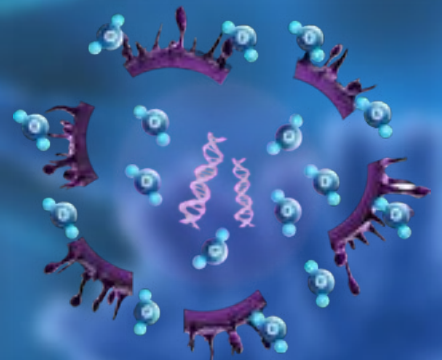
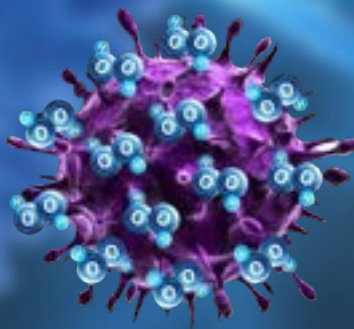
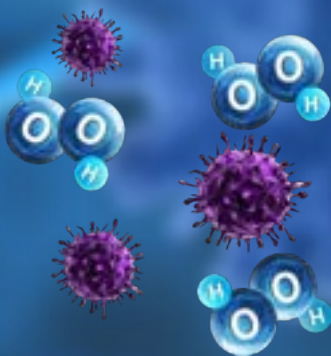




# VIRUS AND BACTERIA ELIMINATION FOR MARINE ENVIRONMENTS





Nevegy creates tailor-made solutions for each vessel based on the type of vessel and owner's needs.



With a network of experts and certified installation teams, we not only provide solutions that work from day one, but also training, follow up, an APP to visualize and monitor all system's performance for the maintenance team, maintenance and air quality monitoring that shows the real time status of air quality to guests and crew.



We make sure you are safe and all the occupants of your vessel feel safe.



## Our Impact around the world – Installations in **30** countries

With installations in over 30 countries and partners worldwide, Nevegy technology has been installed in over 32 million square meters of occupied spaces and is helping protect close to a million people daily from the exposure to pathogens, chemicals and other air pollutants. Our real time monitoring and remote management systems help reduce the need for maintenance and helps reduce energy consumption by optimizing the use of HVAC equipment.



## Our Impact around the world



## Unique Technology Patented\*

Removes more than 99.9% of viruses and bacteria in air and surfaces, in addition to fighting allergens, mold, dust mite and odor pollution particles.

Maximizing indoor air quality.

Continuous disinfection 24 hours 7 days a week drastically reducing harmful microparticles.

100% safe for humans, animals and plants it can work in their presence.

Economical and installable in minutes.

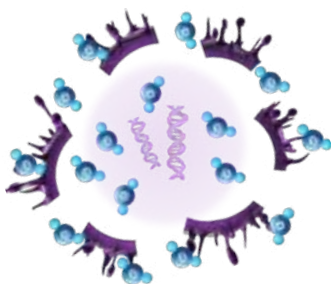
Without valleys, equipment does not need to be turned off.

No shadows, all areas are treated.

No harmful chemicals like ozone or chlorine are used.

Reduces interventions and costs related for the cleaning and cleaning of ventilation ducts.

Decrease disease rate in the treated spaces.



## THE NEVEGY ADVANTAGE

Unlike other solutions, Nevegy can eliminate pathogens from air and surfaces throughout the whole vessel by deploying pathogen elimination molecules to all areas and eliminating pathogens on the spot, at the source, being the only technology that can effectively keep clean quarters.



## CASE STUDY - Port Authority

Ports can't stop, every hour a crane is not loading and unloading containers costs millions of dollars, creates delays, ship queues and customer complaints. This type of situation has been happening for a few years and Covid did not make this any better. At a major port authority in Spain, the terminal handlers had to sanitize and disinfect every cabin before every shift, this meant that all their trucks and cranes were out of operation for 2-3 hours a day, generating millions in losses.



## How could we solve this?

The solution was installing Nevegy ductFIT, Nevegy ductFIT is sanitizing 24x7 non-stop, killing any type of pathogen, including Covid continuously so this eliminated the stoppage between shifts and saved millions. The RoI of Nevegy ductFIT was measured in days and workers feel secure and productive once again.

## nevegy ductFIT

- 1 Immediate Return of Investment
- 2 Safety for workers
- 3 Compliance with unions
- 4 Port increased operational performance



# nevegy ductFIT

## System Implementation

Implementing Nevegy ductFIT is quick, simple and inexpensive and has no effect on air conditioning system since it does not block the air flow. Nevegy ductFIT does not need to be recharged or refilled and only one maintenance operation needs to be conducted yearly to change the Nevegy ductFIT Cell that contains the catalyst that converts water molecules into hydrogen peroxide molecules.

nevegy ductFIT additionally helps maintain the ducting system free of bacteria and mold, reducing maintenance. IoT functionality helps us know if any ductFIT unit has any issues, being able to eliminate completely predictive maintenance actions, therefore freeing your maintenance personnel to do other important tasks.

3  
STEPS



1 Install nevegy ductFIT units in HVAC system.



3 Pathogens are eliminated from both air and surfaces as they appear, at the source, immediately.

2  $H_2O_2$  molecules are created and distributed to all areas of the vessel, creating a healthy atmosphere.

# FOOD ON BOARD *Certifications and benefits*

Nevegy' ductFIT solutions have been thoroughly tested for the complete food chain, including food storage, processing, transportation and Horeca establishments, providing important benefits to food duration, yield and freshness due to its bactericidal and chemical reduction effects.



Our international partner CITA tested thoroughly the Nevegy's ductFIT technology in food storage with the following results.

## Result

Nevegy's ductFIT was thoroughly tested on a laboratory in a food storage fridge with different kinds of food, the result from the test was:

ductFIT from Nevegy used an efficient technique to significantly reduce environmental concentrations of mold and yeast as well as all bacteria that could affect food.

ductFIT has significant positive effects on food and no negative effect on any of the food types.

## The technology shows significant improvements to all food types:

- Longer shelf-life for the food
- Improved freshness
- Reduced impact of bacteria on food
- Improved firmness
- Reduction of food yield
- Reduction of food weight loss

Refrigeration chamber used for the experiment and location of the Nevegy's ductFIT device:



The first measurement was to perform a 24-hour study in air of the inhibitory capacity of the growth of microorganisms in fruit and vegetables and meats, and pathogenic microorganisms causing food poisoning.

**The results showed that the ductFIT device was able to reduce total mesophilic aerobes by 100% and molds and yeasts by 99%.**

| Bactericidal effectiveness of ductFIT in cold rooms (Air) |                    |                |
|---|--------------------|----------------|
|   | Mesophilic Aerobes | Molds & Yeasts |
| Initial quantity (CFU)                                    | 3.98               | 177.83         |
| Final quantity with ductFIT (CFU)                         | 0                  | 2.51           |
| <b>Reduction with ductFIT</b>                             | <b>100%</b>        | <b>98.59%</b>  |



The disinfectant efficacy on surfaces was then determined for spoilage bacteria (*Pseudomonas* sp., *L. monocytogenes*, *E. coli*) and spoilage molds (*M. fruticola* and *B. cinerea*). **The results were equally significant in the elimination of bacteria on surfaces, close to 100% in all cases with the exception of 90% for *B. cinerea*.**

| Bactericidal effectiveness of ductFIT in cold rooms (Surfaces) |                |                |                  |                |            |
|--|----------------|----------------|------------------|----------------|------------|
|  | E. Coli        | Pseudomonas    | L. Monocytogenes | M. Fruticola   | B. Cinerea |
| Initial quantity (CFU)   | 1000000        | 398107         | 316227           | 10000          | 3162.28    |
| Final quantity with ductFIT (CFU)                              | 1000           | 11             | 10               | 1.78           | 316.23     |
| <b>Reduction with ductFIT</b>                                  | <b>99.900%</b> | <b>99.997%</b> | <b>99.997%</b>   | <b>99.982%</b> | <b>90%</b> |

## Results in fresh chicken breasts

In parallel, a study was carried out on fresh chicken breasts, studying the evolution of the total aerobic microorganism count of commercial chicken meat in a ventilated refrigerator chamber with a total capacity of 980 dm<sup>3</sup> at a temperature of 4°C.

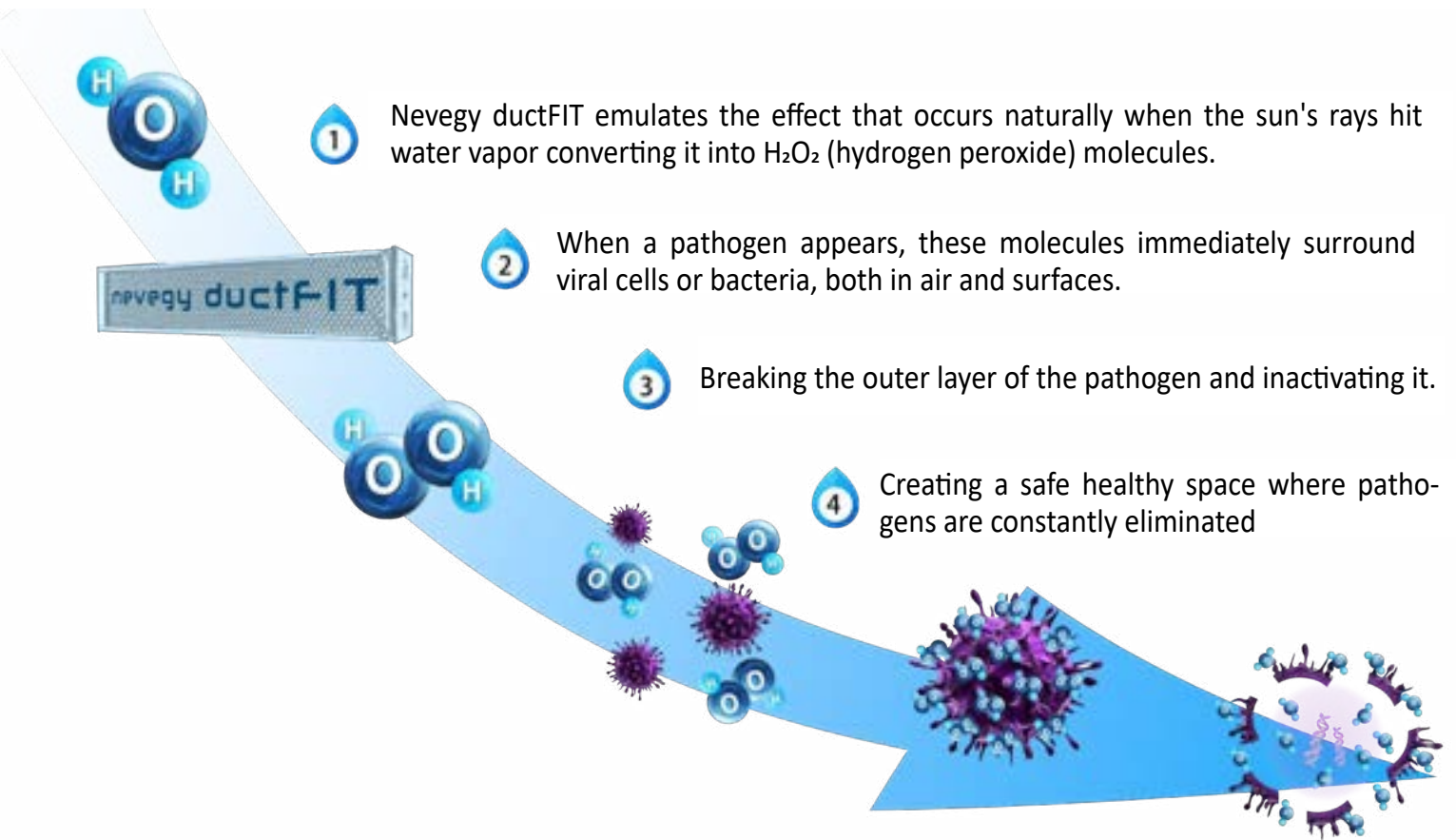
After 9 days in the two chambers (with and without ductFIT), the total bacteria concentration in chicken breasts not exposed to ductFIT was more than 16 times higher than that exposed to ductFIT or the equivalent of a 94% reduction of bacteria in treated breasts.

| Effectiveness of food storage in refrigerators with and without exposure to ductFIT |             |            |            |
|---|-------------|------------|------------|
| CHICKEN BREASTS   | Initial CFU | Final CFU  | Increase % |
| Without ductFIT   | 692         | 30.900.000 | 44,653     |
| With ductFIT  | 148         | 407.000    | 2,750      |
| <b>Bacteria reduction with ductFIT</b>  |             |            | <b>94%</b> |



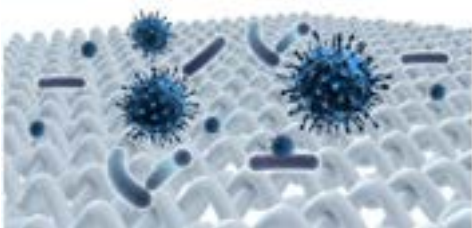
Solve PM2.5, VOC, CO<sub>2</sub>, Virous, Bacteria, etc.

# How does **nevegy ductFIT** work?

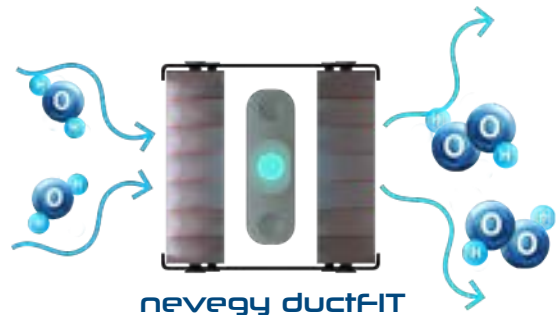


## Purifying H<sub>2</sub>O<sub>2</sub> Molecules

These purifying H<sub>2</sub>O<sub>2</sub> molecules, which are safe for humans, circulate continuously and surround the viral cells in the air and on surfaces. They disrupt the lipid-protein membrane of the cells, deactivating them and killing the pathogens.



UV Light

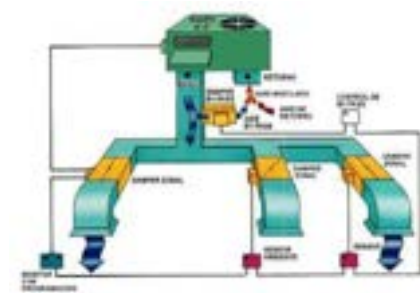


nevegy ductFIT

## Implementation

Enclosed spaces free of pathogens, applicable to

- *Vessels*
- *Recreational crafts*
- *Port terminals including Cabined means of loading...*
- *Office building, logistic centers, factories, etc.*



# Effectiveness of neveygy ductFIT

Certificate

Third Party Laboratory Tested and Certified to Eliminate:

- 100%** Coronavirus
- 99.75%** H1N1 virus
- 99.994%** Entero Virus
- 99.97%** Dust Mites
- 99.997%** Bacteria



## Certified by Strictest International Institutions

All the components of Neveygy technology comply with the most demanding certifications and quality standards, following European production and quality standard.

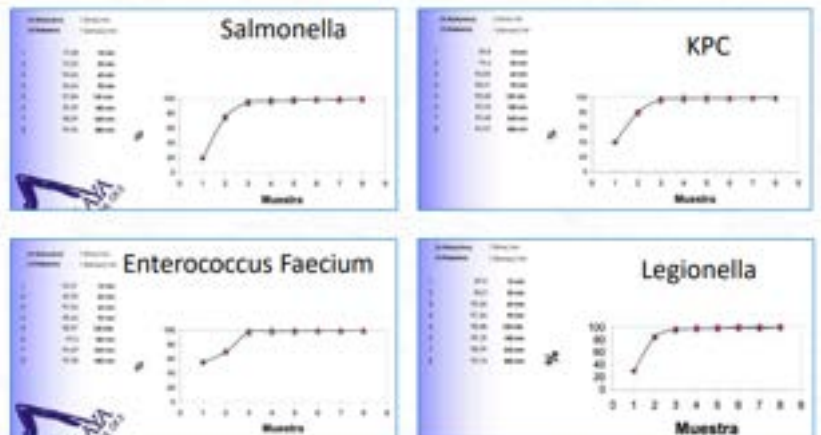


## Elimination of all kinds of bacteria:

Over 99.95% elimination of bacteria, achieving over 80% elimination rates in under in 30 minutes and 95% in 60 minutes for most of them. Including KPC (Antibiotic resistant super bacteria) and the deadly Legionella.

Tested against:

- E-Coli
- KPC
- Legionella
- Salmonella
- Acinetobacter
- Enterococcus Faecium
- Pseudomonas Aeruginosa





# How is nevegy ductFIT different?

## nevegy ductFIT vs Other Solutions

There are two main differences between Nevegy ductFIT and other solutions. The first and most important is that Nevegy ductFIT is certified 100% safe for humans, animals, plants and all materials. The second one is that Nevegy ductFIT attacks the pathogens and chemicals at the source. Most solutions require the pathogens to go through a filter or UV light in order to kill them and that means waiting at least 20 minutes before they have an effect on a pathogen from an infected occupant, most systems are also not effective on surfaces. Nevegy ductFIT, however is an active air & surface purification system, the H<sub>2</sub>O<sub>2</sub> molecules it creates are present in the environment and attack the pathogen at the source, immediately.

| nevegy Technology                                      | nevegy ductFIT | UV lights | Ozone Generators | Spray Solutions |
|--|----------------|-----------|------------------|-----------------|
| Proven effective against a broad spectrum of pathogens | ✓              | ✓         | ✓                | ✓               |
| Continuous pathogen reduction on air and surfaces      | ✓              | ✗         | ✗                | ✗               |
| Safe to use in occupied spaces                         | ✓              | ✗         | ✗                | ✗               |
| No disruption or delayed access to areas               | ✓              | ✗         | ✗                | ✗               |
| Continuously eliminates odors                          | ✓              | ✗         | ✗                | ✗               |
| No operator required (truly "No-Touch")                | ✓              | ✗         | ✗                | ✗               |
| No chemical exposure                                   | ✓              | ✓         | ✗                | ✗               |
| People can be in premises while operating              | ✓              | ✗         | ✗                | ✗               |

## nevegy ductFIT vs UV Solutions

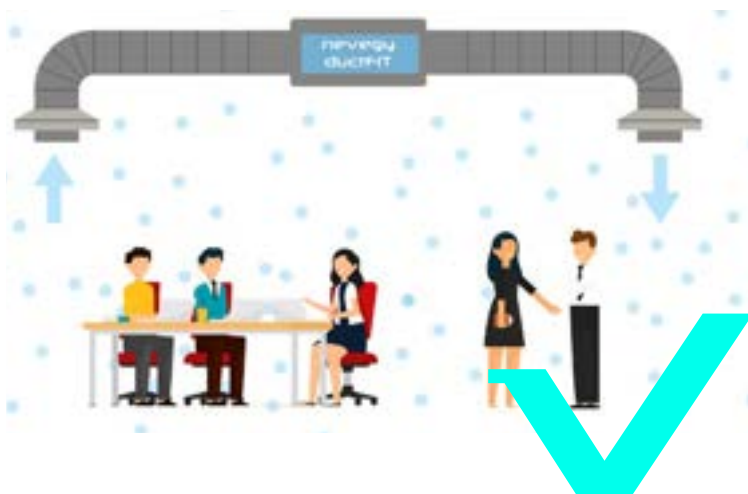
### UV Light Solutions



UV lights are often placed in the ship's air intake, killing the pathogens that come from the outside, in this case, if we have an infected person inside a vessel, those UV lights will never have an effect on pathogens from infected occupants.

In the case the UV lights are placed in the recirculation system, the pathogens still need to go all the way from the person's mouth to the UV light, this is a trip that takes about 20 minutes, infecting people and contaminating not only the air, but also surfaces that need to be cleaned separately since the UV light does not affect surfaces it does not directly shine on.

### nevegy ductFIT Solutions



Nevegy ductFIT instead disperses a very small, 100% healthy concentration of H<sub>2</sub>O<sub>2</sub> molecules that will attack all pathogens at the source, preventing that pathogen from infecting other personnel or surfaces. These molecules while 100% safe for humans, are deadly to virus, bacteria, mold and chemicals, making spaces completely healthy.

Nevegy ductFIT systems are used widely in ICU rooms in hospitals and in all kind of occupied spaces and have been subject to the strictest testing and validation for effectiveness, safety and durability.

# How is **nevegy ductFIT** different?



Nevegy ductFIT systems are different since they are 100% healthy, not generating any harmful chemicals, ozone or large quantities of ions, it attacks all pathogens at the source and it eliminates pathogens from both air and surfaces.

Nevegy ductFIT is easy and quick to install and requires little to no maintenance.

## ***Certified by Strictest International Institutions***

All devices have IoT capabilities that allow us to visualize and manage the state of our infrastructure in real time, from anywhere and provides notifications to our personnel in case of any issue. Easy to use APPs and dashboard systems allows us to visualize air quality and the status of all our equipment.





**nevegy**

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