

# THE WORLD'S HIGHEST CERTIFIED CLEAN AIR TECHNOLOGY

Radic8 Viruskiller™ kills **99.9999%** of viruses, bacteria and pollutants in a **Single Air Pass**. Improve indoor infection control by neutralising airborne pathogens through air sterilisation.

**COVID-19**   
**VIRUSKILLER™**

## AWARD WINNING TECHNOLOGY



Global Clean Air  
Technology  
Competition



Innovation for  
Infection Control



Good Design  
Award



### Single Air Pass

99.9999% virus and bacteria kill rate in a Single Air Exchange.



### Air Sterilisation

All pathogens and harmful airborne microorganisms are neutralised.



### Controlled Airflow

Create a laminar airflow to take contaminated air away.



### Hextio



### VK102



### VK 401



# The Technology PURIFICATION + STERILISATION

Radic8 technology uses a two-stage process: filtration followed by photocatalytic oxidation technology. The Viruskiller™ Technology has a 99.9999% kill rate—in a single pass—against viruses similar to SARS-CoV-2 or harder-to-kill, such as Coronavirus DF2, Adenovirus, Influenza virus, and Poliovirus.

## Radic8's Reactor Chamber



**Photocatalytic surface**  
The chromed nano titanium dioxide (TiO2) tube filters are polished with activated carbon.  
**UV-C lights**

**Cleans** dirty air  
**Kills** sick air  
**Neutralises** toxic air

In a Single Air Pass

### Why combining technologies?

Radic8 uses  
**Filtration + Absorption + UVC + PCO**

- Increases the removal/sterilisation performance
- Maximises the strength and minimises the weaknesses of an individual purification technique
- Increases the energy conservation



Sterilised, pathogen-free, safe air is released back into the breathing zone, pushing contaminated air down – repeating the cycle!

### 2 STAGE 2: STERILISATION

*Small particles are neutralised in a single air pass through:*

**PATENTED REACTOR CHAMBER**  
- Multiple UVC lights react with the Photocatalytic Oxidation surface (PCO)

### HYDROXYL RADICALS

The ultimate virus killing environment!

### 1 STAGE 1: PURIFICATION

*The air is first purified via a set of 3 mechanical filter:*

#### FILTRATION + ABSORPTION

- Pre-filter
- HEPA filter
- Activated Carbon filter

Dirty and larger coarse particles are caught!

99.9999%  
kill rate in  
a single air  
pass

Contaminated air is drawn into the unit by a powerful fan

# We don't catch it, we kill it.

Air purifiers are widely available and most are effective against pollen, dust and smoke. However, not all air purifiers can sterilise the air: kill sick air and neutralise toxic air.

Viruskiller™ is The World's Highest Certified Clean Air Technology: Cleans Dirty Air, Kills Sick Air and Neutralises Toxic Air.

## Airflow



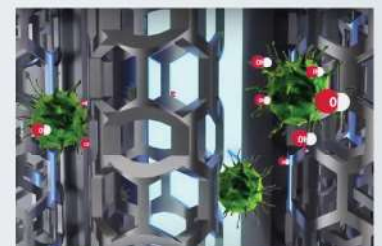
Take the danger away from the breathing zone and replace it with clean air. Where possible, create a laminar airflow.

## Single Air Pass

SINGLE AIR PASS KILL RATES	
HEPA Filters	<b>NO</b>
UV Light	<b>NO</b>
Plasma tech	<b>NO</b>
VIRUSKILLER™	<b>YES</b>

Use technology that can give a virus kill rate. Kill rates can only be given by tests conducted on a single air exchange.

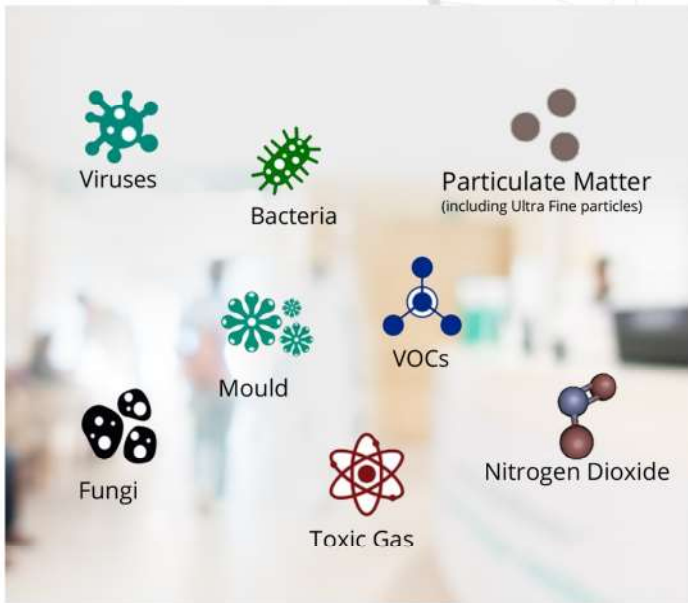
## Air Sterilisation



The Viruskiller™ reactor chamber can completely neutralise viruses and other dangerous particles in a single air exchange, achieving unparalleled test results.

# It's all about test results

For many years, the Radic8's sterilisation chamber has been vigorously tested by many independent facilities and institutions. The results on airborne pathogens are the same for all of the Viruskiller™ range.



## RESULTS SUMMARY

- 99.9999% Viruses inactivated
- 99.9999% Removal of bacteria, mould and fungi
- 99.9999% Removal of fine dust and particulate matter
- 99.9999% Removal of odor and toxic gas
- 99.9999% Removal of Volatile Organic Compounds with 0% Ozone creation

## IN A SINGLE AIR PASS

The efficiency rate for the above has always been 99.9999%

Date of test: 2020

### COVID-19 Air Sterilisation Results

A new barrage of tests conducted on Radic8's VK 401 found that Viruskiller clean air technology was effective in killing COVID-19, as well as a range of other respiratory pathogens.

Kind of virus	Procedure	Result	Test Institute
<ul style="list-style-type: none"> <li>- Chlamydomphilia pneumoniae</li> <li>- Mycoplasma pneumoniae</li> <li>- Legionella pneumophila</li> <li>- Bordetella pertussis</li> <li>- Bordetella parapertussis</li> <li>- Streptococcus pneumoniae</li> <li>- Haemophilus influenza (various strains)</li> <li>- SARS-Cov-2 (Novel Corona Virus)</li> </ul>	Analysis was performed using RT-PCR tests in accordance with WHO recommendations	None of the 16 pathogens tested were present after passing through the VK 401 unit	Test by Vimta Labs Ltd - a leading biotechnology testing and research firm based in Hyderabad, India

Inactivation of major airborne viruses



To test if the Viruskiller technology could neutralise the virus, it used a 106 Plaque Forming Unit (PFU) of Coronavirus DF2 into a 50ml PBS (liquid solution). The experiment was conducted three times.



Date of test: 2014

Each of the four viruses tested belongs to one of the four main respiratory virus group types.

We therefore can claim 99.9999% efficiency on ALL respiratory viruses

Kind of virus	Quantity of virus used	Results	Remarks
Polio Virus	Experiment 1	10 <sup>6</sup> PFU/ 100ml	None detection (99.9999%)
	Experiment 2	10 <sup>6</sup> PFU/ 100ml	None detection (99.9999%)
	Experiment 3	10 <sup>6</sup> PFU/ 100ml	None detection (99.9999%)
Influenza Virus & Adeno Virus	Experiment 1	10 <sup>6</sup> TCID <sub>50</sub> / 100ml	None detection (99.9999%)
	Experiment 2	10 <sup>6</sup> TCID <sub>50</sub> / 100ml	None detection (99.9999%)
	Experiment 3	10 <sup>6</sup> TCID <sub>50</sub> / 100ml	None detection (99.9999%)
Corona Virus	Experiment 1	10 <sup>6</sup> PFU/ 50ml	None detection (99.9999%)
	Experiment 2	10 <sup>6</sup> PFU/ 50ml	None detection (99.9999%)
	Experiment 3	10 <sup>6</sup> PFU/ 50ml	None detection (99.9999%)

Test by Institute of Medical Science & Department of Microbiology, School of Medicine, National Kangwon University

# Industries Served

Radic8 is an all-in-one solution for air quality problems in a wide range of market sectors and providing cutting-edge surgically clean air for industrial, commercial and home environments.



DOCTORS & DENTISTS



INDUSTRIAL BUILDINGS



HOTELS & RESTAURANTS



SCHOOLS & UNIVERSITIES



RETAIL SHOPS



PUBLIC BUILDINGS



FOR YOUR HOMES

## What to consider when buying an Air Sterilisation Device?

### 1 How extensively it has been tested?

It's important to know what pathogens the technology has been tested against. Most importantly, has it been tested against viruses? Another aspect to consider is if the testing laboratory is independent to the company and authorised/official.

### 2 Does it achieve a Single Air Pass kill rate?

Some companies will advertise 99.99% efficiency without stating the testing method. If they do not have a Single Air Pass kill rate, their units may distribute viruses into the air and increase cross contamination.

### 3 Can it properly control the airflow?

Radic8 technology aims to take contaminated air out of the breathing zone as quickly as possible and get it through the unit where viruses get killed. Then, it pushes sterilized air back into the breathing zone, where it matters most.

### 4 How much it has been implemented?

For the past 16 years, Radic8 technology has focused on killing airborne viruses. Its devices have since been installed in over 80% of hospitals in South Korea, all lung examination rooms, universities and more.

## Core Products



	VK MEdi	VK102	VK401	HEXTIO
Description	The ultimate unit in clean air technology with its powerful fan and possibility for creating positive pressure.	With its powerful reactor chamber, the VK 102 is the best unit for complete negative pressure.	With its large air exchange capacity, VK401 is ideal for dental surgeries and waiting rooms.	Ideal for personal use at home or in a small office. The unit is portable and can be placed anywhere.
Airflow	300 - 635 CFM	200 - 388 CFM	70 - 141 CFM	10 -12 CFM
Filters	Pre-Filter, HEPA Filter, Carbon Filter			HEPA Filter, Carbon Filter
UVC Lamps	8 Lamps	16 Lamps	8 Lamps	1 Lamps
Titanium Dioxide Filters	~70 Filters	~140 Filters	~40 Filters	~10 Filters
Room Size	165 m <sup>2</sup>	165 m <sup>2</sup>	60 m <sup>2</sup>	20 m <sup>2</sup>