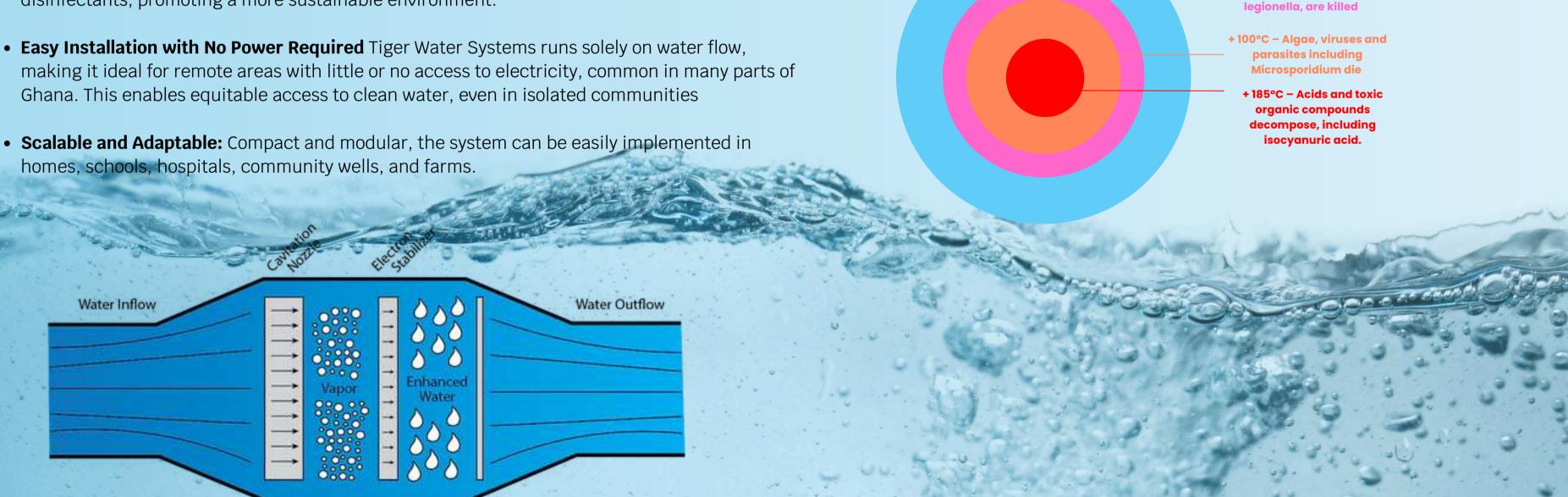


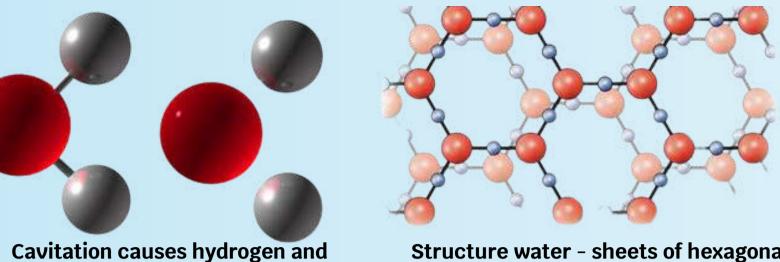
Structure water - sheets of hexagonal cells



#### **Advantages and Benefits of the System**

- Clean Water at the Point of Use: Effectively eliminates physical, chemical, and biological contaminants, providing safe water straight from the tap.
- Public Health Improvement: Reduces the prevalence of waterborne diseases. Structured water enhances cellular hydration and metabolic processes.
- Natural pH Regulation: Balances water pH to neutral levels, improving health outcomes and protecting plumbing infrastructure.
- Infrastructure Protection: Prevents and eliminates limescale, reducing clogging and lowering maintenance costs in pipelines and systems.
- Reduction in Plastics and Chemicals: Minimizes the need for bottled water and harmful disinfectants, promoting a more sustainable environment.
- Easy Installation with No Power Required Tiger Water Systems runs solely on water flow, making it ideal for remote areas with little or no access to electricity, common in many parts of Ghana. This enables equitable access to clean water, even in isolated communities
- homes, schools, hospitals, community wells, and farms.





oxygen atoms to temporarily dissociate

Structure water - sheets of hexagonal cells

**Buffer zone. Absorbs excess** 

+ 70°C - Bacteria, including

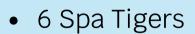


### TIGER WATER SYSTEMS

#### USER GUIDE

**Tiger Water Systems Domestic Well Water Content: TWS162** 

#### **Provision**





- 5-micron particle filter
- 1 Carbon cartridge
- 1 biochar cartridge





- Head and nut in polypropylene
- Includes bracket and key
- Glass in transparent SAN material
- Operating temperature: 0-30°C
- Threads featuring brass inserts
- Maximum pressure: 8 bars

3/4 connections, elbows, and DIN system adapters.



Assembly will take place at the primary water inlet of the residence, commencing with the tank and particle filter. Subsequently, the six SPATIGERS Cavitators will be installed, followed by the duplex filter, which will initially incorporate the biochar filter and then the activated carbon filter. This configuration can be modified with elbows and hoses, provided that the sequence of the components is preserved.



- loses for filter connection

  Teflon
- Steel pipe joints
- Water inlet adapters



### TIGER WATER SYSTEMS

#### USER GUIDE

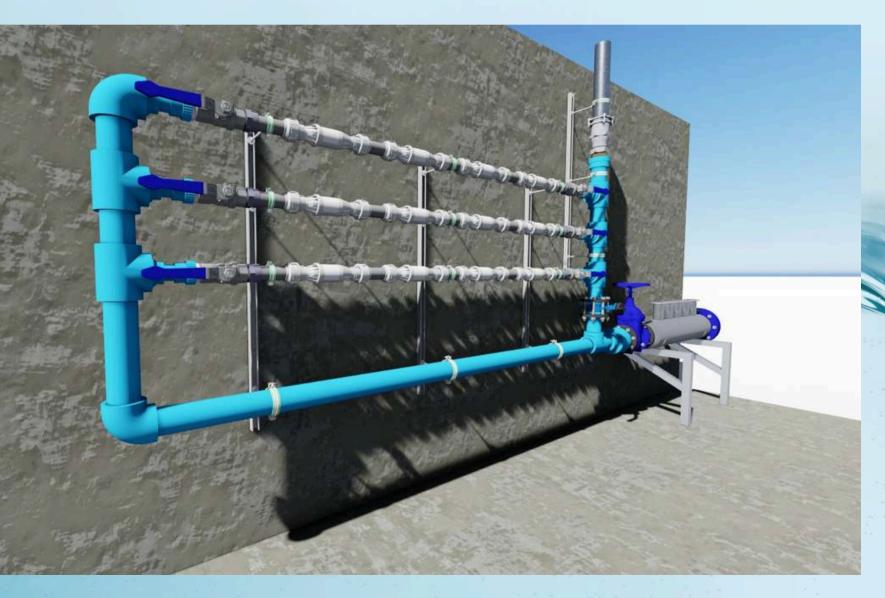
#### **Product Range and Customization**

#### Domestic Systems

Tiger Water Systems offers three standard models specifically designed to adapt to different household needs. These units are compact, user-friendly, and easily installed on residential water inlets, offering high performance for individual homes and small community dwellings. Maximun flow 3,5m3/h

#### Industrial Systems

For larger-scale or commercial applications, Tiger Water Systems provides custom-designed industrial units, tailored to meet the specific needs and flow rates of factories, processing plants, water treatment facilities, or municipal systems.



# Our models

	Pool Tiger Models	Connections ©		Caudal	Weight	Diameter	Long
POOLTIGER  www.PoolTiger.com  Extra 1000	Pool Tiger Residential	50	63	21m3/h	2 kg	10 cm 🔊	44 cm
POOLTIGER	Pool Tiger commercial		63	57m3/h	3,5 kg	13 cm 🔊	49 cm
SPATIGER www.spatiger.us	Spa Tiger	32		3m3/h	0,5 kg	7 cm 🛭	23 cm
GROW TIGER LAWE & GARDER ETHILITIES	Pool Tiger Grow			3m3/h	0,5 kg	7 cm 🛭	25 cm









