

ECO FRIENDLY PRODUCT

# delclean™

## OZONE LAUNDRY PROGRAM

The use of ozone technology allows for a significant reduction in energy, water and chemical use in commercial laundry facilities. Ozone represents an excellent opportunity to decrease utility costs, increase operational efficiency, and improve the life and quality of linens through environmentally aware antimicrobial practices.

DEL Ozone, recognized as a leading authority in ozone technology worldwide, offers a turn-key ozone program that will elevate the way you do laundry, providing a proven return on investment.



Let us help you  
So you can

be green  
SEE GREEN

DEL  ozone™  
GREEN SOLUTIONS SINCE 1975



# Give Greenwashing a whole new meaning



**delclean**<sup>TM</sup>  
OZONE LAUNDRY PROGRAM



## Reduce Hot Water: Reduce Energy Use

Because ozone works best in cold environments, the need for hot water is reduced by up to 85% and in some cases eliminated. Like hot water, ozone activates chemicals and helps to oxidize soils making them easier to remove from wash water. Since heating water requires a tremendous amount of energy, a reduction in hot water use translates directly into cost savings.

## Reduce Chemical Use

Ozone attacks residual alkali hundreds of times more effectively than hot water. The elimination of salt crystals left by residual alkali consequently reduces and potentially eliminates the need for fabric softener which hinders rinsing, drying and absorption.

## Reduce Total Water: Efficient Wash Cycles

In some cases, up to two rinses can be eliminated from the wash cycle because ozone is more effective at removing chemicals (especially alkali) and because there is no fabric softener to retard the wash liquor from moving through the weaves of fabric and removing dirt particles. Potential removal of one high fill rinse in one 60 pound washer that completes eight loads per day can save over 65,000 gallons of water each year.

## Softer, Absorbent, Longer Lasting Linen

Salt crystals that form in the course of a hot water wash process grind away at linen during the drying cycle causing lint, so when these crystals are removed by ozone the linen life is extended. In the absence of salt crystals, fabric softener (which coats fabric) is no longer needed, allowing the fabric to fully expand and absorb.

## Operational Efficiency

The elimination and shortening of wash and dry cycles allows for reduced labor and water costs by up to 20%.

## Environmentally Friendly

Beyond reducing chemical pollution, ozone's ability to disinfect in cold water is more environmentally friendly while being significantly more cost effective. Heating water requires a tremendous amount of energy and ozone is actually more effective at killing microbes than hot water laundering, performing 3,000 times faster. Additionally, since ozone is produced on-site and on-demand, the cost of transporting chemicals (and the carbon footprint that goes with it) are eliminated.



# Savings Potential

Maximize Savings While Maintaining Or Improving Linen Outcome  
Typical Return on Investment: 18 to 24 Months

### Energy Reduction

Reduce hot water up to 85%

### Water Reduction

Reduce total water up to 20%

### Cut Chemical Use 10%

### Extend Linen Life 20%

### Kill Bacteria & Viruses More Effectively

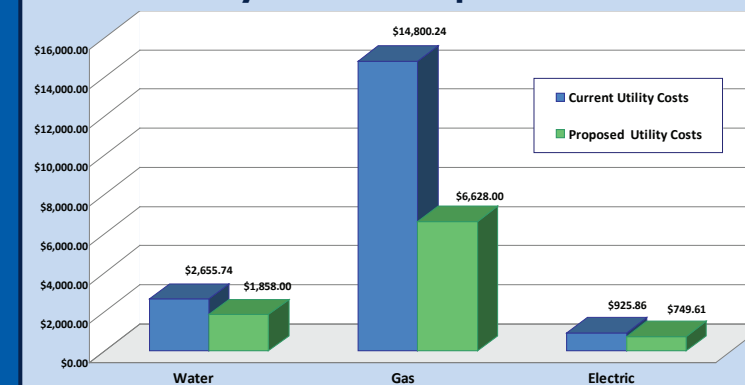
Ozone is faster acting and more powerful than chlorine bleach with a dramatic decrease in hot water usage

### More Efficient Extract Cycle

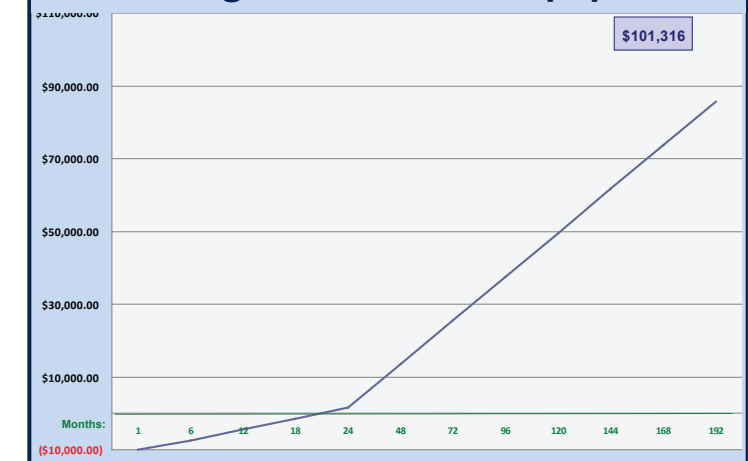
### Reduce Dry Times

Lower energy costs  
Allow for more loads per day

## Utility Cost Comparison



## Savings Over Life of Equipment



## How Ozone Works

### In The Wash Process

1



An oxygen concentrator in the unit converts the air we breathe into 90% pure oxygen.

2



These oxygen atoms are then split apart by an electrical current in the ozone generator.

3



The freed atoms reassemble into groups of three, forming ozone.

4



Ozone is dissolved into wash water during the entire wash cycle.

5



Soiling, bacteria and other microorganisms are immediately attacked and destroyed.

6



Ozone is most effective in cold water and reverts back into oxygen with no harmful byproducts.

Fibers in materials are lifted, giving laundry a softer feel and prolonging its life.

Ozone is more effective than chlorine and produces clean, fresh, disinfected laundry on every cycle.

# delclean™



## Features

Oxygen Concentrator  
Ambient Ozone Controller  
Ozone Diffuser  
Installation Kit  
*Delivery Line, Fittings,  
Wall-Mount Brackets*

Variable Ozone Output  
Compact, Wall-Mounted  
Fast & Easy Installation  
Continuous Ozone Injection  
Ozone Safety Controls  
Oxygen Feed Gas System

## Applications

Hotels & Motels  
Cruise Ships  
Commercial Laundries  
Prisons  
Extended Care Facilities  
Convalescent Care Facilities  
Sports Facilities  
Health Clubs

## DEL Ozone Laundry Systems

The DEL Ozone laundry system provides the ideal amount of ozone, making it safe for your employees and effective at disinfecting your wash load. Ozone is introduced into the wash drum constantly during the fill and agitation steps of the wash cycle, providing the maximum amount of ozone contact time for the wash load. Packages are available to integrate the ozone system seamlessly with most washers. Universal packages are also available for less common washers found on the market.

## Ozone Disinfection

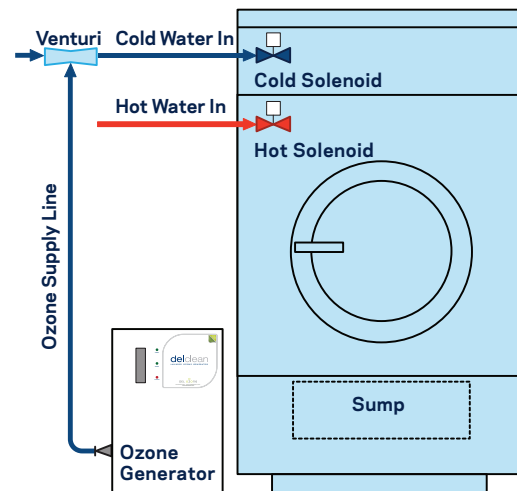
Because of its high oxidation potential, ozone is capable of instantly destroying the outer membranes of microorganisms such as MRSA and Cryptosporidium, providing immediate and complete disinfection. Ozone reacts up to 3,000 times faster than chlorine, and unlike chlorine, creates no secondary pollution in water as a result of oxidation. Since oxygen (O<sub>2</sub>) is the principal byproduct of ozone oxidation, ozone is an environmentally friendly technology.

DEL Ozone systems are third-party validated by NSF International and are listed with UL.



**DEL ozone™**  
GREEN SOLUTIONS SINCE 1975

## Venturi Injection



## Diffusion

