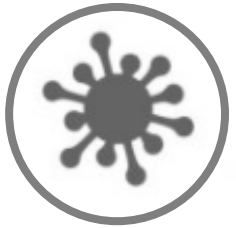
WHY DO WE NEED AIR SANITISERS?

The air around us contains micro-organisms, bacteria, viruses, moulds, fungi and volatile organic compounds.

Airborne micro-organisms can create offensive odours, spread infections and be responsible for the continued growth of mould.

MICRO ORGANISMS

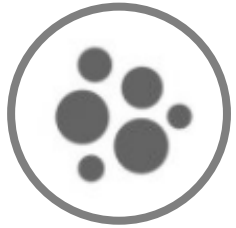


BACTERIA

MOULDS

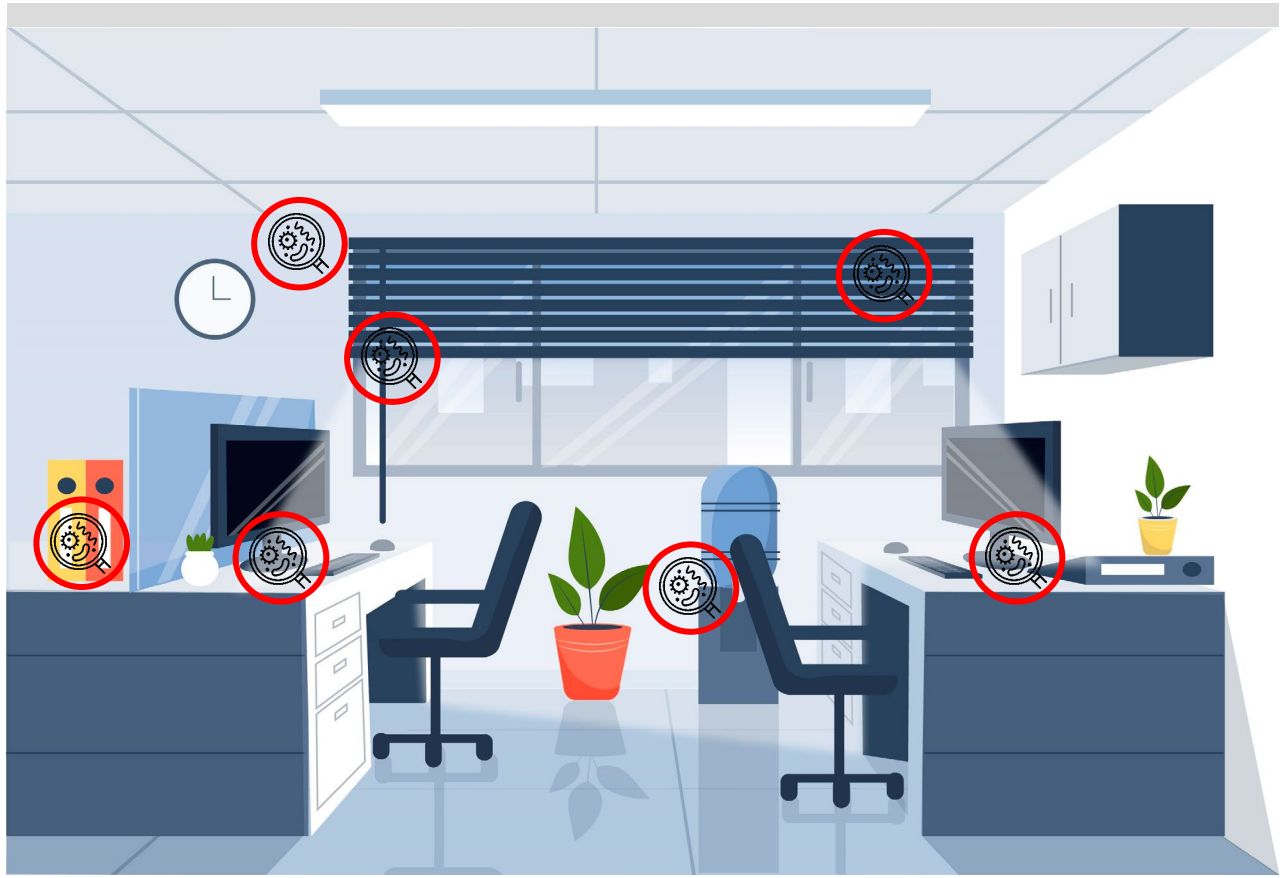
FUNGI

VOLATILE ORGANIC COMPOUNDS



ODOURS

WHY DO WE NEED AIR SANITISERS?



Background vector created by freepik - www.freepik.com

Micro-organisms are deposited on surfaces from the air where they continue to grow, increasing odour issues and the risk of infection.

Standard room cleaning and disinfecting procedures can only offer a temporary solution.

As soon as an area is cleaned, the airborne micro-organisms immediately begin to settle, recolonising on the surfaces and increasing odour and infection problems.

WHAT DO AIR SANITISERS DO?

Controls infections by killing bacteria and viruses, mould and fungi.

As an added advantage the unit also removes pollen, pollution, smoke and odours.

Cleans deep into fabrics, prolongs life of carpets and soft furnishings.

Eliminates need for masking agents.

Can help to reduce staff absenteeism and agency costs.

Improves environment for residents, staff and visitors.

The unit provides 24-hour protection by creating an environment that is hostile to micro-organisms.

The air and all exposed surfaces are continuously sanitised every hour of every day.

AIRFLOW | TECHNOLOGY | EXPERTISE

HOW AIR IS SANITISED

GERMICIDAL UV

As air flows through the plasma chamber and over the UV lamp all micro-organisms in the air are killed/inactivated.

The plasma chamber comprises of dual waveband UV lamps at 254nm and 185nm surrounded by nano coated catalytic plates.

HYDROXYL RADICALS

As air flows through the chamber the UV light reacts with the titanium dioxide catalysts causing water vapor to be converted to highly reactive hydroxyl radicals (OH).

H_2O → OH

SUPEROXIDE IONS

As air flows through the chamber the UV light reacts with the titanium dioxide catalysts causing a release of free electrons, they bond with oxygen to form Superoxide ions.

O_2 → O_2^- (-)

OZONE

As air flows through the chamber the 185nm UV light reacts with oxygen and forms monatomic oxygen, this then bonds with oxygen to form ozone.

O_2 → O_3

AIRFLOW | TECHNOLOGY | EXPERTISE

HOW AIR IS SANITISED

The technologies produced in the plasma chamber act on the virus in different ways…

GERMICIDAL UV

Germicidal UV light changes the viruses RNA destroying their ability to reproduce.

HYDROXYL RADICALS

Hydroxyl Radicals (very strong oxidising agents) cause oxidative damage to the viral particle eventually converting to CO2 and water.

SUPEROXIDE IONS

Superoxide ions bond with airborne particles (including micro-organism's) causing them to sink as they are heavier and become attracted to surfaces beneath.

OZONE

Ozone created by the UV light is a highly diffusive gas and a strong oxidising agent, this diffuses through the lipid coat to damage the viral RNA.

This technology has been proven to kill 98.11% of airborne and 99.6% of surface micro-organisms.

206% more powerful than chlorine

157% more powerful than hydrogen peroxide

Energy Field equals to 10,000 times of natural sunlight