Kalstein

Laminar Flow Cabinet Model YR05734

Instruction Manual

Thank you very much for purchasing our Kalstein´s Laminar Flow Cabinet Model YR05734 Please read the "Operating Instructions" and "Warranty" before operating this unit to assure proper operation. After reading these documents, be sure to store them securely together with the "Warranty" at a hand place for future reference.

 Warning: Before operating the unit, be sure to read carefully and fully understand important warnings in the operating instructions.

1、Brief Introduction

1. Adopting arbitrary positioning sliding door system.

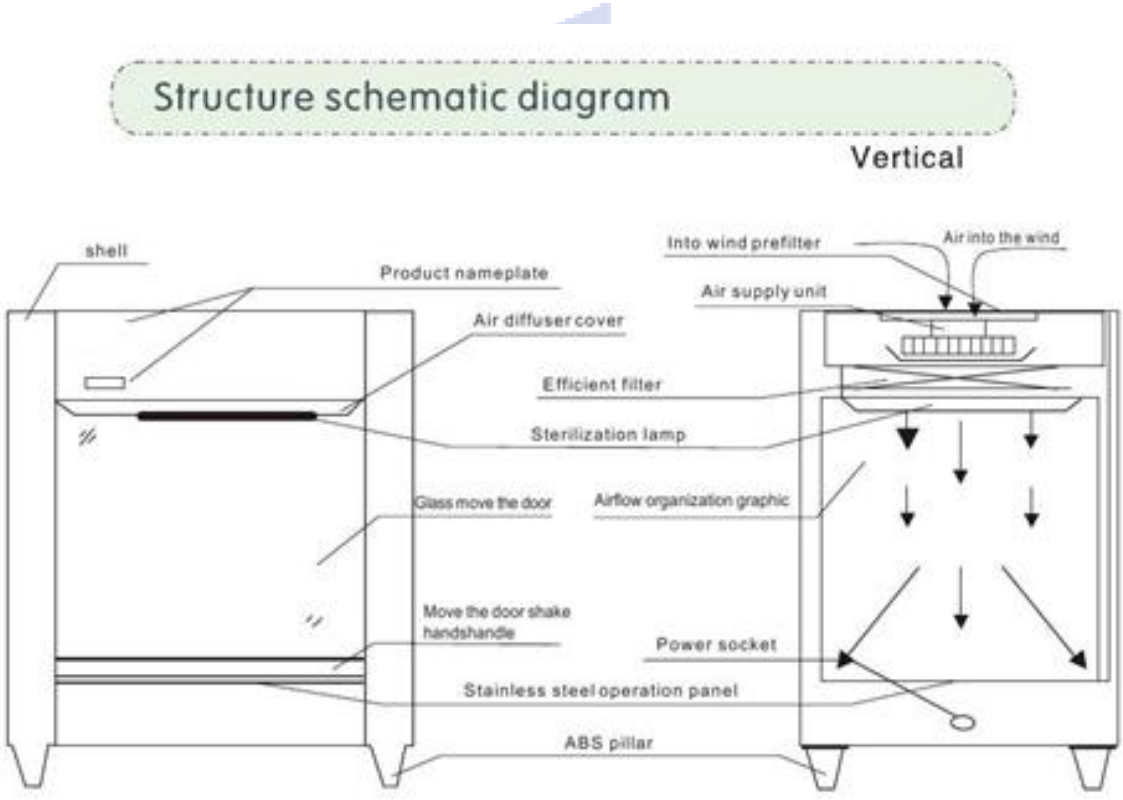
2. The shell is made of cold plate electrostatic spray, and the work surface is SUS304 brushed stainless steel, which is corrosion-resistant and easy to clean.

3. Safety interlock between lighting and sterilization system.

4. Wireless controller, adjustable speed in two speeds, more user-friendly design.

5. The vertical quasi-closed table top and the formation of a downward flow air curtain in the operation room can effectively prevent the input of external air and the operation area is clean.

6. Equipped with HEPA high-efficiency air filter, with primary filter for preliminary filtration, which can effectively extend the service life of the high-efficiency filter..



2、 Technical Specification

Model / Technical		YR05734
Clean level		Class 100 @≥0.5μM（The US federal 209E）
Clump count		≤0.5pcs/dish·h（Φ90mm dish）
Average wind Speed		0.25～0.45m/s
Noise		≤62dB（A）
Vibration in Half-Peak		≤5μM（x、y、z direction）
Illuminance		≥300Lx
Voltage		AC Single phase110V/60Hz
Work size	W1×D1×H1	490×490×490
Overall size	W×D×H	650×530×850
Hepa filter size and Qty.		475×410×38×①
Fluorescent lamp/UV size and Qty.		5W×①/10W×①

3、 Structural Characteristics

Laminar flow cabinet: by several major components of the cabinet, fan and high-efficiency filters, operating switches, etc. Box cold plate production, surface spray treatment, work tops, stainless steel. The purification unit uses a variable air volume fan system, by adjusting the fan working status, can the average wind speed to maintain a clean work area within the rated range, and effectively extend the life of the high-efficiency filter.

The horn cannot touch the wall of the container, and the end part of the horn and the bottom of the container should be more than 4cm (or will case no load when with bigger power), to ensure the good break effect

Recommended for use in elongated containers. When processing small-capacity samples, using small ultrasonic power, the horn can never contact the bottom of the container.

4、 Working Principle

By The Centrifugal fan pressure air through the primary filter, into the plenum chamber, and then after a hepa filtered from the blowing of the wind surface, clean air, clean air flow to the uniform cross-section wind speed through the clean area, the region the dust away, thus forming a work environment of high cleanliness.

5、 Installation

The laminar flow cabinet in place locations in the environment is relatively clean work room (preferably placed between the primary purification of one hundred thousand grade or three hundred thousand grade), plug in the power, as shown in function on the control panel to open the can, deal with purification workspace surface and shell before starting the carefully cleaning to remove surface dust, ten minutes after boot can be implemented normal operation.

6、 Maintenance

(1) Based on actual usage, periodically remove the primary filter cleaning, the cleaning cycle is generally 3-6 months. (if not long-term cleaning, the dust will affect the amount of wind insufficient to reduce the cleaning effect.)

(2) When the early effect of the normal exchange or clean the filter air filter, still can not achieve the desired cross-section wind speed, then adjust the fan voltage, and thus achieve the desired uniform wind speed.

(3) Generally when the fan operating voltage adjustment to the highest point in the use of eighteen, still can not achieve the desired wind speed, description of the filter on the high-efficiency filter dust too much (filter kong has basically stuck to timely update) general efficiency air filters use a period of eighteen months.

(4) Replacement of high-efficiency air filters, should pay attention to the correctness of the model dimensions (original manufacturer configuration), arrow wind devices, and pay attention to the peripheral sealing of the filter is absolutely no leakage occurs..

7、 General Failure, Causes, and Troubleshooting

Failure Phenomenon	Reason	Remedy
Total power switch is not close automatically trip	1、Fan stuck lead to motor stall, or short-circuit lines	1、 Adjust the fan air shaft position, or replace the impeller and bearings, check the line is intact. 2、 The control circuit diagram, point by point inspection line components of the shell insulation resistance, and repair insulation failure.
Wind speed is low	1、A primary filter too much dust. 2、 The high efficiency filter failure.	1、 The beginning of the cleaning efficiency of the filter. 2、 The replacement of high efficiency filter.
Fan does not turn	1、 The contact does not work. 2、 The fan power fuse has blown.	1、 Check the contact line is normal. 2、 Replace the fuse.
Fluorescent lamp is not lit	1、A lamp or relay damage. 2、 The lamp power supply fuse has blown.	1、 Replace the lamp or relay. 2、 Replace the fuse.
Wind speed is low	1、A primary filter too much dust. 2、 The high efficiency filter failure.	1、 The beginning of the cleaning efficiency of the filter. 2、 The replacement of high efficiency filter.
Fan does not turn	1、 The contact does not work. 2、 The fan power fuse has blown.	1、 Check the contact line is normal. 2、 Replace the fuse.
Fluorescent lamp is not lit	1、A lamp or relay damage. 2、 The lamp power supply fuse has blown.	1、 Replace the lamp or relay. 2、 Replace the fuse.

8、 Schematic Diagram for Controller

The panel: