



In-Store Water Treatment  
and Beverage Dispensers



Laboratory  
Water Treatment



Ice Flakers and Food  
Processing Water Treatment



Hemodialysis  
Water Treatment



Water Treatment for Medical  
Disinfectors and Medical Care

# IM/WT-Series

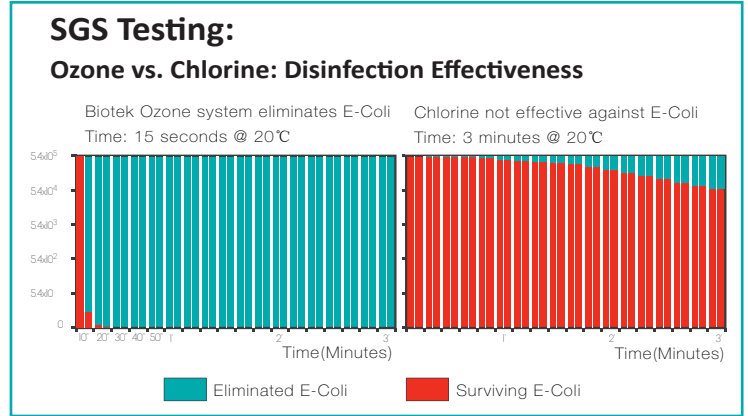
## Water Disinfection System

## About Ozone

Ozone is nature's three-molecule solution for safer, more effective sanitation. Today Ozone is used throughout many industries (by companies such as Intel and Coca-Cola) for its powerful disinfection properties, eliminating pesticides, viruses, fungal spores, bacteria, microorganisms, and harmful chemicals. Ozone is considered to be significantly safer than chemical disinfectants since it leaves nothing but oxygen as a by-product.

## Benefits of Dissolved Ozone

1. Ozone effectively sterilizes tap water.
2. Dissolved Ozone is 3000 times stronger than chlorine.
3. All machine components are disinfected.
4. In contrary to UV, ozone offers residual disinfection.
5. Residual ozone prolongs food shelf life and deodorizes.
6. Ozone removes pesticides and other harmful chemicals.
7. Prevents scale build up.
8. Ozone reverts back to oxygen after disinfection.
9. No by-products or residues.
10. Inactivates viruses, bacteria, fungi, mold and mildew.



Items	Biotek Ozone	Liquid Chlorine	Chlorine Dioxide	UV	SGS Testing	Test Item	0 sec	5 sec	15 sec	Reduction
Clean and Safe	✓	✗	✗	✓	Antimicrobial Effectiveness Testing	Staphylococcus aureus (CFU/ml)	5.4x10 <sup>5</sup>	Not Detected	Not Detected	>99.999%
Kills Bacteria	✓	✓	✓	✓		Escherichia Coli (CFU/ml)	2.5x10 <sup>5</sup>	6.1x10	< 10	99.99%
Also effective on Viruses	✓	✗	✗	✗		Salmonella (CFU/ml)	1.7x10 <sup>5</sup>	1.9x10	Not Detected	99.9%
Treatment time under 10 mins	✓	✗	✓	✓		Pseudomonas aeruginosa (CFU/ml)	4.5x10 <sup>5</sup>	Not Detected	Not Detected	>99.999%
Effective deodorizer	✓	✗	✗	✗		Candida albicans (CFU/ml)	1.3x10 <sup>5</sup>	Not Detected	Not Detected	>99.999%
Residual Disinfection	✓	✓	✓	✗		MRSA (CFU/ml)	1.3x10 <sup>5</sup>	Not Detected	Not Detected	>99.999%

SGS is the world's leading inspection, verification, testing and certification company. SGS is recognized as the global benchmark for quality and integrity. With more than 48,000 employees, SGS operates a network of over 1,000 offices and laboratories around the world.

## The World's First Dissolved Ozone System For POU Water Disinfection

Ozone has been recognized as a particularly powerful and clean disinfectant for decades, however its application has been limited to large scale operations such as bottling plants (Coca-Cola), semi conductor breeding (Intel) and water treatment plants. The reason for this limited use has been the difficulty in generating Ozone which has previously required expensive, large and dangerous equipment. Biotek's technology is affordable. That is why industry leaders are replacing UV lamps and chemical dosing systems with Biotek Ozone Systems to overcome the shortfalls of UV light and harmful chemicals.

## Biotek-Ozone Technology

Biotek-Ozone has spent 20 years developing our Ozone generation system which now has over 40 worldwide patents and the following advantages:

- Requires only municipal water as an input
- Enables cost effective, point-of-use application of Ozone
- Compact and Low voltage for convenient, safe and quiet use
- Provides instant and continuous Ozone with no warm up or cool down time
- Injects dissolved ozone directly into the water distribution system, preventing off-gas issues
- Superior to UV lamps, chemical dosing systems, and Corona Discharge Ozone Generators



**Patented Electrolytic Ozone Generator**

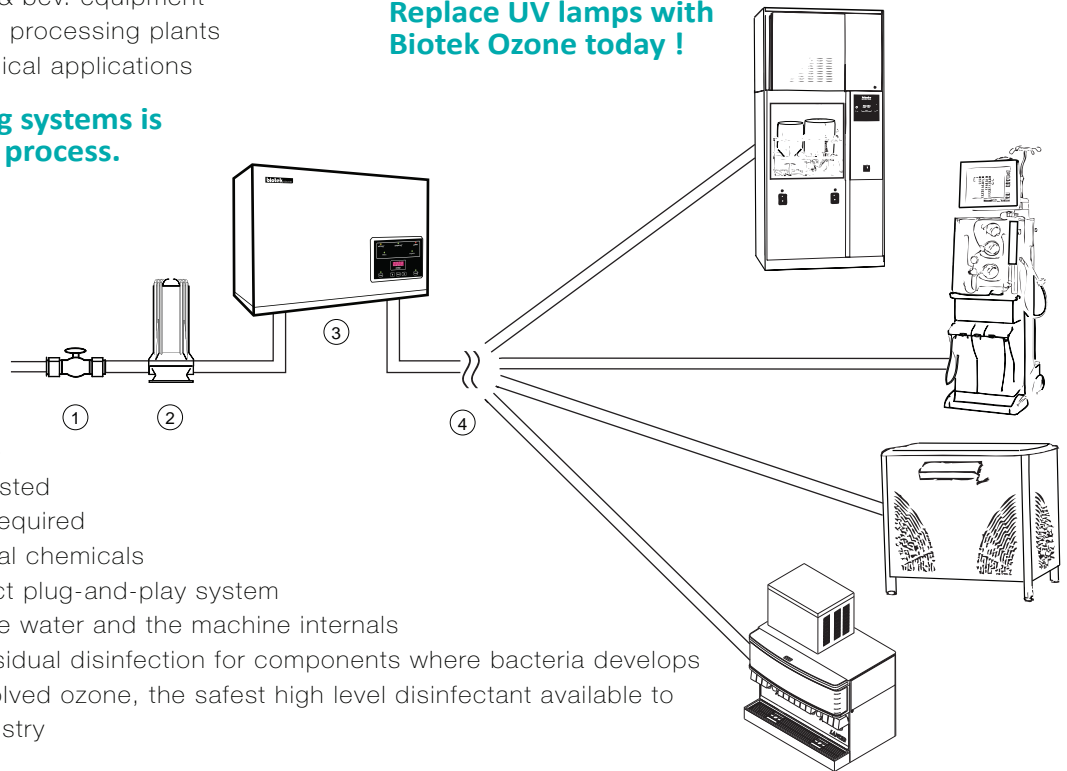
## Applications

- Ice machines
- In-store water treatment
- Lab water treatment
- Water disinfection for hemodialysis machines
- Water treatment for food & bev. equipment
- Water disinfection in food processing plants
- Water disinfection for medical applications

- ① Tap water supply
- ② Optional prefilter
- ③ High concentration dissolved ozone is injected into the water distribution system
- ④ Ozonated water disinfects the input water and machine components of medical disinfectors, hemodialysis machines, beverage dispensers, ice machines, and more.

**Replace UV lamps with Biotek Ozone today !**

**Integration into existing systems is a simple plug-and-play process.**



## Advantages

- No PLC required
- No residual chlorine taste
- Ozone levels can be adjusted
- No refill or maintenance required
- No by-products or residual chemicals
- OSHA compliant, compact plug-and-play system
- Disinfects both the source water and the machine internals
- Ozonated water offers residual disinfection for components where bacteria develops
- Efficiently produces dissolved ozone, the safest high level disinfectant available to the food & beverage industry

## Biotek Electrolytic Ozone Generator VS Conventional Corona Discharge (CD)

Item	Biotek Electrolytic Ozone Generator	Conventional Corona Discharge (CD)
<b>Ozone concentration</b>	H <sub>2</sub> O → O <sub>3</sub> at 20% efficiency No warm up time and generates high concentration ozonated water, ensuring most effective disinfection performance.	Air → O <sub>3</sub> at 3% or Pure O <sub>2</sub> → O <sub>3</sub> at 6% efficiency Requiring warm up time and incapable of effectively dissolving ozone into water.
<b>Power Supply</b>	Low voltage DC, ozone generator below 4V Simple circuit reduces hazards of dangerous blowout	High frequency AC voltage is more expensive and potentially more dangerous to operate. Complicate circuit increases chances of failure
<b>Ozone generator life</b>	Biotek Ozone's Electrolytic Ozone Generator is guaranteed for 2000 hours in all operating conditions. During this time the Ozone output will always remain above 70% of listed specifications.	Under high frequency voltage, CD electrodes are consumable, affected by air quality and unstable O <sub>3</sub> generation. Different discharge tube life range 100~1500 hours.
<b>Noise</b>	Low noise due to low voltage.	High frequency and high voltage, results in loud discharge noise during operation.
<b>Space</b>	Compact POU (Point of Use) systems	Support equipment required, incapable of effective POU operation.
<b>Humidity</b>	Capable of operating in almost any ambient conditions	Any air moisture will reduce Ozone outputs significantly
<b>US OSHA Standard: 0.08ppm/8 hr</b>	Complete compliance	No compliance