



OWS Series

save as you wash

- High performance
- Simple installation
- Safe to operate
- Dissolved ozone

Professional Ozone Laundry

Hospitality | Healthcare | Laundromat

BioSure

PROFESSIONAL

At BioSure Professional we produce ozone generation and integration equipment specifically for use in the professional laundry industry. We take our commitment to quality seriously and strive to continually improve our products in order to ensure we are providing the highest quality ozone laundry solutions available.

We are dedicated to providing our customers with complete solutions for their laundry needs through our cost-saving and ecologically-responsible units.



*Some features happen only with programmable washer-extractors.



Features

- Compact, wall-mounted
- Flow triggering, automated operation
- Powered by iEOG, no need of air feed
- Consistent, independent to air quality
- Durable, major maintenance every 3 years
- Safe, with built-in destructor controlling off-gas
- Flexible, integration on multiple washers available
- Concentrated dosage enhancing sanitation contact
- Programmable dosing times available for different contamination demands

Advantages

- Minimum maintenance
- No feed air preparation
- High concentration
- Consistent oxidation concentration
- Effective sanitation & deodorization
- Easily integrated to existing washers
- Low cost

Application

Hospitality



Healthcare

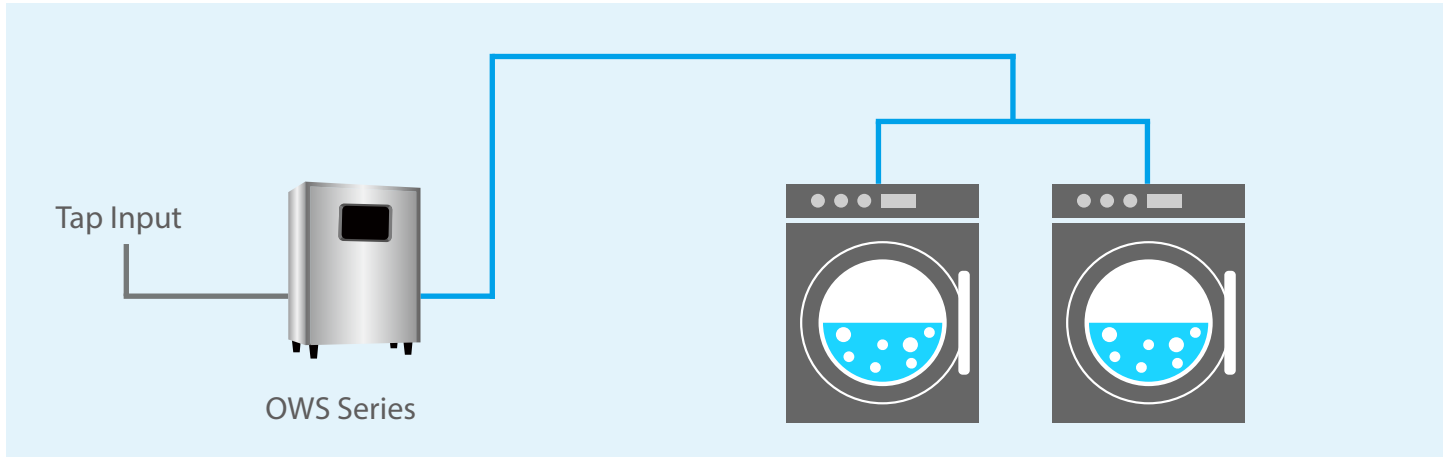


Laundromat



Installation

- OWS Series are designed to operate 24/7 in an extremely busy working environment.
- For laundromat application, depending on usage of washers and water flow, OWS Series could support multiple washers.



How It Works

<p>1.</p> <p>Generates high purity ozone directly from water (O₃ by 28 wt%).</p>	<p>2.</p> <p>Delivers ozonated water to washer extractor.</p>	<p>3.</p> <p>Dissolved ozone kills bacteria, viruses and superbugs.</p>	<p>4.</p> <p>Oxygen opens fibers to promote cleaning and drying.</p>
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Dissolved vs. Bubble

If you believe chlorine bleach in liquid solution is correct, why bother using more dangerous chlorine gas?

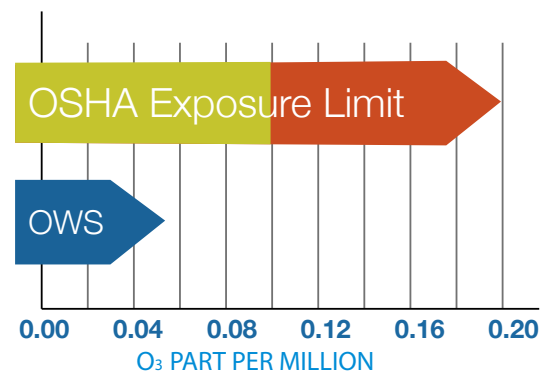
BioSure Professional's OWS Series provides instantly dissolved ozone solution rather than gaseous ozone as almost no one is applying gaseous chlorine in modern commercial laundry. Most washer manufacturers void their warranty if "bubble" system is applied.

Highly concentrated dissolved ozone solution delivers great wash result with no worries of ozone off-gasing unlike other technologies.

Safe to Operate

OSHA guidelines for ozone off-gas

- 0.2 ppm for no more than 2 hours exposure
- 0.1 ppm for 8 hours per day exposure





Sanitizes In All Cycles

Ozone is one of the most powerful disinfectants known to man and proven effective against all micro-organisms, bacteria, yeasts, moulds and viruses - including superbugs such as MRSA.

- BioSure Professional kills 99.999% of harmful bacteria on all wash cycles.
- Eliminates odor for the washer extractor.



Improves Washing Results

Ozone in water solution performs oxidation to linen soils and destroys odor-causing elements. Also, the oxygen from ozone penetrates and opens up the fibers. Thus:

- Recovering linen softness.
- Refreshing smells.



Shorter Drying Times

Because fibers are opened, moisture release becomes easier in the dryers or on a flatwork ironer. Thus:

- Creating much faster drying times.
- Reduce energy use in drying.



Reduces Water & Energy Use

Dissolved ozone supplies oxygen to the wash water, enhancing chemical effectiveness.

Thus:

- Fewer rinse steps required or shorter wash cycles.
- Less need for water heating.





Enhances Chemical Performance

Because ozone allows existing chemicals to work better, overall chemical demand can be reduced, especially to the need for harsh and high-pH chemicals in conventional washing processes.



Deodorization

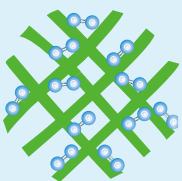
Ozone is an effective deodorizer that works by oxidizing and breaking molecular bonds of many organic and inorganic compounds typically responsible for odors that are found in washer-extractor and on soiled laundry.

Sure
SIONAL



Improves Textile Life & Quality

Shorter cycles or washing times and cooler temperature water means less wear and tear on linens. Also, reduced exposure to harsh chemicals improves fabric life.



Improves Effluent Quality

Due to fewer chemicals are used and also the oxidation of ozone in the wash water, both biochemical and chemical oxygen demands (BOD & COD) in the wastewater will be greatly reduced.

Results & Performance

SGS		BioSure Professional Ozonated Water Efficacy Test				
		Test Item	0 sec	5 sec	15 sec	Reduction (%)
Antimicrobial Eciency Test	Staphylococcus aureus (CFU/ml)	5.4 x 10 ⁵	Not detected	Not detected	> 99.999	
	Escherichia Coli (CFU/ml)	3.4 x 10 ⁵	Not detected	Not detected	> 99.999	
	Salmonella (CFU/ml)	1.1 x 10 ⁵	1.0 x 10	Not detected	> 99.999	
	Pseudomonas aeruginosa (CFU/ml)	4.5 x 10 ⁵	Not detected	Not detected	> 99.999	
	Candida albicans (CFU/ml)	1.3 x 10 ⁵	Not detected	Not detected	> 99.999	
	MRSA (CFU/ml)	2.4 x 10 ⁵	Not detected	Not detected	> 99.999	

Technology Comparison

BioSure Professional's patented Indirect Electrolytic Ozone Generation (iEOG) technology is the world's leading technology for ozone generation. It is a unique technology which produces ozone from water instead of gaseous air or oxygen. No other substance besides water is used in the electrolysis and only pure ozone with no Nitrogen Oxides (NOx) will be produced. The technology has proven to fulfill the demand within professional environment for providing a reliable and consistent performance with minimal maintenance required as most others do not.

iEOG Technology

- No need of feed air handling
 Performance is independent to humidity and air quality (lint in air).
- No by-product, NOx-free
 No NOx hazards, no acidification and associated corrosion in contact with equipment or materials.
- Promoted Ozone Purity - up to 28wt%
 Higher ozone purity means higher efficiency. iEOG delivers 6 to 10 times better dissolution efficiency than ordinary Corona Discharge system.
- Consistant performance
 For ozone generated from water electrochemically the production is consistent and independent to environmental variables.
- Reliable operation
 Full time self-monitoring, real-time collective alarm and service codes are available.

Conventional Corona Discharge

Performance is highly dependent to humidity and air quality (lint in air). Feed air preparation is required (air filters, air dehumidifier or oxygen concentrator), meaning frequent maintenance needs.

NOx production in corona discharge represents a health hazard and potential lead to corrosion.


About only 1-3wt% of ozone is produced in corona discharge ozone system without air pre-treatment. More nitrogen is dissolved in water and very little ozone can be dissolved.


Inconsistent performance fluctuation can happen in daily opertaion due to air quality variables, especially lint and humidity. Frequent daily and weekly check up is required for on-site service engineers.


Self-monitoring is not available leading to potential blind operation.

Specifications

Washer-extractors:


 <p>CLS30</p>	Model No.		CLS30
	Avg. Ozonated Water Conc.		>1.0ppm
	Maximun Output Flow Rate		900LPH (3.96GPM)
	Applied Washer-extractor size	Hospitality	20 lbs x 2 unit / 35 lbs x 1 unit
		Laundromat	In total 60 lbs combination
		Healthcare	20 - 35 lbs x 1 unit
	Power Supply	Voltage	100 - 120V, 50/60Hz or 200 - 240V, 50/60 Hz
		Power Consumption	60W
Appearance	Dimension (mm)	300 x 169 x 431 (mm)	
	Net Weight	7.5kg (15.5lbs)	
Input/Output Diameter		½"	

 <p>OWS-1</p>	Model No.		OWS-1
	Avg. Ozonated Water Conc.		>1.0ppm
	Maximun Output Flow Rate		4000LPH (17.6GPM)
	Applied Washer-extractor size	Hospitality	60 lbs x 2 unit / 120 lbs x 1 unit
		Laundromat	In total 120 lbs combination
		Healthcare	60 lbs x 1 unit
	Power Supply	Voltage	100 - 120V, 50/60Hz or 200 - 240V, 50/60 Hz
		Power Consumption	900W
Appearance	Dimension (mm)	550 x 310 x 680 (mm)	
	Net Weight	50kg (110lbs)	
Input/Output Diameter		1 ½"	

 <p>OWS-3</p>	Model No.		OWS-3
	Avg. Ozonated Water Flow Rate vs. Conc.		>1.0ppm
	Maximun Output Flow Rate		6000LPH (26.4GPM)
	Applied Washer-extractor size	Hospitality	120 lbs x 2 unit / 250lbs unit x 1
		Laundromat	In total 250 lbs combination
		Healthcare	120 lbs x 1 unit
	Power Supply	Voltage	100 - 120V, 50/60Hz or 200 - 240V, 50/60 Hz
		Power Consumption	1150W
Appearance	Dimension (mm)	760 x 350 x 1034 (mm)	
	Net Weight	80kg (243lbs)	
Input/Output Diameter		1 ½"	

- 1ppm for energy saving-focus application
- 2ppm for disinfection-focus application

Tunnel Washers:

 <p>G Series</p>	Model No.	G3	G6	G9
	Ozone Production	3 g/h	6 g/h	9 g/h
	Voltage	100 - 120V, 50/60Hz or 200 - 240V, 50/60 Hz		
	Power Consumption	300W	600W	900W
	Dimension (mm)	760 x 350 x 1034 (mm)		
	Net Weight	60kg (132lbs)	67kg (148lbs)	75kg (165lbs)
	Input/Output Diameter	3/8"		

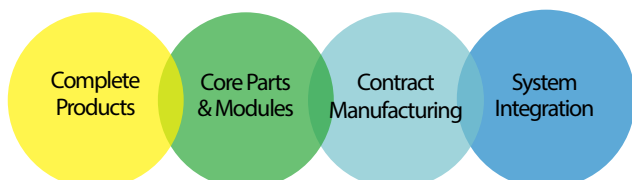
For tunnel washer application, please contact our sales agents.

Sanitized & Fresher Smelling TRUE CLEAN Cleaner, Softer & longer lasting linen REAL SAVINGS

About Us

Since 1988, BES Group has been the global leader in electrolytic technology. Converting water to ultra pure ozone gas and hydrogen gas is our core technology. Series products include Food Safety & Sanitation, Healthy Environment, Clean Water, and Sanitation & Wellness.

All products and components are tested for high performance, safety, and reliability with required certifications from government agencies and leading 3rd party labs.



BIOSURE North America, LLC.

2020 Babcock Rd., Ste. 25
San Antonio, Texas - USA

www.besgroups.com

Biotek Environmental Science Ltd.

5F, 98 Xingde Rd, Sanchung Dist,
New Taipei, 24158 Taiwan

www.besgroups.com

ISO 9001 Certified



Technologies applied are protected by one or more of the following patents: US 8,308,914 B2, US 9,757,697 B2, US 9,248,208 B2



Sales Finland
Sauvo3 Ltd.

Timperintie 5
21570 Sauvo, Finland

www.sauvo3.fi

Manufacturing

4F, 1 Wuzhishan Rd, ETDZ
Yantai, Shandong 264006 China

www.besgroup.com.cn

