

## To whom it may concern:

# Recommendation letter for airborne disinfection with Cube Atomizers automated fogging devices

The Covid-19 pandemic has badly affected the airline industry and dented the public's confidence in flying. This has made many carriers reassess their cleaning and disinfecting procedures to help prevent the spread of infection and reassure their customers that it is safe to travel by plane again.

To clean the air, airlines use HEPA filters, similar to those used in hospitals. These capture 99.9% of viruses and bacteria, with the volume of cabin air being exchanged every two to three minutes. This is further supported by rigorous physical cleaning and disinfecting procedures between flights.

Airline carriers generally disinfect their aircraft cabins using manual procedures with disinfectant and suitable cloths. As we are all facing the challenge of ensuring enhanced sanitation measures necessary to reduce the spread of COVID-19 and protect the health of customers and employees, we have taken another approach, and we would like to present a revolutionary technology for disinfection services through 3D nebulization.

To eliminate the possibility of cross-contamination, it is necessary to perform disinfection of both air and surfaces. **Uplift Airport Services** is an authorized handling company, providing services for passengers and aircraft and DDD services (disinfection, disinsection, derating). We perform these services at Henri Coanda International Airport Bucharest-Otopeni, lasi International Airport, Bacau International Airport and Cluj Napoca International Airport. We are present in Italy at Torino Airport through Blue Air airline, for which we provide 3D nebulization disinfection services.

For example, we use CUBE M dry foggers to disinfect both the air and surfaces of a Boeing 737 in just 2 minutes and 10 seconds without leaving a wet residue. Also, the Boeing 737 max series 800 aircraft (about 300m3) can be done in about 5 minutes. That helps us when we only have 20 minutes to clean and disinfect a plane between flights.

A range of non-alcoholic disinfectants can be used in CUBE dry foggers, including Netbiokem-DSAM (IATA approved) or hypochlorous acid-based biocides which are suitable for all surfaces in an aircraft.



#### General information about the nebulization disinfection method:

Nebulization is performed with CUBE - an automatic 3D atomizer. The method is performed with disinfectant biocide solution with a broad spectrum of virucidal, fungicidal and bactericidal kill; due to the 3D effect, the biocidal history is reset, killing the entire micro-aero flora from the treated spaces.

It is unnecessary to wipe the surfaces of the treated space after 3D nebulization, and there is no risk of destruction of the equipment. The areas of use are multiple, ranging from operating rooms, classrooms, kitchens, conference rooms to large volumes such as production halls, waiting rooms, theatre/cinema rooms, airports, commercial spaces, offices, residential buildings, archives, museums, equipment, cars, public transport, freight transport, and the treatment of civil, military, and transport aircraft.

The equipment has an ultra-precise dosing system that, together with the electronic control system, can achieve the correct dispersion of the nebulized solutions with an accuracy of 0.01ml + -/ 1000ml, not being affected by the variations of voltage in the electrical network. During nebulizing operation, the substance covers the entire volumetry existing in the treated space so that every millimetre of surface and any object in that space, with any geometry, is treated by the floating disinfection solution type of buoyancy generates a fog curtain effect. This curtain is composed of nanoparticles of biocide. This process is designed three-dimensional (3D) to avoid the shadow effect existing in the classical two-dimensional (2D) procedures.

## The main competitive advantages of the disinfection with CUBE 3D atomizer:

### 1. Guarantees up to 99.9999% disinfection level

The nebulized particle of the substance has the size of a few microns; therefore, every millimetre of the surface of the treated area will be projected with at least one particle of the active substance. Due to the principle of operation and uniform dispersion, the nebulizer also disinfects the air inside the treated area, including the air conditioning system. This effect occurs even in slots, corners, and holes, impossible to achieve by any other conventional disinfection methods, guaranteeing a 99.9999% sterilization of the treated area with micro-aero flora action and fungicidal, bactericidal, virucidal and sporicidal spectrum.

2. Achieves the highest speed of performing the disinfection operation, therefore offering the ultra-fast disposal of the treated area, allowing the client to use it as efficiently as possible. The intervention time is short; the nebulization time for an area of 1000m3 is only 16 minutes.

# 2. The nebulizer is a fully automated device that allows no human error.

After setting the volume to be treated, it automatically calculates the nebulizing time and necessary quantity of biocide to be used. You can choose the 2 in 1 method (odour control and



disinfection) with an ultra-efficient dosing system that ensures an optimal quality-time-price ratio.

Our clients for 3D nebulization services are Blue Air Aviation (LC Carrier), Tarom, as well as clients operating in other industries such as L'Oreal, Orlando Import, Alstom Transport SA (maintenance company of Metrorex Bucharest Subway operator), Euromedia Group, RedZone Creative, Antena 3 TV Studio, Aleph Media TV, Ana Hotels-Crown Plaza and Hotel Europa, Theda Mar, GoPro, Dogan Media, Dr. Oetker Factory, JYSK Shops, Metropolitan Circus of Bucharest, Arcub theatre, Berreta Romania, Romarm S.A., F.R.F (Romanian Footbal Federation) stadiums, etc.

Best regards,

Catalin Ilie - CEO

UPLIFT AIRPORT SERVICES ROMANIA