ArtiClean Ozone Laundry Systems are now approved by the CDC/CMS for use in lieu of hot water washing.
The Center for Disease Control and the Center for Medicare Services has accepted our Laboratory Testing and has stated that any Nursing Facility or Hospital can now use the superior bactericidal action of ArtiClean Systems in lieu of and/or in conjunction with hot water washing. ArtiClean is the only ozone laundry company that continues to test our systems with different bacteria to assure our customers are killing the latest bacterial strains and threats. ArtiClean tests all of our systems, AW, AT, and EconOzone so that you will know we exceed the strict standards of sanitation in the Health Care, Hospitality and First Responder markets.
The strict laboratory tests that we have commissioned show that towels in a hot water with detergent and chlorine bleach wash gives a 6.31 log kill rate on MRSA, an ArtiClean Ozone wash with detergent and bleach will give a 7.31 log kill on MRSA, without the detergent and bleach there is a 6.89 log kill. A competitive bubble ozone company is claiming a 4.7 log kill on MRSA. The laboratory tests on C. difficile with Firefighters Bunker Gear indicated the same kill rate for both hot water and ArtiClean Ozone with the same amount of detergent and bleach gave a 4.97 log kill on C. difficile spores.
ArtiClean has conducted four laboratory tests on all of our Ozone Laundry Systems, including AT, AW and EconOzone. The CDC, CMS and several state Nursing Facility Licensure Boards accept the ArtiClean Ozone Laundry System as an alternative to hot water laundry. Since ArtiClean can deliver the maximum amount of ozone dissolvable in water safely, and monitor the amount of this ozone in the water, our system is unmatched.

Test Summaries

**July, 1994**, University of Kentucky Department of Interior Design, Merchandising and Textile, Textile Testing Laboratory, University of Kentucky, Lexington, KY

Traditional Wash at 140F hot, pH of water 6.6, Load Composition of Heavy Soiled incontinence pads with extremely visible fecal material from Homestead Nursing Center, Lexington KY

Ozone wash at 75 F, pH of water 6.6, Same Load Composition of Heavy Soiled Pads, Ozone level of 0.93 ppm. An ArtiClean AT system used for ozonated fill water.

**RESULTS:** Each wash cycle, hot and ozonated cold water, showed the same level of bacteria kill in the linens. The ozone wash cycle was with 100% cold water and both wash cycles were with the same amount of detergent and chlorine bleach.

**March 2009**, Nelson Laboratories, Salt Lake City, UT, Bioburden of M. terrae laundered at 70F with 1.5 ppm of dissolved ozone fed to the washers with an ArtiClean AW 60 system. The ozone wash cycle was with 100% cold water.

**RESULTS:** A 99.99941 reduction of M. terrae in the linens with an Initial Titer: 3x10^7 CFU/ml and Corrected Positive Titer: 1.0 x 10^8 CFU/device.

**September 2010**, EMSL Analytical, Cinnaminson, NJ, Challenge bacteria, MRSA and Clostridium difficile (vegetative cells and spores), wash cycles at 155 F (Hot) and 75F (ozone). Same amount of detergent and chlorine bleach used for both, the same wash cycle used for both hot and ozone tests. 1.5ppm of dissolved ozone fed into washer via the water fill valves, using an ArtiClean EconOzone ECO2-10. All the fills for the Ozone cycle were with 100% cold ozonated water.

**RESULTS:** A 99.99999% reduction in MRSA, a 99.98% reduction in C.difficile vegetative cells and a 99.983% reduction in C.difficile spores. Initial CFU 2.10 x 10^7 for MRSA, initial CFU 5.33 x 10^4 for C.difficile vegetative cells and initial CFU 5.67 x 10^4 for C. difficile spores. Also the hot water cycles gave a 99.9999% reduction in MRSA, a 99.99% reduction in C.difficile vegetative cells and a 99.983% reduction in C.difficile spores.
**Major Reduction in Natural Gas Cost**

Approximately half the Natural Gas consumption used in the laundry is for heating water. The other half is used in drying the linen. ArtiClean can eliminate 90% or more of your hot water usage.

Some facilities have turned their hot water heaters off!

An average 100 bed nursing home could save a minimum of $1,200 per month on their utility bills.

**Smart Generators**

EconOzone LITE uses a USA designed ozone generator. The corona discharge generators use a quartz tube with a metal sleeve to elongate service intervals. The end result is the right amount of ozone goes to each washer, thus removing the possibility of off-gassing issues.

**Industrial Oxygen Concentrators**

A well designed ozone laundry systems starts with a good supply of Oxygen. The air that we breathe is made up of approximately 21% Oxygen, 75% Nitrogen, and 4% other inert gasses. The EconOzone Lite system utilizes an industrial grade oxygen concentrator that removes the Nitrogen. That makes our system much more reliable than similar systems on the market. Most other companies use an air dryer, which allows the nitrogen to enter the ozone generator. In the process of creating ozone with only dry air, Nitric Acid is formed which will lead to premature failure of the ozone generator and other system components. ArtiClean uses a special medium in the concentrators to provide a “cleaner” oxygen.

**Shorter Drying Times**

Ozone actually penetrates the fibers of your linen. This is evident in the thicker, fluffier towels that are dried after being ozonated. The ozone helps to release moisture in the dryers or on a flatwork ironer, thus creating much faster drying times as well. In most cases, drying time has decreased by 20%. This decrease in drying times also reduces gas consumption in the dryers by up to 20%.

**Whiter, Softer, Sanitized, Fresher Smelling, and Longer Lasting Linen = Huge Savings**
ArtiClean Ozone Laundry System
Value Line EconOzone LITE

When you need good quality, reliable, ozone laundry equipment at a low cost, ArtiClean’s EconOzone LITE is the most advanced, high performance corona discharge system on the market today. The EconOzone LITE system is designed in the US to ArtiClean’s stringent standards and manufactured by one of the world’s leading ozone equipment manufacturer.

Standard Features:
- Each washer has a corona discharge ozone generator dedicated for it. This assures that each washer receives the correct dose of ozone with every fill.
- Special quartz generator tube with metal coating to give longer life span.
- Proprietary oxygen concentrator sieve bed medium produces a purer oxygen.
- Simple to understand operational and trouble shooting lights.
- Easy, fast installation of system, so down time is a minimum.
- Service and replacement parts are simple and available.

System Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>VLO-5S</th>
<th>VLO-10D</th>
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</thead>
<tbody>
<tr>
<td>Number of Washers</td>
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<tr>
<td>Ozone Generator</td>
<td>Corona Discharge</td>
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<td>Ozone Grams Per hour</td>
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<td>Oxygen Concentrator</td>
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<tr>
<td>Rated Amperage</td>
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System Includes:
* Complete Ozone Laundry System - Wall Mounted
* Multiple Washer - Industrial Ozone Generator
* Integrated PSA Oxygen Concentrator with Smart Timer Control
* Wall Mounted Venturi Injector Assembly
* Mazzei - Venturi Injector
* Stainless Steel Check Valves
* Schedule 80 PVC Piping
* Union Ball Valves