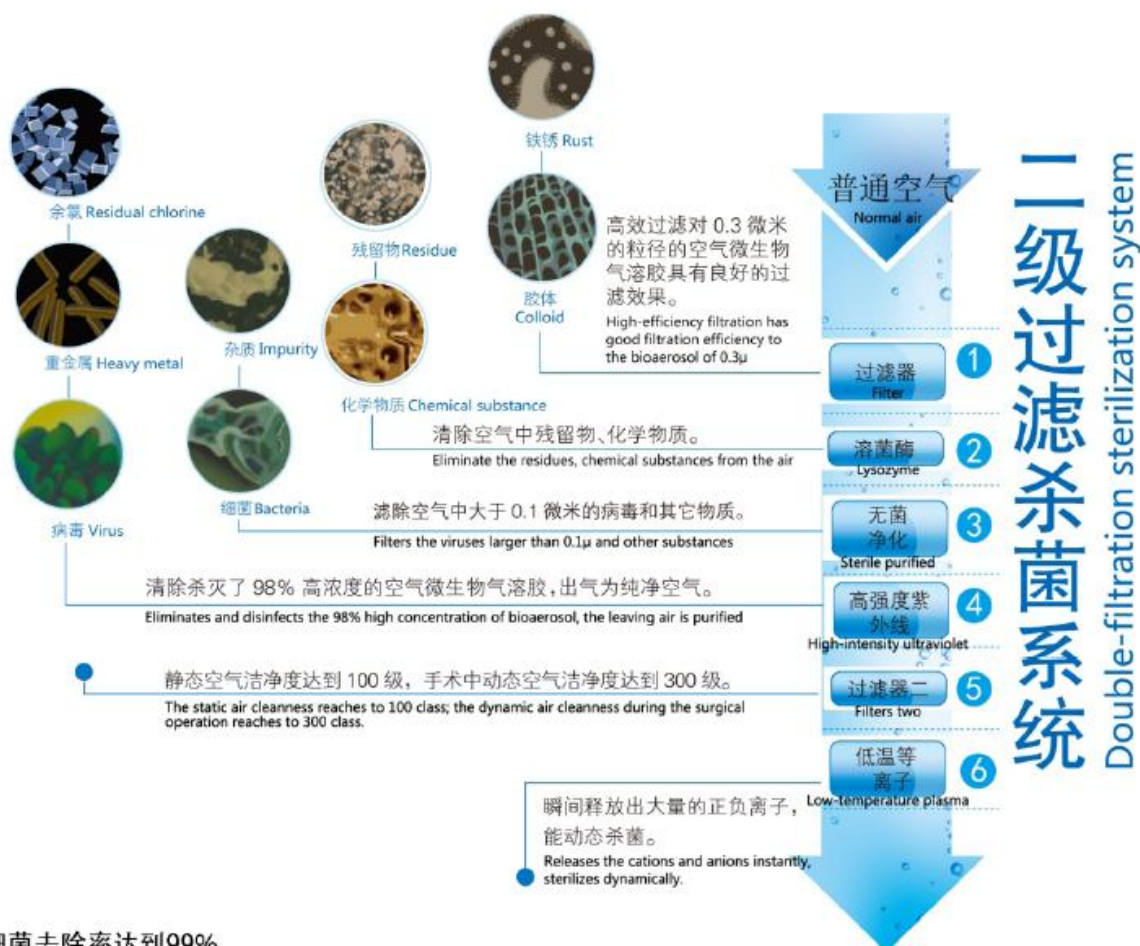


ROOM PURIFYING DISINFECTOR – HORIZONTAL LAMINAR AIRFLOW

This unique energy-efficient purifying Disinfector has an integrated 6-step sterilization process combining 3 purification methods of disinfecting the air and fomites (**any object or substance capable of carrying infectious organisms*) in the room which will eliminate 99.9% of microorganisms and residues and chemical substances, without any harmful effects to the human body:

- (1) Double H14 HEPA filtration sterilizing system (with Lysozyme impregnated filtering material to remove residues and chemical substances) eliminates microorganisms and substances **larger than 0.1μ** – permanently electrostatic and can be cleaned repeatedly with service life of more than 2 years, thus greatly reducing the maintenance costs as monthly HEPA filter replacement is NOT required;
- (2) High intensity UV-C Ultraviolet lamps (36W) are moisture proof, anti-shock, vandal resistant with long service life – **can eliminate bacterial strains of 0.01μ and bactericidal capability of more than 99.9%**;
- (3) Airstream inundated with Extremely High Ions concentration (cations and anions) reaching 40 billion ions per second ($4 \times 10^{10}/s$) produced by advanced low temperature plasma generator – eliminate **99.9% of microorganisms** from the air and fomites;

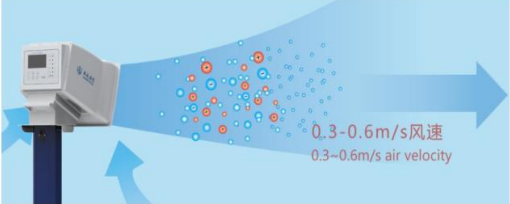

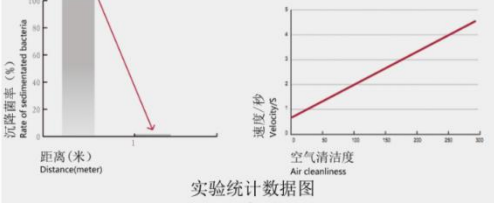





细菌去除率达到99%

* **Fomites** are any object or substance capable of **carrying infectious organisms**, such as **germs or parasites**, and hence transferring them from one individual to another. Skin cells, hair, clothing, and bedding are common hospital sources of contamination.

** **Lysozymes**, also known as muramidase or N-acetylmuramide glycanhydrolase, are glycoside hydrolases. These are **enzymes that damage bacterial cell walls by catalyzing hydrolysis** of 1,4-beta-linkages between...

KEY FEATURES

<p>Sterilizing Horizontal Laminar Airflow at 0.3-0.6 m/s</p>  <p>0.3-0.6m/s风速 0.3-0.6m/s air velocity</p>	<p>Bacteria elimination efficacy reaches 99%</p>  <p>HW95初效和超低阻力H14高效过滤 HW95 primary and middle efficiency and super-low resistance H14 high efficiency filtration</p> <p>离子使细菌蛋白质发生变化 The ions make the bacteria-protein changed</p> <p>细菌无法生存 Bacteria cannot survive</p>
<p>喷出后沉降菌每米存活率 Survival rate of emitted sedimentated bacteria per meter</p> <p>每秒动态空气清洁度变化 The variable cleanliness of dynamic air per second</p>  <p>沉降菌率 (%) Rate of sedimentated bacteria</p> <p>距离(米) Distance(meter)</p> <p>速度/秒 Velocity/s</p> <p>空气清洁度 Air cleanliness</p> <p>实验统计数据图 Statistics of test datum</p>	<p>CLASS 100 AIR CLEANLINESS within 1 meter distance</p> <p>For a room size of 20-50 m², the static air cleanliness within 1 metre distance from the Disinfectant reaches to Class 100 and the dynamic air cleanliness during a surgical operation reaches to Class 300.</p>
<p>LOW-TEMPERATURE ION GENERATOR</p> 	<p>HIGH IONS GENERATIVE RATE</p> <p>The latest generation of American Ion generators is capable of high ions generative rate without Ozone formation. The plasma generated stream of extremely high concentration ions (cations and anions) reaches 40 billion ions per second (4x10¹⁰/s) and can eliminate 99.9% of microorganisms from the air and fomites in the room without causing any harm to the human body.</p>
<p>ENERGY-EFFICIENT 36W ULTRAVIOLET LAMPS FOR UV-C GERMICIDAL IRRADIATION</p>	<p>UV-C is effective in destroying the nucleic acids in microorganisms as their DNA is disrupted by the UV radiation, leaving them unable to perform vital cellular functions.</p>
<p>2-STAGE G4 PRE-FILTER AND H14 HEPA FILTER</p>	<p>Contains Lysozyme. Permanently electrostatic, can be repeated cleaned with service life of more than 2 years – Low maintenance costs</p>
	<p>Real-time monitoring of working area with visualized electronic screen</p>
	<ul style="list-style-type: none"> (a) Single integrated display (b) Electrical height adjusting device (c) Mobile with 4 all-around wheels (d) High efficiency and low noise 49-54 dB (e) Plug and play, simple to operate (f) Safe and reliable (g) Eliminate smoke and smell

HOW DOES THE HORIZONTAL LAMINAR FLOW PURIFYING DISINFECTOR WORK

过滤器永久自带静电和滤料含有溶菌酶可重复清洗
初阻力和效率不变，寿命2年以上
The filter is permanently electrostatic and the filtering material contains lysozyme, can be repeatedly cleaned, the initial resistance and efficiency are invariable, the service life is more than 2 years

送出无菌空气
Aseptic supply air

下口入吸入灰尘空气
The dust air sucked into the lower tayer

高浓度离子群
High-concentration ion swarm

1 放出离子
通过等离子放电，产生并在空气中放出与自然界中相同的正负离子。
Ion released
Produce and release cations and anions in the air same as in nature through the plasma discharge.

2 对霉菌和病毒发挥作用
仅当附着在霉菌或病毒表面时，才变为氧化力极强的OH基，从表面的蛋白质中瞬间抽取氢（H），分解蛋白质。
Act on the mildew and bacterial
Only when attached to the surface of mildew or virus, it just becomes OH alkyl with strong oxidation, instantly extract the hydrogen (H) from the surface of protein, and makes proteolysis.

3 形成水返回到空气中
OH基与氢（H）相结合，形成水（H₂O）返回到空气中。
Water formed and returns to the air
The OH alkyl combines with hydrogen (H), to form the water (H₂O) and returns to the air.

▶ 利用离子群进行空中除菌的机制(示意图)
The mechanism to use ion swarm to sterilize the air(schematic diagram)

The air is disinfected by the composite effect of germicidal UV-C Ultraviolet Irradiation, inside the Disinfector, 2-stage High-Efficiency Filters and low-temperature plasma sterilization factor (high ions generation) as follows:








(i) Air flows through the G4 Pre-Filter	Gravimetric method efficiency is greater than 90%
(ii) Pre-filtered Air is then sucked into the Disinfector	<ul style="list-style-type: none"> (a) First stage disinfection by UV-C high intensity Ultraviolet Light emission (36W lamp) – kills bacteria, viruses and other microorganisms; (b) Then passes through the H14 HEPA filter (0.5μ particle efficiency of 99.995%) – pathogenic bacteria and dust pathogens debris is captured
(iii) HEPA filters can be repeated cleaned and service life is more than 2 years	<ul style="list-style-type: none"> (a) Permanently electrostatic (b) Filtering material contains lysozyme, an enzyme that damages bacteria walls
(iv) Low-temperature Plasma generator emits High-concentration swamp of 40 billion ions per second (4x10 ¹⁰ /s)	<ul style="list-style-type: none"> (a) The cations and anions in the airstream can eliminate 99.9% of microorganisms from the air and fomites in the room; (b) The Ions when attached to the surface of the mildew, bacteria and microorganisms causes strong oxidation reaction and instantly extracts the hydrogen (H) molecule from the protein surface, causing proteolysis; (c) OH alkyl that has combined with the hydrogen (H) will form water (H²O) and returns to the air

SOLUTIONS AND APPLICATIONS

The Disinfector is applicable for the following functions:

- (1) Air filtration
- (2) Sterilization
- (3) Odor removal
- (4) Elimination of harmful gases
- (5) Surface disinfection especially for fomites
- (6) Purification as a whole

Suitable application areas include the following:

<p>MEDICAL APPLICATIONS</p> <p>适用场所 Application occasions</p>  <p>各类手术室 Various surgical operation rooms</p>  <p>各类监护病房 Various intensive care units</p>  <p>巡回手术车 Patrol operation vehicles</p>	<ol style="list-style-type: none"> (1) Various types of surgical theatres (2) Intensive care units (3) Mobile operation vehicles (4) Veterinary surgeries (5) Emergency areas (6) Hospital/Clinics reception (7) Hospital rooms
<p>CHILD CARE APPLICATIONS</p> 	<ol style="list-style-type: none"> (a) Nurseries (b) Kindergartens (c) Child care centres (d) Indoor children play area
<p>INDUSTRY APPLICATIONS</p> 	<ol style="list-style-type: none"> (i) Canteens (ii) Food preparation/processing areas (iii) Banking Halls (iv) General reception areas (v) Conference/Meeting Rooms
<p>HOSPITALITY APPLICATIONS</p> 	<ol style="list-style-type: none"> (A) Restaurants (B) Hotel Receptions (C) Hotel Rooms (D) Churches (E) Concert/Performance Halls (F) Cinemas
<p>TRANSPORTATION HUBS</p> 	<ol style="list-style-type: none"> (1) Airport terminals (2) Train Terminals (3) Bus Terminals (4) Ferry terminals

PERFORMANCE TEST REPORTS AND CERTIFICATES

The Disinfectant has been certified and passed a wide variety of tests including the following:

- (1) Microorganism bacterial eradication rate tests – Food safety and Health Bureau of Chinese Center for Disease Control and Prevention;
- (2) Mildew eradication rate – Test Centre of National Building Materials
- (3) Formaldehyde, benzene and Total Volatile Organic Compound (TVOC) tests – Test Centre of National Building Materials
- (4) Smoke elimination rate test
- (5) Dust removing efficiency test
- (6) Ozone concentration test and other authorised certificates



HIGH-QUALITY DESIGN FOR OPERATING THEATRE USAGE

传统手术室消毒PK韩威空气净化消毒机

Conventional surgical operation disinfectant VS Hanwei air purifying disinfectant

净化手术室现状特点:

The present characteristics of conventional surgical operation rooms :

- | | |
|---|---------------------------------------|
| 1. 建设的高投入
High construction investment | 2. 设备的大空间
large space of equipment |
| 3. 运行的高能耗
High running power-consumption | 4. 效果的不确定
Uncertainty of effect |

韩威空气净化消毒机特点 :

The characteristics of Hanwei air purifying disinfectant

1. 水平层流, 减少上风向污染物对伤口的感染
The horizontal laminar flow reduces infection of incision caused by the upward pollutant
2. 可以替代过氧化氢和富尔马林或室内紫外线等对人体有害的房间消毒方式
Can replace the room sterilization ways in hydrogen peroxide and formalin or outdoor ultraviolet which harmful to human body
3. 局部净化等级高
High grade of local purification
4. 动静态杀毒相结合
Combination of dynamic and static disinfection



+

国内医疗电器安全规定 设计制造

=

Domestic Medical Apparatus Safety Specifications designing and manufacturing



1

有效消除

Effective elimination
有机挥发物、麻醉废气、手术电刀烟雾和气味
Volatile organic compounds, waste anesthetic gas, smoke of electrosurgical knife and smell

2

预防手术感染

Prevent surgical infection
水平送风气流可防止手术切口的局部低温
The horizontal supply air flow prevents the local hypothermia of Surgical incision

3

移动方便 快速安装

Easy move and quick installation
不需要建筑改造和设备层既插即用用电量少, 低噪声
No need building reconstruction and the equipments are plug and play with low power consumption and low noise

4

安全使用

Safe operation
防触电, 防溅水渗入, 可在含有空气、氧气或笑气的易燃性麻醉混合气体的环境中
Protecting electrifying, preventing infiltration of splash water, can be used in the environment contains flammable anesthetic mixture gas like air, oxygen or nitrous oxide.

XDSC-Y型移动式

XDSC-Y movable type



一个集成的显示
One integrated display

电动高度调节装置
Electric height adjusting device

4个万向移动轮子
4 all-around wheels

移动式配备4个万向移动轮子和电动高度调节装置可以方便地移动位置, 即插即用。

层流屏背面配备彩色电子屏显示装置, 方便医护人员准确定位无菌保护目标。对于流动医院和防治传染病临时爆发, 隔离医护人员免受污染, 这种移动式净化消毒机具有不可替代的技术优势。

The movable type equipped with 4 all-around wheels and electric height adjusting device to make the position shifted easily, plug and play.

The color display device is equipped at the back of laminar flow screen; makes the medical stuff can accurately align the target position of sterility protection target.

Such movable purifying disinfectant has the irreplaceable technical superiorities to the mobile clinics and outbreaks of infectious diseases control, isolates the medical stuff from being polluted.



SPECIFICATIONS PARAMETER OF HORIZONTAL LAMINAR FLOW PURIFYING DISINFECTOR

PARTICULARS	SPECIFICATIONS
POWER SUPPLY	220V, 50 Hz
Power Consumption (including fans)	180W
Standby Mode	23W
Fuse; Inert Fuse	220V: 3.5A ; 5 x 20mm
Internal Power Supply	24V rectifier, 65W
DIMENSIONS:	
Height(adjustable)	1500mm – 1800mm (5Ft – 6 Ft) adjustable
Depth x Width	700mm x 600mm
Weight	58 kgs
OPERATING ENVIRONMENT	Achieve aseptic hygiene for air quality control
Room Size	Suitable for 30 – 50 sq metres room
Ambient Temperature	-10°C to 40°C
Relative Humidity of Air	10 – 100%, no condensation
STORAGE AND TRANSPORT CONDITIONS	
Ambient Temperature	-10°C to 40°C
Relative Humidity of Air	10 – 100%, no condensation
DUAL SUSPENDED SUBSTANCE FILTERS	
G4 Pre-Filter (Resistance 50Pa)	Permanently electrostatic, can be repeatedly cleaned, the resistance and efficiency is invariable, contains bacteriolytic fiber with lysozyme
H14 HEPA filter (Resistance 100Pa)	Anti water mist, primary standard UL900 flammability rating
OPERATING PARAMETERS	
Supply Air Volume	400 m ³ /h
Noise Level	< 52 Db (A)
Ozone concentration	< 0.02 mg/m ³ , negligible
Air velocity	≥ 0.6 m/s
LOW TEMPERATURE PLASMA GENERATOR	
Ions generation rate	40 billion ions/second (4x10¹⁰/s) - cations and anions
HIGH INTENSITY ULTRAVIOLET LAMP	
36W UVGI Lamp (Choice of Xenon or Mercury)	Emits UV-C ultraviolet germicidal irradiation (UVGI), moisture proof, anti-shock, vandal resistant with long service life