



Diamond Air

DESINFECTION

100%

SMELL FREE



Disinfect the air

100% odor removal

bacteria, viruses, moulds

www.diamond-air.nl

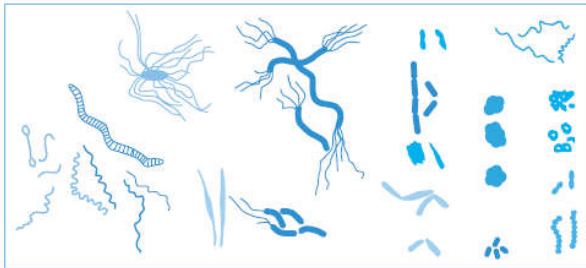


Air quality in your environment

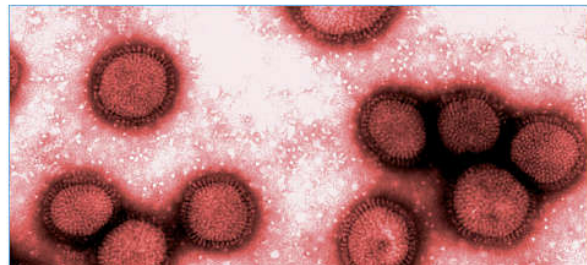
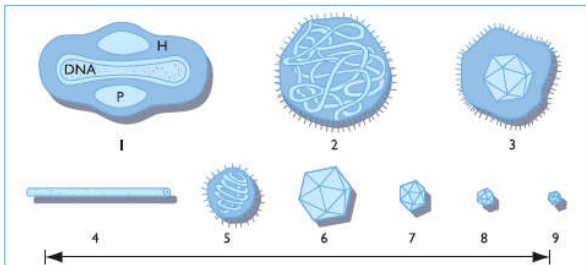
Air can contain just as many good substances as bad. Our air is not equally clean everywhere we go. Infectious bacteria, viruses and moulds spread easily through the air and can make us sick. Air can also contain pollens and dust particles that can cause allergic reactions in people who are sensitive to them.

Many people spend most of their day in enclosed spaces – at work, school or even at home. Test results show that enclosed spaces contain much more bacteria, viruses and moulds than open areas. The air in enclosed spaces is usually poorly ventilated and filled with dust, which means it also contains many contaminants. In addition to bacteria, viruses, moulds and pollen, air can also contain cigarette smoke, food or odors, and exhaust fumes. Elevated quantities of these kinds of infectious substances work as stimulating mechanisms for a range of various illnesses, of which influenza and asthma are the most familiar.

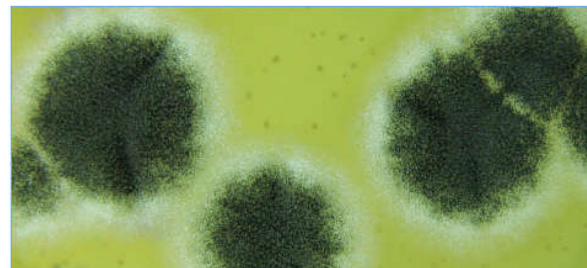
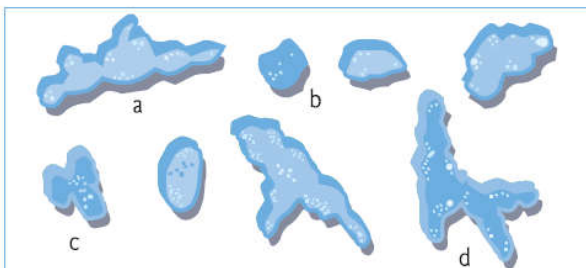
Bacteria



Viruses



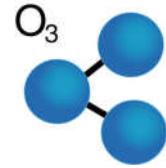
Moulds



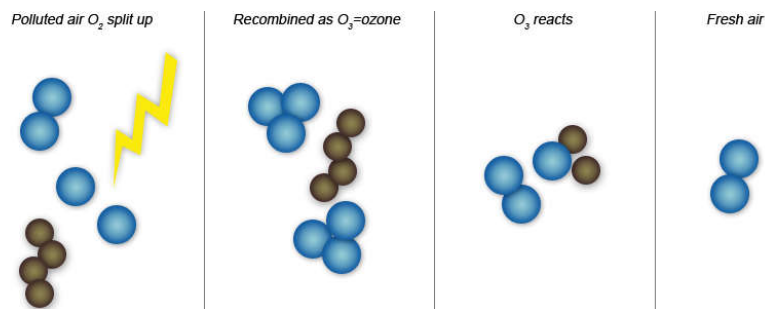
Ozone: The way of cleaning air in nature!

Ozone is a marvel of Nature. In the upper atmosphere ozone protects our planet from harmful ultraviolet radiation. Closer to earth, ozone purifies and sanitizes the air we breathe, the water we drink, and food we eat. Long used in medical therapies, ozone has shown remarkable antibacterial, anti-viral, and anti-fungal activity.

Ozone (O₃) is present in our everyday live. The highest concentration of ozone in nature can be found in mountains, forests and on the beach or whenever **lightning strikes, which is nature's way of cleaning the air.**



By applying a electrical discharge to oxygen gas, the oxygen molecules (O₂) will be split into atoms. Ozone (O₃) is formed by recombination of atomic and molecular oxygen. Ozone reacts with other gases (smells) and destroys them. As ozone oxidizes/disinfects, it destroys odors, harmful bacteria and contaminants, then reverts to "normal" oxygen.



Remark the picture is a simplified expression of fresh air. Fresh air will contain more molecules like: Nitrogen (N₂), Argon (Ar), Neon (Ne), Helium (He), Krypton (Kr), Xenon (Xe), Hydrogen (H₂) and others.

Is Ozone Safe?

If ozone was not safe, we would not be able to go outside and breathe the air, especially during sunshine or a thunderstorm, lightning. The fact is, when used responsibly, ozone is very safe just like oxygen and very beneficial to our planet and all of us that live here.

Like a toxicologist once said: Everything is toxic and nothing is toxic. It is all about the concentration! The effect of ozone on human health depends on the concentration and duration of exposure. The ozone concentration in open air declines rapidly. Ozone concentration in open air will never exceed 0,1ppm, so accepted for human safety.

Ozone concentration [PPM]	Duration of exposure	Effect	References
0.01	Continuous	Odour treshold	Fresh country air
0.1	Continuous	Minor eye, nose, throat irritation	Accepted levels acc. FDA, OSHA standards
0.10-0.25	2-5 hours	Headache, dry cough	Heavy thunderstorms
0.3	2 hours	Reduction of lung function	Smog alert
> 0.6	2 hours	Chest pain	Smog
1.0	1-2 hours	Lung irritation , severe fatigue	Severe smog
> 1.5	2 hours	Coughing, severe lung irritation	Severe smog
11.0	15 minutes	Rapid unconsciousness	Ozone layer



Diamond air in-line system

Scientifically proven technology by



The revolutionary new air cleaning system.

With Diamond air in-line you have fleece filter, ozone generator, in-line carbon filter and fan in one professional system.

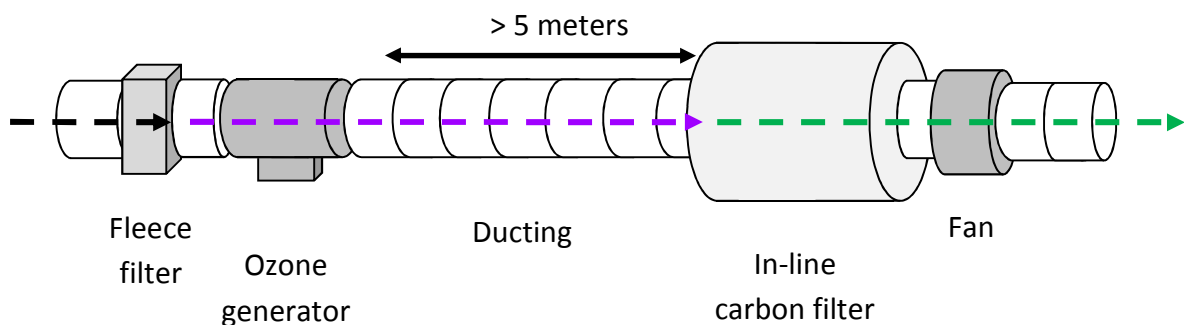
You can now easily eliminate bacteria, viruses, moulds and dust particles from the air you breath. The air is continuously protected, and you can prevent illnesses, allergies and the spread of the substances that cause them.

- Eliminate bacteria, viruses, moulds and dust
- 100% odor removal
- Recirculate disinfected and clean air
- Ozone usage for output air flows in enclosed areas
- In-line carbon as ultimate certain filtering element
- EC fan for energy saving

Advised in-line air cleaning system setup is described below. The polluted air will be disinfected and cleaned by all the required elements:

1. Fleece filter for large dust particles
2. Ozone generator for disinfection and odor control
3. In-line carbon filter for blocking ozone and filtering fine particles
4. Fan for air flow creation

The fleece filter is required as pre-filter for large dust particles. After ozone generation a minimal length of 5 meters ducting is required. This is to let the ozone have sufficient time to react with the polluted air. It is possible that more ozone is produced than necessary to clean the air. The excess ozone will be blocked by the in-line carbon filter. This will also filter all fine particles. The disinfected and clean air is blown to your desired area by the fan.



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