INFUSER

ADVANCED
POLLUTION
CONTROL

ABOUT INFUSER

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INFUSER is a leading air purification company, pioneering novel clean-tech solutions that bridge the gap between science and industry. Our team of scientists develops, produces and implements technologies for Advanced Pollution Control that:

- Provide clean-air solutions for polluting industries
- Improve air quality in indoor environments
- Remove dangerous viruses and bacteria from buildings.

INFUSER's purification technologies use Advanced Atmospheric Oxidation to remove pollution, achieved by utilising the natural self-cleaning mechanisms of the Earth's atmosphere in closed reactor systems. The INFUSER system is designed to purify air using significantly less energy than conventional methods. It does so by eliminating the need to force air through ineffective static filters, which typically leads to large pressure differences and energy losses. INFUSER's science team is supported by industrial designers, mechanical and electrical engineers, guiding the transition from research findings to industrial solutions.

INFUSER operates one of the most sophisticated and well-equipped air pollution abatement laboratories in Europe. The laboratory serves as a major research and development facility, including construction and testing of prototypes, modelling and in-depth analysis of air samples from all over the world. The facility is located in Copenhagen Science City, providing INFUSER with the unique opportunity for tapping into the network of talented young scientists and engineers from across the world.

KEY MILESTONES

INFUSER was established in 2011

INFUSER's collaboration with the University of Copenhagen was established in 2012

INFUSER is located on campus of the University of Copenhagen and in Copenhagen Science City

INFUSER's head office is in Denmark, with subsidiaries in Sweden and Germany

INFUSER runs arguably one of Europe's most advanced research and atmospheric chemistry facility

INFUSER employs 25 people in four different countries

INFUSER has partners and points of contact in all of Europe, the Middle East, China and Malaysia.

SCIENCE & TECHNOLOGY



INFUSER's purification technologies use Advanced Atmospheric Oxidation to remove pollution. This is achieved by utilizing the natural self-cleaning mechanisms of the Earth's atmosphere in closed reactor systems.

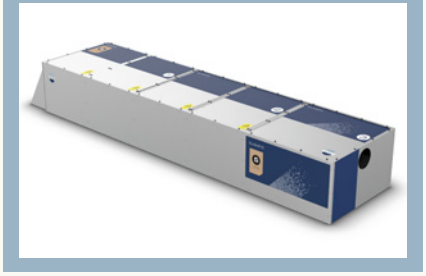
A large part of anthropogenic pollution consists of hydrocarbons. When hydrocarbons are emitted to the ambient atmosphere, they react with naturally occurring compounds to form particles in a process triggered by sunlight. These particles are removed from the atmosphere via dry or wet deposition. INFUSER combines and accelerates these natural processes in a controlled environment. The technology – Photochemical Air Purification – prevents polluting gasses and particles from entering the atmosphere by accelerating these natural processes in a controlled reactor environment.

The INFUSER system is designed to purify air using significantly less energy than conventional methods. It does so by eliminating the need to force air through ineffective static filters, which typically leads to large pressure differences and energy losses.

PRODUCTS

INFUSER develops, produces and implements solutions for Advanced Pollution Control, the reduction of air pollution and smell, and decontamination of virus, bacteria, germs, toxic mold and spores. Our products and solutions range comprises:

CLIMATIC INDOOR (HVAC)



STERISAFE™

CLIMATIC INDUSTRY

CLIMATIC INDOOR (HVAC)

INFUSER's team of scientists and engineers has developed a sustainable solution for the market of improving indoor air quality in buildings.
The CLIMATIC Indoor solution utilizes the chemical and technical principles of Advanced Atmospheric Oxidation to capture pollutants in the gas-phase, whilst removing particles at the same time. More concretely, the solution addresses the pollution found both in the often relatively more hazardous gas phase and in the form of particulate matter (PM), all in a Single Treatment Cycle.

CLIMATIC INDUSTRY

Industries across the world are under increased pressure to reduce pollution. Industrial facilities emit large amounts of unwanted gaseous waste and air pollution, e.g. Volatile Organic Compounds (VOCs), H_2S, SO_2 and NOx.
INFUSER's system for industrial applications, the CLIMATIC Industry, uses Advanced Atmospheric Oxidation to remove pollution from plant emissions. The cleaning principles accelerate and harness the natural self-cleaning properties of the Earth's atmosphere in a closed reactor system, and capture emissions before they pollute the environment.

STERISAFE TM

The STERISAFE is an affordable, high-tech method for the sterilization of rooms contaminated with virus, bacteria, germs, toxic mold and spores.

The STERISAFE extracts pure oxygen from natural atmospheric air. During the sterilization process, the oxygen is turned into ozone, a highly effective oxidant that kills all microorganisms and removes

pollutants in the air and on surfaces. The STERISAFE leaves no residual compounds and requires no additives other than water.

The STERISAFE can be used in multiple applications:

- Health care : patient rooms, operating theaters, mobile hospitals, ambulances, labs
- Public places : schools, waiting rooms, sport facility's, spa's
- Transport : food containers, trucks, trains, cruise ships
- Apartment : fungus restoration, smell restoration
- Hospitality sector : hotels, offices, commercial kitchens etc.