



O₃ SYSTEM

Taming the elements





HISTORY

CG Air Systèmes revolutionized the North American hydrotherapy market in 1991 by introducing the first air massage system that was safe, hygienic and perfectly adapted to North American requirements.



Since then, **CG Air Systèmes** has maintained its position as an innovative leader by introducing new patented massage concepts developed according to an in-depth understanding of market requirements and consumer expectations. This is achieved through the dedication and efficiency of the dynamic team in their research and development department.

Today, **CG Air Systèmes** has expanded to service world markets by adapting products:

- To specific needs of their customers.
- To tendencies of each sector of the market.
- To geographical requirements of the consumer.

Our goal for the future is to maintain our innovative tradition by nourishing trust and team spirit with our customers, becoming an integral part of their success, their vision and their dreams.

TAMING THE ELEMENTS.

Hygiene has always been an important criteria when buying a bathtub equipped with a massage system, and it's always the most important criteria for **CG Air Systèmes Inc.** when designing new products.



Because ozone has been used as a major water purifier in pools and spas for many years, it was an easy step to introduce it to the bathtub industry. However, a bathtub is not a pool or a spa and has its own specifications. Indoor use, in a small and confined area and the water doesn't need to be purified since it is always fresh water that is used.

Up till now, no one had found the solution to tame nature's special elements in a way that is safe and practical for use in the bathtub industry while taking full advantage of the powerful oxidizing and disinfecting properties of ozone in a whirlpool or an air massage system.

Finally, **CG Air Systèmes Inc.** has found the **only** solution!



WHAT IS OZONE?

NATURE'S ELEMENTS!

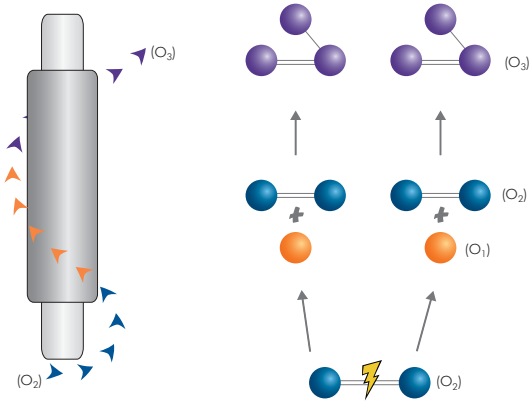
Basically, ozone is a gas or an active oxygen that is naturally created by the sun's UV rays or by the electrical energy of lightning.

We find ozone in the water we drink and even, in small quantities, in the air surrounding us. The use of ozone in bottled water started in the early 80's.

All in all, ozone is one of the most powerful disinfectants available today and although it is considered a gas, it leaves no chemical residue, taste or smell. Actually, it is odourless except for the clean fresh scent that is always present after a storm.

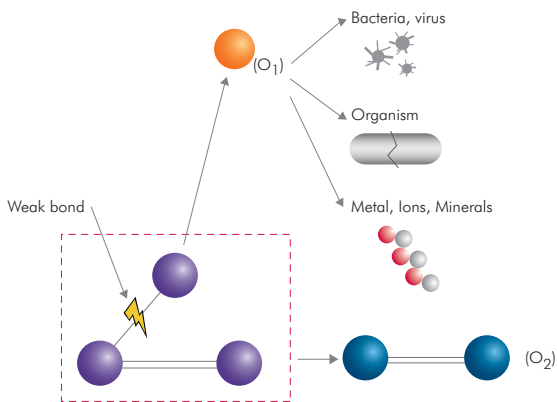
Also, it is not a gas that can be purchased or stored; it is simply generated when needed and actually destroys all particles remaining within your piping without using any chemicals.

An oxygen molecule (O_2) is 2 oxygen atoms connected together. When hit by a (VUV) "Very Ultra Violet" light, it splits and becomes 2 individual oxygen atoms (O_1). Each atom will connect with another oxygen molecule creating a 3 oxygen atoms molecule that is called ozone (O_3), a highly energetic oxidizer.



HOW DOES OZONE WORK!

SANITIZE WHERE NEEDED!



The third atom of the O_3 molecule, is connected by a weak bond creating an unstable compound. Each time the O_3 molecule enters in collision with contaminants, the weak bond frees the third atom leaving a highly energetic oxidizer as a by-product thus oxidizing any organic molecule and dissolving solids to be precipitated.



Ozone will eliminate all known disease-causing micro-organisms such as bacteria, viruses, yeasts, mould and mildew. It breaks down harmful chemical residue and dissolves minerals to be precipitated so they can easily be removed.

IT IS NOT ONLY SAFE FOR THE ENVIRONMENT BUT IS ALSO GENTLE ON BATHTUB COMPONENTS.

It is a well known fact that the combination of moisture and heat is one of the main factors in the creation of bacterial growth in any environment.

What better conditions than within the air channel or the whirlpool piping of a bathtub where humidity combined with residue remains after each use.

The O_3 System eliminates this worrisome factor by completely sanitizing every inch of the air channel and/or whirlpool piping immediately after each use thus preventing the possible colonization of bacteria and micro-organisms.

WHY OUR SYSTEM IS SO UNIQUE...



CG Air Systèmes Inc.: Patent
Pending Prozone: Patented

IT IS THE SYSTEM THAT WE ARE SANITIZING, NOT THE BATHER!

During past years, CG Air Systèmes has been studying the main advantages and inconveniences of using ozone in the bathtub industry. There are ozonators on the market but they are mostly adapted for the spa or pool industry and have been only slightly modified for the bathtub industry.



It was essential to us to find a way to thoroughly sanitize the entire bathtub system whether whirlpool or air channel system without necessarily having the bather caught in the middle as is the current in the present method used in the bathtub industry.

**BASICALLY, YOU DON'T WANT TO BE DISINFECTED!
YOU WANT YOUR BATHTUB SYSTEM TO BE!**

We also wanted to create a worry-free sanitizing system so that it would turn on by itself in the exact moment that it is needed. Instead of having the ozonator sanitize the system while the bather is taking advantage of the relaxing massage, our **O₃ System will sanitize the bathtub system after each and every use.** Doesn't that make more sense?

Even though ozone is not a harmful gas when used in such a small concentration for bathtub sanitization; we have made it so that the system will only start under certain conditions and it will never be possible to start it otherwise.

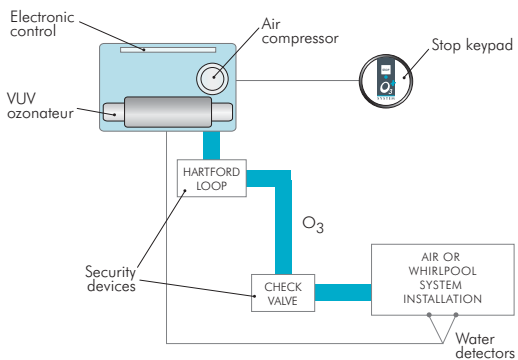
However, we also wanted to let the user know which cycle of the sanitizing process the O₃ System is in, and offering him the possibility of turning it off if he wishes to do so.

**WITH ALL THIS IN MIND, WE ARE VERY PROUD TO INTRODUCE
OUR RESULTS: THE O₃ SYSTEM .**

HOW OUR SYSTEM WORKS

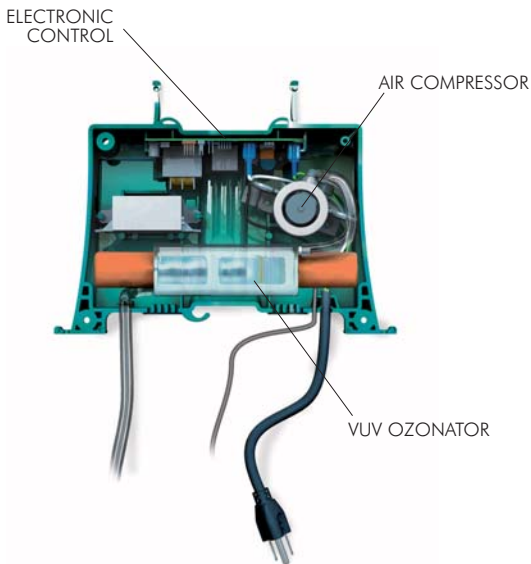
IT TAKES CARE OF EVERYTHING AT THE RIGHT MOMENT!

O₃ SYSTEM



- When the probes detect water in the bathtub, the O₃ System automatically activates the waiting mode until the bathtub is emptied.
- Once the O₃ System has detected an absence of water, the O₃ System turns on a one hour delay timer. The O₃ System will then start the cleaning process for a period of 15 minutes to sanitize the whirlpool piping and/or the air channel of your bathtub massage system.
- Because ozone is much heavier than air, the 15 minute cycle is sufficient to fill the bathtub and the systems with ozone for an efficient sanitization process.
- Thirty seconds before the end of the cleaning cycle, the system will turn off the ozone generator and only the air compressor will continue to function. Doing so, the ozone gas that is left within the O₃ module will be emptied thus will prevent corrosion of the system components.
- When the sanitization cycle is finished, the O₃ System will automatically turn off until another water detection occurs within the bathtub.
- An electronic keypad accessible from the inside and the outside of the bathtub will permit the user to turn off the sanitizing process at any time. However, for security reasons, he will not be able to start the O₃ System manually.
- No maintenance is necessary for the O₃ System.
The various stages of the cycle can be visualized through the LED of the keypad.
 1. LED off: System not in use.
 2. LED flashes: In waiting mode.
 3. LED on: In sanitization mode.

O₃ SYSTEM



OZONE MODULE.

Small and compact, the O₃ System module was designed to facilitate the installation with either a whirlpool or an air channel system (see pages 9 and 10). This ingenious module incorporates an air compressor and the VUV ozonator from **Prozone** as well as an electronic control that controls all sanitization process of your massage bathtub.



ELECTRONIC CONTROL

The **electronic control** incorporated within the O₃ module has two independent connections: one for the ozone generator and one for the air compressor allowing individual and optimal programming of the O₃ System as well as permitting personalized programming.

AIR COMPRESSOR

The **internal diaphragm compressor** has the advantage of improving the ozone production as it increases the volume of O₃. The compressor pushes the ozone throughout the piping and/or air channels of the massage systems.

VUV OZONATOR

“Very Ultra Violet” ozone generator cartridge. The VUV ozone generator produces ozone by splitting the oxygen molecule in the air with a “Very Ultra Violet” light.

AVAILABLE IN:

- 120 volts/60 Hz, 240 volts/60 Hz.

TIPS

The main problem of the ozone systems on the market is that residual ozone remains after each use and corrodes the components that are included within the module thus diminishing the longevity of the ozone system. CG Air Systèmes Inc. innovates and offers you a patented oxidization free O₃ System module that automatically protects your electric and electronic components by purging the ozone residue from the module at the end of each sanitization cycle.

KEYPAD & PROBES

TOTAL CONTROL OF YOUR O₃ SYSTEM.



FUNCTION INDICATOR:
 1. LED off: System not in use.
 2. LED flashes: In waiting mode.
 3. LED on: In sanitization mode.

WATER DETECTORS

The CG Air Systèmes Inc. innovative and unique use of water detectors in the ozone system is very easy to install. Simply connect them to small probes within your bathtub or system. By detecting the water or should we say the absence thereof; it will automatically activate the O₃ System only after the bathtub has been emptied.



Also, if the bathtub has been used as a soaker or a tub/shower, the O₃ System will automatically turn on because of the water detection even though the massage systems has not been used.

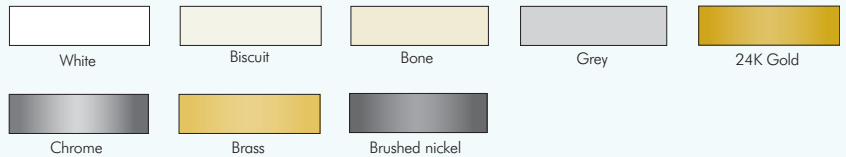
OPTIONAL PROBES • PLATED STAINLESS STEEL PROBES AVAILABLE IN:

- Chrome
- Brass
- 24K Gold

O₃ SYSTEM KEYPAD • SMALL, DISCREET AND SLIM

- All electronics are completely sealed within a watertight plastic membrane that is part of the label.
- LED light showing which mode is activated.
- Easy clip on plug for easy connection.
- Completely accessible from the top of the bathtub for easy maintenance.
- Choose your shape, color, pictograms and add your logo.
- Available in all standard ABS or plated finish colors.

AVAILABLE FRAMES COLORS



WHIRLPOOL SYSTEM

OUR O₃ SYSTEM, A MUST!

The O₃ System module was specially designed for easy installation underneath the bathtub. This ingenious module can be installed just about anywhere. You can screw it directly under the bathtub or simply hang it on the piping of your whirlpool system. Simple as can be!



The O₃ System is a complete independent system. The ozone is directly injected within the piping of the whirlpool system by pressure generated by the compressor within the O₃ System module.

There are 2 security levels incorporated within the system.

1. **A loop of piping at the module level.**
2. **A security check-valve.**

These 2 security levels prevent water back flow within the O₃ System and its components.



TIPS

The majority of ozonators available on the market function with the venturi effect of the whirlpool pump to inject the ozone within the system. Therefore the bathtub must be full of water and the whirlpool system must be in function. The ozone that is injected within the system loses most of its efficiency for the sanitization of the piping of the whirlpool system because the majority of the ozone concentration is used to sanitize the bath water. Furthermore, a venturi system is incapable of generating as much concentration of ozone as with a compressor system.

AIR SYSTEM



IT WORKS FOR AIR TOO!

The O₃ System module was specially designed to be installed on the Mani-SD of your air system. However, it can also be installed by screwing it directly under the bathtub or simply attached to the piping.

The major innovation of the O₃ System is that it was not only created with the whirlpool system in mind but also for installation to an air channel system.

The ozone is directly injected within the channels of the air system with pressure generated by the compressor within the O₃ System module. As ozone is a gas, each and every inch of the air channel will be sanitized to prevent bacteria, virus or micro-organisms to spread or grow.

There are 2 security levels incorporated within the system.

1. **A loop** of piping at the module level.
2. **A security** check-valve.

These 2 security levels prevent water back flow within the and its components.

TIPS

CG Air Systèmes Inc. is recognized worldwide for its expertise in the development of various types of air systems. The air system is an ever growing market and we are the first and only company to design the O₃ System with this reality in mind. The O₃ System is not only for the whirlpool system. It is designed for the air system as well as for a combination of both systems.





www.cgair.com

207, rue Industrielle, Sainte-Marguerite (Québec) Canada G0S 2X0

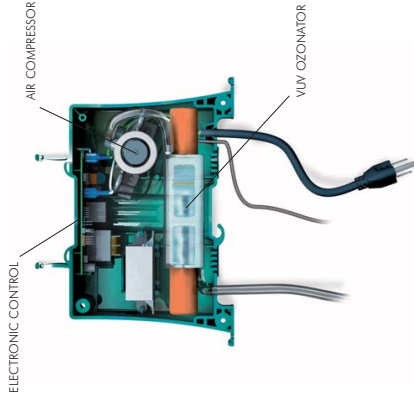
T: 418-935-7075 • 1-800-463-9927 • F: 418-935-3507 • cgair@cgair.com



INNOVATION

The main problem of the ozone systems on the market is that residual ozone remains after each use and corrodes the components that are included within the module thus diminishing the longevity of your ozone system.

CG Air - Systèmes Inc. innovates and offers you an oxidation free O₃ System module that automatically protects your electric components by purging the ozone residue from the module at the end of each sanitization cycle.



ELECTRONIC CONTROL

The electronic control incorporated within the O₃ System module has two independent connections: one for the ozone generator and one for the air compressor allowing individual and optimal programming of the O₃ System as well as permitting personalized programming.

AIR COMPRESSOR

The internal diaphragm compressor has the advantage of improving the ozone production as it increases the volume of O₃. The compressor pushes the ozone throughout the piping and/or air channels of the massage systems.

VUV OZONATOR

"Very Ultra Violet" ozone generator cartridge. The VUV ozone generator produces ozone by splitting the oxygen molecule in the air with a "Very Ultra Violet" light.



FUNCTION INDICATOR:
 1. LED off: System not in use.
 2. LED flashes: In waiting mode.
 3. LED on: In sanitization mode.

O₃ SYSTEM KEYPAD

Easy clip on connection and top side access for maintenance if needed. As with all **CG Air - Systèmes Inc.** high quality keypads, all electronic parts are sealed within a water tight membrane.

UNIQUE FEATURE

The sanitization system turns on automatically without any programming or maintenance. You can turn it off any time throughout the cycle.



AIR MASSAGE SYSTEM



WHIRLPOOL MASSAGE SYSTEM

O₃ SYSTEM