WE BET ON UVc TECHNOLOGY TO BEAT THE VIRUS

SOLUTIONS FOR AIR DISINFECTION, CLEANING AND PURIFICATION

- DISINFECTION IN AIR CONDITIONING AND VENTILATION INSTALLATIONS
- DISINFECTION AND CLEANING OF OUTDOOR SPACES
- AIR PURIFICATION INDOORS

SAFE ELIMINATION OF VIRUSES AND BACTERIA
SOLUTIONS FOR DISINFECTION AND CLEANING IN EXISTING AIR CONDITIONING AND VENTILATION INSTALLATIONS

With time and years of use, air conditioning and ventilation installations become possible sources of bacteria, fungi and other microorganisms that could be harmful to health.

To guard against this risk, we recommend that, in-duct germicidal chambers, with ultraviolet UVC light are installed. The use of properly maintained filters is also recommended where possible if the existing system pressure losses permit.

INDOOR AIR QUALITY

Microorganisms that may have built up in ducting, filters or on other surfaces can become airborne. These types of pathogens can cause disease, allergies or other health problems. To prevent this and to ensure good indoor air quality, the installation of germicidal chambers is essential.
SUITABLE HYGIENE CONDITIONS

There are many cases where high standards of hygiene need to be maintained, for example in healthcare facilities, commercial kitchens and food preparation and sales areas. Airborne microbes may contaminate products, equipment and surfaces in these areas and could cause serious health problems.

Dangerous microorganisms that contaminate food or surfaces are not only harmful to health, they can also cause financial damage to businesses.
GERMICIDAL CHAMBERS WITH ULTRAVIOLET LIGHT ENDORSED BY ASHRAE AND BY IUVA

Germicidal chambers inactivate pathogens using UVC, ultraviolet light technology. Along with other measures, they are effective against microbes that have not been captured by other methods such as filtration.

According to ASHRAE, germicidal radiation uses UVC short wave ultraviolet energy to inactivate viral organisms, bacteria and fungi and prevents them from replicating and causing disease. UVC energy disrupts the deoxyribonucleic acid (DNA) of a wide range of microorganisms, making them harmless. Standard UVC lamps in commercial systems are low pressure mercury vapour lamps. They radiate light in the air passing through the germicidal chamber at a virtually optimum UVC level of 256 nm.

The use of UVC is becoming increasingly more frequent as the concern for the quality of the air indoors grows. UVC is used to disrupt the transmission of pathogenic microorganisms such as Mycobacterium tuberculosis (TB), influenza viruses or mildew. By applying UVC, the indoor air quality (IAQ) is improved and consequently, so is the health, comfort and productivity of the occupants.
UVc light has been used for 40 years to remove bacteria and viruses, including coronaviruses, from wastewater and pharmaceutical products. Some viruses and bacteria may be more susceptible to UVc disinfection than others, but they can all be inactivated with appropriate doses.

UVc light is used in medical and scientific settings and makes specific reference to the Germicidal UVc range of 200-280 nm. Under controlled laboratory conditions, it has been scientifically demonstrated that it inactivates two coronaviruses similar to SARS-CoV-2 such as SARS-CoV-1 and MERS-CoV.

The International Ultraviolet Association (IUVA) endorses the fact that UVc disinfection technologies play an important role, along with other processes used, in reducing the transmission of the virus that causes COVID-19, based on disinfection data and empirical evidence. UVc is a known disinfectant of air, water and surfaces and can help reduce the risk of COVID-19 contagion when properly applied.

**UVc DOSE**

Some examples of effective dosage for virus and bacteria inactivation

For further information please go to: www.iuva.org

* Table according to IUVA (International Ultraviolet Association)

<table>
<thead>
<tr>
<th>TYPE</th>
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<td>BACTERIA</td>
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BENEFITS OF DISINFECTING USING UVc ULTRAVIOLET LIGHT AND FILTERS

— **System supported** by international organisations and by scientific tests
— **System frequently used as a disinfectant** in healthcare settings for many years
— **Destruction of viruses, bacteria, mildew, fungi and other pathogens** that could cause disease and allergies
— **Retention of harmful micro-particles**, dust reduction and elimination of odours
— **Improves indoor air quality** increasing the productivity
— **Cleaning air 24 hours a day**, lowering the maintenance and cleaning costs of ventilation and air conditioning installations
IMPORTANT ADVANTAGES DEPENDING ON THE APPLICATION

HEALTHCARE SECTOR

Elimination of viruses and bacteria, reducing the exposure and expansion of possible diseases.

FOOD SECTOR

Elimination of fungi, mildew and bacteria, increasing the conservation of food and reducing the possibilities of producing allergies and intoxications.

HOSPITALITY SECTOR

Elimination of viruses and bacteria, reducing possible exposure and spread of disease.

INDUSTRIAL AND COMMERCIAL SECTORS

Elimination of viruses and bacteria, reducing possible exposure and spread of disease.
SOLUTIONS FOR
DISINFECTION AND CLEANING

DISINFECTION EQUIPMENT AND CLEANING OF AIR CONDITIONING AND VENTILATION INSTALLATIONS

WITHOUT A FAN

**CGR-UVc**
Germicidal chamber without a fan for rectangular ducts

**CG/LP-UVc**
Germicidal chamber without a fan for circular ducts

**CG/FILTER/UVc**
Air purification units for circular ducts

WITH FAN

**SV/FILTER-CG**
Air purification units with UVC germicidal chamber

**CJK/FILTER/EC**
Air purification units for circular ducts

OUTDOOR DISINFECTION AND CLEANING EQUIPMENT

**DISINFECT-500**
Industrial disinfection machine with misting system

**DISINFECT-500-R**
Industrial disinfection machine with misting system equipped with a trailer
SOLUTIONS FOR AIR PURIFICATION INDOORS

AIR PURIFIERS

AIRDOG
Air purification unit with a patented system for eliminating viruses and bacteria

SV/FILTER-CG
Air purification units with UVc germicidal chamber, in line for ducts

CJK/FILTER/EC
Air purification units for circular ducts

UPH-EC
Mobile air purification units

UPM-EC
Mobile air purification units

UPA
Units specifically designed for cleaning and purifying indoor air

Pure air throughout your entire life
AIR PURIFIERS

Schools and training centres
Universities

Pharmacies
Medical and dental centres
Nursing homes

Bars and cafes
Restaurants
Hotels
Gyms

Waiting rooms
Spas

AIRDOG

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SV/FILTER-CG

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* Recommended effective working area for a space 3 metres high.
4.0 technology industry
Medical industry
Pharmaceutical industry
Laboratories
Food industry
Data centres

Hotels
Manufacturing industry
General warehouses
Logistic warehouses
Airport waiting rooms
Hospital waiting rooms

UPM/EC
Model
m²
F7 + F9
220 50-100
250 100-140
310 140-200
400 200-250

UPM/EC
Model
m²
F7 + HEPA H14
310 100-200
400 140-250
500 250-350

UPA
Model
m²
F7 + F9
1500 200-350
3000 300-450
4500 450-900

UPA
Model
m²
F7 + HEPA H14
1500 200-350
3000 300-450
4500 450-900