



# Hydro-Techniques M.P.B. inc.

au service de l'industrie et de l'environnement

## Aqua-Tron

### INDUSTRIAL WATER TREATMENT SYSTEM

HEALTH Canada Registration number 25505



The **Aqua-Tron** industrial water treatment system is the most efficient and safest technology on the market today.

**Aqua-Tron** is an electronic ionic generator that is capable to stop the growth of bacteria from a water treatment system and this is based on its ionic exchange technology of silver and copper metals developed by the NASA organization, for purifying water on board of the space shuttle and where the electrolytic water purifying system generates silver ions which are released in water at concentrations of **50 to 100 mg per litre** of water to be treated.

### **Advantages of ionization process compared to the chemicals generally used in water treatment systems**

The **Aqua-Tron** system improves the environment because it replaces all the chemical products and materials normally used in a water treatment system and this, with great success. More than that, **Aqua-Tron** is approved by Health Canada.

Corrosion of pipes and filters is caused by the presence of chlorine in the water system and with the **Aqua-Tron** ionizer that maintains the quality of the water, this culprit is eliminated without adding any corrosive chemical materials.

### **Comparison table between ionization process and chlorine**

Frequently Asked Questions (FAQ)	Chlorine	Ionization
Explosive and dangerous to handle?	Yes	No
Dangerous to store?	Yes	No
Evaporates?	Yes	No
Toxic and poisonous for the environment?	Yes	No
Constant problem with manipulation?	Yes	No
Risk of cancer?	Yes	No
Detrimental for the environment?	Yes	No
Additional operation annual costs?	Yes	No
<i>Kills algae? **</i>	Yes	Yes
<i>Kills bacteria? **</i>	Yes	Yes
<i>Kills viruses? **</i>	Yes	Yes

## **General information on water sanitation and purification**

For hundreds of years, we have been knowing that some metals have the characteristic of purifying water from their ionization properties. The best metals that have this characteristic are copper and silver. The copper ions released in the water kill algae and the silver ions kill bacteria and viruses. Thus, silver is an efficient bactericide. The research shows us that copper ions eliminate the growth of algae and bacteria in water. Copper and silver metals are good complements for industrial water treatment systems.

The **Aqua-Tron** ionic purification system releases **controlled quantities of copper and silver ions**. Ionization is created via a process called electrolysis which is the conduction of an electric current through and between two electrodes. The electric current passes ions through positively and negatively charged electrodes. In the water, these charged particles destroy bacteria by changing their electrostatic nature.

The **Aqua-Tron** ionizer is an electric equipment which converts the alternative current (AC current) of 125 volts (with a differential switch) into direct current (DC current) of approximatively 15 volts. The DC current is sent to the electrodes which are in direct contact with water and release copper and silver ions.

The electrodes of the **Aqua-Tron** water treatment system are fabricated from patented alloys and made of 98.5% copper and 1.5% silver metals. A system that uses copper is typically used in drinkable water refreshers where corrosion control and algae control are a constant and major preoccupation.

## **Advantages of the Aqua-Tron system**

- Offers an ecological solution
- No handling of toxic chemicals
- No maintenance cost
- Functioning without monitoring or surveillance
- Very reliable system

All **Aqua-Tron** ionic generator/regulator are fabricated with **high quality electronic components and semi-conductors**. **Aqua-Tron** counts one **microprocessor** that precisely controls the exit and quantity of silver and copper ions.

## **5-year limited warranty**

The manufacturer of the **Aqua-Tron** system guarantees that all electronic components will not have any defect for a period of five (5) years starting from the date of purchase. This applies and covers the initial purchaser only.

**Our Aqua-Tron system is unique and there is no other system like this on the market.**