

Smart & Sophisticated Bio Decontamination





efficient. safe.





No matter where...

container
public transport
hospital
pharmaceutical industry
hotels ambulances
retirement homes
kindergarten airplanes
schools food industry

clinics



Staphylococcus aureus . Pseudomonas aeruginosa . KPC (Klebsiella pneumoniae Carbapenemase), Enterococcus hirae, MRSA (Methicillin resistant S. aureus) . **BACTERIA**. Candida albicans . Aspergillus brasiliensis . Proteus mirabilis. Acinetobacter XDR (Extensively drug resistant). Escherichia coli . VIRUS. Human Norovirus (HNV) Feline calicivirus (FCV). ESBL (Extended-Spectrum Beta-Lactamase) Aspergillus Niger. **SPORES** Geobacillus stearothermophilus. Clostridium difficile. VRE (Vancomycin resistant Enterococcus) **INSECTS** Bed Bugs (Cimex Lectularius)

## **Quality controlled Hygiene**

## can save billions

## Microorganisms could be dangerous and a cost factor

4.5+ million people get a nosocomial infection in a hospital in Europe and USA with more than 136.000 direct attributable deaths every year. 1 600+ million people worldwide get food related infections with more than 420,000 deaths every year.2 Contaminated vehicles and facilities must remain closed until proper decontamination while contaminated food must be treated as hazardous waste

### What if we prevent...

Using the latest technologies of DCX increases your hygiene measures and safety

<sup>1</sup> http://www.who.int/gpsc/country\_work/burden\_hcai/en/

<sup>2</sup> http://www.who.int/mediacentre/factsheets/fs399/en/



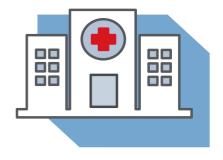
# **DCX System Solution** for more safety

## **DCX sets new hygiene standards**

DCX creates micro-aerosols based on a patented technology. The systems vaporize a low concentrated special designed liquid with hydrogen peroxide at room temperature in order to decontaminate the air and all enclosed surfaces. The intelligent system improves hygiene standards by offering reproducible and quality controlled results. Viruses, bacteria, fungi and spores are reduced effectively.

## Proven activity: 99.9999% germ free in 30 minutes

Geobacillus stearothermophilus is a spore forming bacteria and recommended by the RKI for the validation of sterilization processes. Several tests with DCX technologies showed a log 6 reduction after 30 minutes.



## **DCX System**

## two powerful model sizes, for every application

## **DCXpert**

Maximum power for maximum outcome. Validate your processes or plug in additional devices to make it perfectly suitable for your demands.

**Room size:** 3.000 m<sup>3</sup> +

**Dimensions:** 1256 x 590 x 920 mm

Weight: approx. 90 kg Voltage: 230 V / 50Hz Power: max. 600 Watts

## **DCXpro**

Compact, but what a performance. Easiest way for routine standard decontaminations even when space is very limited e.g. ambulances.

**Room size:** up to 1.500 m<sup>3</sup>

**Dimensions:** 950 x 450 x 920 mm

Weight: approx. 30 kg Voltage: 230 V / 50Hz Power: max. 400 Watts

> compact edition





Different solutions especially designed to fit your needs for hygiene purposes, food industry or pest control

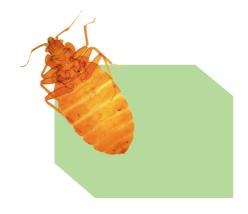


## Especially developed and tested fluid to save money and food

Two DCXpert systems can be used to decontaminate facilities of + 6.000m<sup>3</sup> for outbreak management. Quality controlled hygiene can be achieved with DCX to reduce production losses and reduce the related high costs for waste disposal.

## Fast pest control for optimal facility management

Bed bugs are a global pest problem and can be found almost everywhere and in higher numbers, e.g. hotels and public transport. The innovative DCX approach will save a lot of troubles, a lot of time and money while destroying bed bugs (cimex lectuarius), their eggs and increase hygiene at the same time.



# **Hygiene saves** money, time and lives.



## Especially developed for food safety

The decontamination with hydrogen peroxide can reduce the chance to get a multi drug resistant organism by 64% and by 80% for Vancomycin resistant Enterococcus VRE. In contrast to former practices, the DCX decontamination provides a well-documented quality controlled process to complete your hygiene protocol.

## **DCX Profitability**

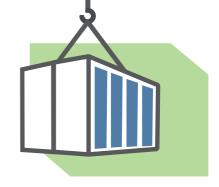
DCX systems reduce costs at many different levels.

Decontamination during changeover times could be kept shorter with DCX in comparison to time consuming manual cleaning.

Pharma- and food production losses due to contamination could be minimized as well as the costs for hazardous waste disposal.

Better hygiene measures can be used to create a positive public image and negative publicity could be prevented at the same time.

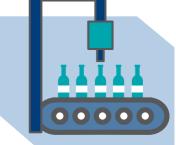
**References: Facility Management** public and private hygiene provider. **Food industry** animal shelters. **Healtcare** public and private hospitals, ambulances. **Laboratories**.



# Quality controlled DCX Decontamination with **Micro Aerosol**

1բ	1μm 10 :		um 100µm 300 : :		μm 1000μm : :	
Vaporization	tiny	small	medium	large	very large	
DCXF	•	•				
JOVL	dry steam	mist	drizzle	light rain	heavy rain	
(under 1µm)	(under 10µm +)	(10µm-100µm)	(100μm - 300μm)	(0,3 mm - 1mm)	(over 1mm)	
quick spreading dry surfaces no corrosion	(10 µm +) condensatio	s on market on, wet surfaces, n equipment		F	1	

Quality controlled hygiene is essential to increase safety where microorganisms may danger people, animals and products.





The 7.5% H<sub>2</sub>O<sub>2</sub>concentration is safely
applicable, easy to store
and biodegreable
without any residues.



## **DCX Fluids**

Different fluids designed for your needs no matter where e.g. health care facilities, food industry, public transport or facility management.

### **Effective and residue-free bio-decontamination**

DCX systems use a special designed liquid based on low concentraded hydrogen peroxide. During the bio-decontamination, hydrogen peroxide decomposes to water and oxygen. Based on your needs there are different fluids available to be used for hygiene purpose, food industry or pest control (cimex lectuarius).



### How does the DCX decontamination work?

DCX systems such as DCXpert and DCXpro vaporize a special designed hydrogen peroxide liquid solution. Furthermore, micro-aerosols also offer excellent compatibility for a variety of materials, electronic devices and electrical systems, which means that electronically devices may remain inside the room.







## **DCX** supplies

for maximum impact and your safety



## **DCXpert Utility Kit**

Additionally, also accessories, personal protective clothes, sensors and sealing materials have been developed and tested in order to offer not just the best technology, but also a complete solution for room and surface decontamination.

"The room disinfection with cold aerosolized hydrogen peroxide is a promising new approach to surface decontamination."

Univ.-Prof. Dr. Franz Allerberger\*

## Reproducible process according to plan

Standard hygiene measures are mostly carried out manually with hardly or even without any objective quality control. The DCX process runs fully automatic and regulates itself based on sensor measurements. DCXF-Fluid is certified as disinfectant and recommended by VAH (GER) and ÖGHMP (AT).

\*Head of the Austrian Agency for Health and Food Safety (AGES), Dep Public and former president of the Austrian Society for Hygiene, Microbiology and Preventive Medicine (ÖGHMP)











## DCX Systems

### Technical specifications

Dimensions mm (L / W / H) Weight Voltage Power Room size Type of protection Insulation class

### H<sub>2</sub>O<sub>2</sub>-Steamgenerator

Atomizing Process Size of aerosol Operation temperature

### DCXF-Fluid

H<sub>2</sub>O<sub>2</sub> -concentration Canister Volume Storage up to

### **DCXpert**

1256 x 590 x 920 approx. 90 kg 230 V / 50 Hz max. 600 Watts 3000m3+ IP10 Class I + Class II

**DCXpro** 

250m3+

ultra-sonic

15 to 35°C

950 x 450 x 920

approx. 30 kg

230 V / 50 Hz

max. 400 Watts

Class I + Class II

ultra-sonic < 1 µm

15 to 35°C

7.5 % 30°C

We reserve the right to make technical changes in the course of further developement

#### Certification of Conformity

CE compliant in accordance with relevant standarts of the applicable EU.

### Certified Desinfectant

DCXFluid is listed as effective disinfectant and recommended by the following organizations: VAH, Association for Applied Hygiene, Germany. ÖGHMP, Austrian Society for Hygiene, Microbiology and Preventive Medicine. All Austrian manufacturers are ISO certified.









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