

# **Advanced Water Treatment**

We have expertise in water treatment systems to ensure the purity and safety of the drinking water supply at all times.





# Operating principle

It is a reactor where hydroxyl radicals (OH-) are generated through Advanced Oxidative Photocatalysis, a physical-chemical process

capable of producing profound changes in the chemical structure of the contaminants, achieving their mineralization.

In itself, it is a broadband semiconductor that is directly excited by absorbing

radiant energy, the photons generated from the UV lamps contained inside, so that, at the interface

between the excited catalyst (carbon dioxide titanium) and dissolution (mainly water and organic compounds), the degradation reactions of contaminants occur until their mineralization is achieved.

# What makes us different?

# Manufactured as a titanium dioxide monoblock

H2O Titanium does NOT use any type of coating, coating or similar, which means the total impossibility of any release of titanium dioxide with its use.

# Versatility, adaptability and space

It occupies a very small area and does not need infrastructure or civil works for its installation, as it is enough to place it on a bypass by introducing it into the same existing network of pipelines.

# Very low energy consumption and maintenance

Energy consumption is very low, an average of 112W per UV lamp (including peripherals) and its maintenance is very simple.

# Efficiency and Effectiveness

It has been proven to be effective for the elimination of organic compounds, normally achieving efficiencies between 90% and 99%.

# Sustainability

Harmless to people, animals and facilities, it does not require chemicals nor does it incorporate anything into the treated water, which preserves all its properties.



# **Applications**

## Industrial waters

Agri-food, fruit and vegetable, textile, automotive, nuclear, paper, petrochemical, ceramics industries... in short, any industry where it is required to eliminate or reduce the organic matter content of water, allowing its reuse or reuse in different industrial processes.

## Waters with fauna and flora

Aquaculture, aquariums, zoos, natural pools, ponds, seafood farms... the reduction of organic matter (clarification) is achieved, and consequently better color and smell.

## Human consumption

Water purification plants, domestic, hotel, restaurant and naval sectors, for hospital aseptic areas, for practicing sports, for the prevention of legionella in ACS and AFCH circuits

# Irrigation

H2O Titanium, combined with adequate filtration, eliminates all the organic matter present in the water, reducing the use of chlorine and other biocides and leaving water ideal for use or re-use in irrigation.



## Scale and corrosion inhibitors

#### ACP

Electrolytic technology that prevents calcium scale and protects against corrosion.

## Operating principle

The system is based on electrolytic technology, which is the most effective physical procedure for the control and inhibition of lime.

The electrolytic system uses an anode and a cathode (Zinc) to release ions of this metal into the water flow.

These ions act as nuclei that keep the minerals in suspension that give the water its hardness and, therefore, since they cannot precipitate, they do not produce

and are eliminated by purging the system.

## What makes us different?

## Use guarantee for 10 years

In new installations and respecting the conditions of use of the equipment, it can report energy savings of up to 50%.

#### Equipment with the highest Zn-Cu content on the market

Easily verifiable simply by comparing the weights of the units and the basis of the guarantee of use that is granted.

#### Does not consume energy or chemicals

Continuous and undefined treatment once the water passes through the unit without the use of electrical energy or chemical

## Does not require maintenance

The unit does not have to be demonstrated at any time during its useful life for cleaning of any kind.

#### WRAS Certification

All units have WRAS certification, which indicates that the product is suitable for use in Water for Human Consumption.



#### Sustainable and Respectful of the environment

It does not require any type of input and does not generate reject water, it only prevents the minerals that provide hardness to the water from precipitating and forming scale

## **Applications**

#### Residential sector

Wide domestic use in homes, restaurants, cinemas, offices, schools..

#### Tourism sector

Hotels, tourist and recreational centers, associated

#### Health sector

Hospitals, nursing homes, pharmaceutical industry...



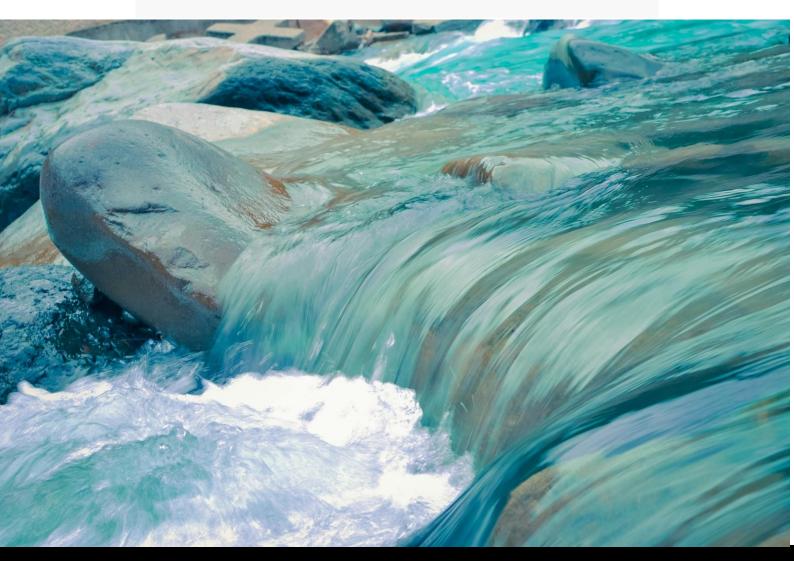
#### Specifications

- Commercial diameters 15mm (1/2") 150mm 6" Threaded connection up to 50mm (2")
- Flanged connection between 50mm (2") and 150mm (6")
- Pressure losses at maximum flow <=0.3 bar
- Water temperature <=80°C



# Efficient Water Management

Efficient water management is crucial to guarantee its availability and quality. Obtaining benefits from the conservation of natural resources, environmental protection and well-being.



## Intelligent water use monitoring system

#### SensorFact

Intelligent monitoring system for the hydraulic network through pulse or ultrasonic sensors to detect leaks and optimize the use of water in industrial, service or supply networks.

#### How does it work?







Easy-to-install ultrasonic pulse sensors and meters monitor your water consumption and send the data to your online control

#### What makes us different?

#### Low cost

 $\label{lem:minimum} \mbox{Minimum installation and implementation costs in similar technologies on the market.}$ 

#### Remote mediation

All measurements reach the intelligent control system through the digital management platform.

#### Non intrusive

It is not necessary to stop the flow circulation for its installation, and it can even be used with meters already installed in it.

## Flexibility

The ultrasonic sensors supplied with the system can be located anywhere on the network, even moved to make other measurements.

#### Smart reports

With permanent and constant measurements, reports are provided that allow evaluating possible points of water loss, and costs to predict maintenance or investments in the network.

#### Alarm management

Easily configurable alarms for PC, tablet or mobile phone depending on parameters that are specified.

## **Applications**

The SensorFact monitoring system has wide use in the industrial sector to control electricity, water and gas consumption; However, the need to control the use of water in all economic sectors of society makes this tool an indispensable product today.



## **Specifications**

- · Use in almost any fluid
- · Pipe diameters between 50 and 700mm (with alternatives for smaller diameters)
  Virtually any pipe manufacturing material

- 2% accuracy for fluid velocities =>0.2 m/s
   Temperature for the equipment between -10°C and
- Temperature for transducers between -20°C and 160°C

