# The evolution is the process of

#### debacterization with recirculation of water

contained water	< 10.000 liters
pumps 20 liters/minutes	1.200 liters/hr
piping	1, 1/4"
$\stackrel{\longleftarrow}{\longrightarrow}$	two filters 10" series connection
estimated time	8/9 hours
current consumption	1Amp 24Vcc

contained water	50.000 liters
pumps 100 liters/minutes	6.000 liters/hr
piping	2,1/2"
<b>→</b>	four filters 20" series connection and parallel
estimated time	8/10 hours
current consumption	3Amp 24Vcc

contained water	15.000 liters
pumps 50 liters/minutes	3.000 liters/hr
piping	1,1/22"
<b>→</b>	four filters 10" series connection and parallel
estimated time	6/7 hours
current consumption	2Amp 24Vcc

contained water	100000 liters
pumps 200 liters/minutes	12.000 liters/hr
piping	5"
<b>*</b>	four filters 20" series connection and parallel
estimated time	8/10 hours
current consumption	3Amp 24Vcc















is proud to present

# Pure Water Solutions





# The scientific principle The Photocatalysis

"The action under which some semiconductor materials, under the combined action of natural or artificial light give rise to a process leading to the reduction or oxidation of undesirable substances even present in small quantities"

Exactly as it happens in chlorophyll photosynthesis.

# The photocatalyst

It is the substance that, through the action of natural or artificial light, changes the speed of a chemical reaction.

# Victory: the bacteria's killer

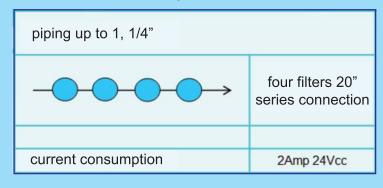
uses a new photocatalyst

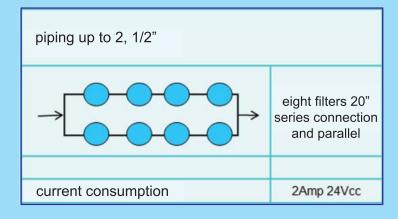
The Tungsten trioxide together with a Platinum paste (Wo<sub>3</sub>/Pt), in nanometric range, which present some advantages:

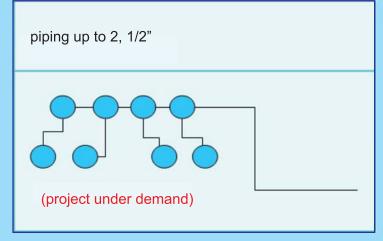
- it provides elimination of gram + and gram whith a performance about thirty times higher than Tio<sub>2</sub>.
- it has an extraordinary photocatalytic activity even in low or artificial light conditions.
- it is declared not dangerous for health.
- it does not lose its properties with the passing of time, since it acts only as a process activator, it does not bind to pollutants and is available for new photocatalysis cycles.
- the polluting and toxic substances are transformed, through the Photocatalysis process into: Sodium nitrates (NaNo<sub>3</sub>), sodium carbonates (Na<sub>2</sub>Co<sub>3</sub>), Limestone (CaCo<sub>3</sub>), Water vapor.

When exposed to light, the  $WO_3$  /Pt absorbs and converts light energy into electrons and electron holes. The  $WO_3$  /Pt reacts with water to create hydroxyl radicals (expressed as OH-) and with oxygen to create anions superoxide ( $O_2$ -). Billions of these highly oxidizing species are created in billionths of a second so as to work to break up the matter at the molecular level. The result is an effective decomposition of organic and inorganic pollutants and one quick and safe sanitation of water.

# Debacterization process«One-Shot»







#### **Available Accessories:**

- Metallic case
- Feet upward
- power supply (second power required)
- Power cable extension

### Tested by:

