

**O<sup>3</sup>TEX**<sup>®</sup>  
OZONE DISINFECTION

No other system disinfects laundry  
more effectively... or efficiently



**JLA**



## The natural choice for infection prevention

### OTEX is more effective in decontamination than current laundry systems

From the Department of Health's Rapid Review Panel, set up to identify new developments to help the NHS combat high levels of Health Care Associated Infections (HCAIs)



Department of Health



Health Protection Agency

September 09

JLA Ltd - OTEX Laundry System

**Basic research and development, validation and recent in use evaluations have shown benefits that should be available to NHS bodies to include as appropriate in their cleaning, hygiene or infection controls protocols. (Recommendation 1)**

This product is a commercial laundry system that uses ozone in all of the wash cycles.

Evidence shows that it is more effective in decontamination than current laundry systems.

## The ultimate infection control solution, pure and simple

**JLA's ground-breaking natural ozone disinfection system has revolutionised the way hospitals, care homes and other hygiene-focused commercial organisations do their laundry.**

Developed by our own internationally acknowledged technicians, chemists and infection control experts, OTEX disinfects more effectively than any conventional thermal alternative. It does this by turning oxygen from the air around us into ozone, and injecting it into your washing machine's drum to kill 99.999% of harmful micro-organisms such as MRSA, E.Coli, Norovirus and *C.difficile* spores.

While traditional thermal cycles use high water temperatures and may need harsh bleaching agents to remove stains, our eco-friendly solution works at low or ambient temperatures. It means you'll not only achieve complete disinfection, but also save on utility bills and extend the life of the fabrics you launder.

**OTEX kills bacteria 3,200 times faster than chlorine bleach**

## Disinfection

### OTEX eradicates MRSA, E.Coli and C.difficile from laundry

OTEX is a validated chemical disinfection process. By injecting a continuous flow of ozone – a powerful natural disinfectant – into every wash cycle, OTEX disinfects mops, cloths, bedding and other linen by killing 99.999% of moulds, yeasts, bacteria and viruses in the laundry – including MRSA, E.Coli, Norovirus and *Clostridium difficile*.

“During an infection control audit by our local NHS trust, we were given 100% for the way our laundry is processed.  
**Linda Warren, Princess Alice Hospice, Esher**”

## Verified

### OTEX meets CFPP01-04 and all other laundry/infection control guidelines with a verified audit trail

OTEX is available with a verification unit which monitors the amount of ozone being injected into the wash process and provides a printed 'receipt' confirming the cycle has achieved disinfection – ideal for meeting requirements of CFPP01-04 guidelines, audits or inspections.

“Overall, OTEX produced a significantly better wash in heavily fouled laundry, with complete elimination of *C.difficile*.  
**Maria Davies, Harrow School, Middlesex**”

## Ease of use

### OTEX guarantees complete disinfection on every wash programme

The OTEX system operates on all wash cycles, which means it is impossible for staff to select a programme that will not achieve disinfection. Training is also given by JLA's laundry and infection control experts to ensure OTEX is used to its full potential.

## Wash quality

### OTEX cleans deeper to give optimum wash quality and extend fabric life

Fibres in linens become opened during the ozone laundry process, which enables deep, gentle cleaning that adds a high level of wash quality to the core disinfection process. This leaves users with fresher laundered items and towels that are fluffier, while extending the life of any fabrics being washed.

“The OTEX system eliminates staining as well as decontaminating the towels; therefore towels do not have to be washed again.  
**Amanda Blacklaw, Spa Manager at Stobo Castle**”

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## Savings

### OTEX cuts running costs by using less water, energy and detergents

The wash process of OTEX means it offers significant savings across all types of wash cycles from healthcare to hospitality.

OTEX uses not only less water on every cycle, but is effective at low temperatures so there is less requirement for heating, therefore reducing water and energy bills. The ozone naturally opens fibres for a deep and gentle clean, minimising the need for detergents, stain removers and softeners.

#### Disinfection of clothing and linen

Water **29% SAVING**

Electric **26% SAVING**

Detergent **59% SAVING**

\* Versus thermal disinfection cycle

**41%**  
TOTAL  
SAVING

#### Disinfection of mops and cloths

Water **31% SAVING**

Electric **89% SAVING**

Detergent **87% SAVING**

\* Versus thermal disinfection cycle

**72%**  
TOTAL  
SAVING

#### Washing of towels

Water **24% SAVING**

Electric **93% SAVING**

Detergent **66% SAVING**

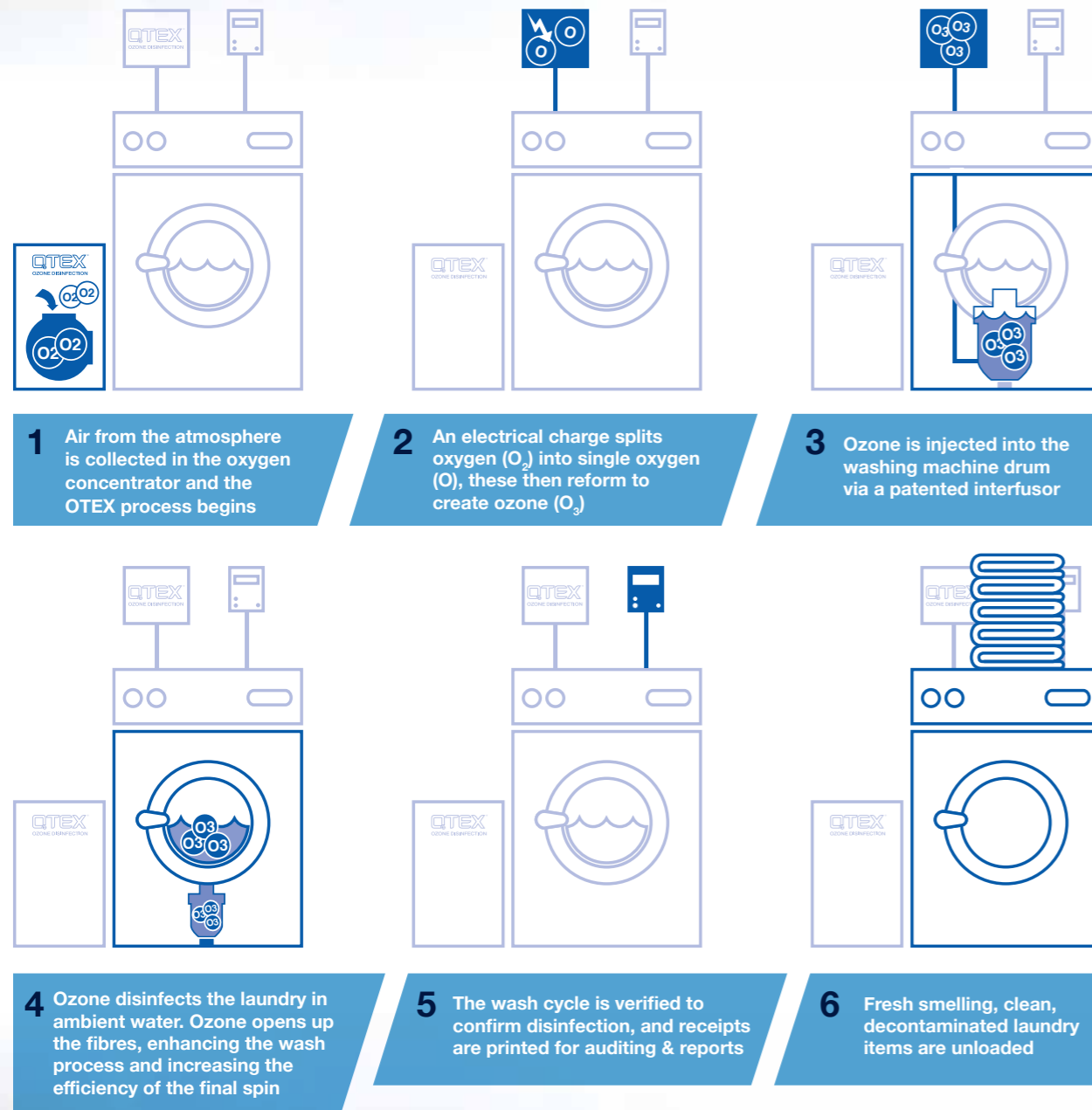
\* Versus 60°C wash

**57%**  
TOTAL  
SAVING



## How OTEX Ozone Disinfection works

The natural properties of O<sub>3</sub> provide a highly effective disinfectant capable of destroying even the most hardy micro-organisms such as *Clostridium difficile* spores in ambient water.



## Scientifically proven, industry-acclaimed

### Kills 99.999% of bacteria, including MRSA and C.difficile

Extensive testing has proven that OTEX is more effective than thermal laundry processes. Independent laboratory tests found MRSA to still be very much in evidence following the commonly used 40°C wash programmes, while in contrast OTEX totally eradicated all MRSA presence. In tests for *C.difficile*, OTEX left no viable trace of harmful bacteria after two and a half minutes – the same tests using conventional thermal disinfection found a significant level of spores remained after 15 minutes.

MRSA - [www.jla.com/pasa](http://www.jla.com/pasa) Report reference LD07 MRSA Contamination Uniforms Test  
*C.difficile* - [www.jla.com/pasa](http://www.jla.com/pasa) Report reference RRP93 LD01 Microsearch & JLA Solution Test

### Compliance with the UK Linen Decontamination Guidelines

HSG(95)18 has been replaced in England by Choice Framework for Local Policy & Procedures 01-04 – Decontamination of linen for health and social care (CFPP01-04). This proposes a risk-control approach for linen decontamination with the option of thermal and chemical disinfection methods. Both methods must be proven via process validation. OTEX ozone chemical disinfection has undergone extensive research including process validation. This is supported by the Department of Health/NHS Rapid Review Panel recommendation 1 that states that OTEX is “more effective than current laundry systems”. In addition, real-time monitoring of the ozone levels within the washer provides verification that the process has achieved the correct level of chemical and contact time to meet disinfection criteria, producing a printed receipt to provide an auditable/documented trail for all batches processed.

<sup>^</sup>Department of Health, Sep '09

### Wipes out cross-infection from mops and cloths

In an ‘Evaluation of the Cleaning Efficiency of Microfibre Cloths Processed via an Ozonated Laundry System’, OTEX was proven to maintain re-usable mops and cloths performance for over 350 washes\*\* – earlier tests by the Department of Health had shown that after traditional thermal cycles, microfibre performance declined after just 150.

\*\*Humphreys PN, et al. (2012) Evaluation of the Cleaning Efficiency of Microfibre Cloths Processed via an Ozonated Laundry System. *Journal of Infection Prevention* 13 (4), doi:10.1177/1757177412447833.

### Cuts detergent costs by 50% - reduces water and energy costs by over 35%

OTEX has been shown to be an effective method of disinfection including being effective against environmental bacteria such as *Clostridium difficile* spores. In tests at Southampton Showcase Hospital, the system – using no hot water – saved 36.49% on water, gas and electricity while reducing detergent usage by 50%\*.

\* Showcase Hospital Technology Review Report Number 8.

Find out more and see how it works at [jla.com/otex](http://jla.com/otex)

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