

biotek ozone

Water Disinfection System

Powered by Biotek Electrolytic Ozone Generator



IM-7100

Water Disinfection System

Short Form Description

The Biotek IM-7100 model is an water Disinfection System. Generating high purity dissolved ozone to be injected into the input water supply for high level disinfection of water and internal components.

Application

- Ice Machine
- In-store water treatment
- Medical water treatment
- Lab water treatment
- Food processing water treatment
- General water treatment
- Medical Ware washer

Features:

- Build in folw switch and pressure switch
- No PLC required
- No off-gas
- Replcae UV lamp for water disinfection with additional residual
- Replace chemical dosing system no chemical refill and regular pruchase required

Advantages:

- Tap water as the only required input
- Simple integration and automated operation
- Instant and Continuous flow of Ozonated Water
- Only O₂ released as byproduct
- Powerful disinfection, eliminates pesticides, viruses, bacteria and chemicals
- Meets strictest OH&S requirements
- No refilling, No maintenance
- Generator life over 3000/5000h (for higher than 70% optimal generation levels)
- Compact and Quiet

Power supply

- Power consumption: 80 watts
- AC Input: 200~240V, 100~120V, 50/60Hz

Input specifications:

- Input Water: municipal water
- Input Water Pressure: 3.0~6.0 kg/cm² (43~85 psi)
- Input Water Temperature: 5~30°C / 41~86°F

Output specifications:

- Ozonated Water Output Capacity: 180-350 L/hr

Appearance:

- Frame in stainless steel
- Height 435 mm
- Depth 260 mm
- Width 575 mm

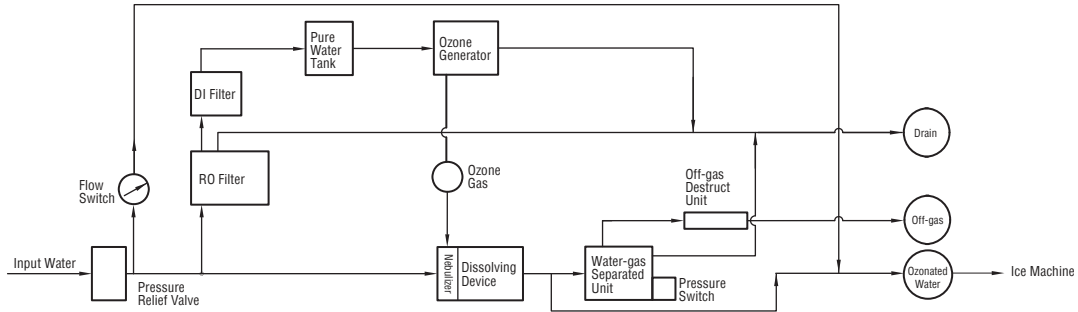
Warranty

- 1 year warranty

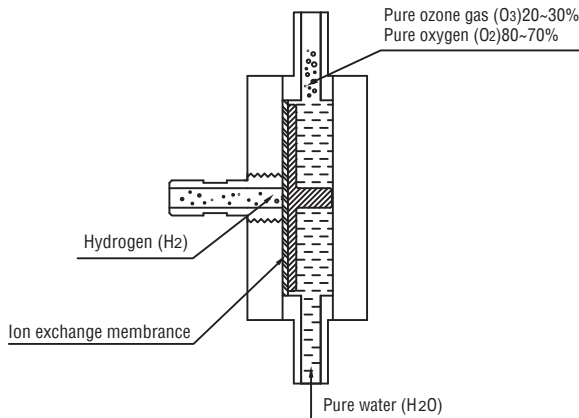
Accessories:

- Prefilter, only required for areas with particularly low quality municipal water

Example Flow Chart with Integrated Biotek Ozone System



Electrolytic Ozone Generator Cell



Chemical Reactions



Ozone vs Chemicals

Items	Biotek Ozone	Liquid Chlorine	Chlorine Dioxide	UV
No harmful chemical residues or by-products	✓	✗	✗	✓
Kill Bacterias	✓	✓	✓	✗
Also effective on Viruses	✓	✗	✗	✗
Short term Cost	Medium	Lowest	Low	Highest
Treatment time under 10 mins	✓	✗	✓	✓
Effective deodorizer	✓	✗	✗	✗
Residual Disinfection	✓*	✓	✓	✗
Does not require regular purchase of inputs	✓	✗	✗	✓

* Ozone has residual disinfection for several minutes before breaking down to oxygen

SGS Testing

	Test Item	Osec	5sec	15sec	Reduction(%)
Antimicrobial Effectiveness Testing	Staphylococcus aureus (CFU/ml)	5.4x10 ⁵	Not Detected	Not Detected	>99.999
	Escherichia Coli (CFU/ml)	2.5x10 ⁵	6.1x10	< 10	99.99
	Salmonella (CFU/ml)	1.7x10 ⁵	1.9x10	Not Detected	99.9
	Pseudomonas aeruginosa (CFU/ml)	4.5x10 ⁵	Not Detected	Not Detected	>99.999
	Candida albicans (CFU/ml)	1.3x10 ⁵	Not Detected	Not Detected	>99.999
	MRSA (CFU/ml)	1.3x10 ⁵	Not Detected	Not Detected	>99.999
Decompose Residual Pesticide	Mevinphos	0.642	0.000		100%
	Permethrin	0.559	0.0337		94%

REMARK : 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.

Spare Parts Life

IM-7100	Daily use time estimated	Replacement Period
Reverse Osmosis Filter	4 hours	6 years
Deionizer Resin Filter	4 hours	2 years
Off-gas Destruct Unit	4 hours	2 years
Ozone Generator	4 hours	2 years

Specifications

Product	Commercial Electrolytic Ozonated Water Generator
Model No.	IM - 7100
Ozonated water flow rate (with 3.0kg/cm ² input pressure; 43 psi input pressure)	180 - 350±10% l/h
Ozonated water output pressure	2.0 - 2.2 kg/cm ² ; 28.4 – 31.2 psi
Dimension (W*D*H)	575 x 260 x 435 mm
Net weight	16.5 kg

Operating requirements

	Minimum	Maximum
Water Temperature	5°C; 41°F	30°C; 86°F
Water Pressure	3.0 kg/cm ² ;43 psi	6.0 kg/cm ² ; 85 psi
Ambient Temperature	5°C; 41°F	35°C; 95°F
Room Condition	Good ventilation	
Voltage	100 - 120 V, 60/50 Hz	200 - 240 V, 60/50 Hz;
Power Supply	80 W	
Input Water	Municipal tap or pre-operation processed water	

Shipping information

Net weight	16.5 kg
Unit dimensions	575 x 260 x 435 mm