百神科技
BAISHEN TECHNOLOGY

Attention: Before operating BSW Series Anti-static Clean Bench, user must read this operating manual carefully, please! Keeping the manual for reference.

BSW Series Anti-static Clean Bench

Executing standard: Q/320500BSK 010-2004

OPERATING MANUAL

ISO9001: 2000 CERTIFIED

SUZHOU CLEANING TECH. RESEARCH INSTITUTE
BAISHEN TECHNOLOGY (SUZHOU) CO., LTD.

Welcome to use BSW Series Anti-static Clean Bench, thank you warmly entering into our company's consumer team!

1. General

Along with science and technology's developing rapidly, air clean technology has already been used extensively in production and scientific research department of electron, nucleon, spaceflight, aviation, precision instrument, apparatus & meter, chemical industry, light industry, biological pharmacy, medicine and foodstuff.

The Clean Workbench is a kind of vertical unidirectional airflow cleaning device

The Clean Workbench is a kind of vertical unidirectional air flow cleaning device, which equips an operating range with no dust and bacteria. It offers great effects on improving technical conditions and raising the accuracy purity and reality of the products, so this device is widely used in the biological cleaning technology.

2. Technical Specifications

Model / Parameter		BSW-1160V	BSW-1160-1
Cleanliness		100 class @≥ 0.5 μ m (FS 209E)	
Colony number		≤0.5 / culture container (Φ 90mm)	
Mean flow rate (m/s)		0.3~0.6 (adjustable)	
Noise		≤62dB (A)	
Vibration/half peak (μ m)		≤5	
Illumination (LUX)		≥300	
Power supply		Single phase 220V/50Hz	
Maximum power consumption (VA)		700	700
Weight (kg)		280	280
Dimensions	W1: (working zone) (mm)	1160	1160
	D1: (working zone) (mm)	750	650
	H1:(working zone) (mm)	550	550
	W: (outline size) (mm)	1320	1320
	D: (outline size) (mm)	750	650
	H: (outline size) (mm)	1700	1700
Size & No. of HEPA		915×610×①	
Person capacity		Single	

Note: Thick of falter can be selected 50 or 69mm.

3. Operating Principle

A. BSW series vertical unidirectional airflow

BSW series Clean Workbench is a kind of air partly cleaning devices of vertical single-direction. After being firstly filtered by the roughing air filter the indoor air is sucked into the static pressure case through variable velocity centrifugal machine. It is secondly filtered by high efficiency particulate air filter (HEPA). The cleaning flow through the outlet of the HEPA with a mean and certain crosscut velocity through the operating range takes the dust particles and biological particles away to make an operating range with no bacteria.

B. BSW series horizontal unidirectional air flow

The Clean Workbench is a kind of horizontal unidirectional airflow cleaning device which offers partly needed cleaning operating circles. After being firstly filtered by the roughing air filter the indoor air is sucked into the static pressure case through variable velocity centrifugal machine. It is secondly filtered by high efficiency particulate air filter (HEPA). The cleaning flow through the outlet of the HEPA with a mean and certain crosscut velocity through the operating range takes the dust particles and biological particles away to make an operating range with no bacteria.

4. Structural Feature

The cabin of the Clean Workbench is made of first-class cold rolling galvanize steel plate (SECC), after bending, using the rivet joint technology, with the surface lacquer coated. Its table flat is made of stainless steel, which is beautiful and anti-rusting handle to avoid rusting.

Built –in HEPA filter in the sucking chamber.

The motor is a small low-noise variable-velocity centrifugal flow motor. The electronic control system offers reliable properties and facilities for operating.

By regulating the electronic-controlled flow motor to change the flow strength the outlet flow velocity is always within the ideal range to effectively prolong the life of the high-efficient filter which is the main part of this device and save the running cost of the device.

5. Installation

5.1 This device must be installed in the cleaning or sealed air-conditioned buildings.

5.2 The installing place must be far from the sources of dust and vibration.

5.3 The ground terminal of the power socket must be seriously grounded to ensure the safety of workers.

5.4 After installation, the inner and outside of the device should be cleaned with Super vacuum cleaners or other tool (such as shot silk cloth or silk fabric), which cannot make fiber.

5.5 After cleaning the device, the flow-velocity instrument should be used to measure the mean flow velocity in the cleaning operating range.

Turn the button on the operating panel to increase the flow rate of the flow motor while the mean flow rate is 0.30m/s. Otherwise turn the button on the operating panel to decrease the flow rate of the flow motor while the mean flow rate is 0.40 m/s till the mean flow rate keep within the range of 0.4m/s 20%.

6. Usage

6.1 The flow motor and ultraviolet bacteria-killer lamp should be on 50 minutes before operation to kill the microbe on the inner surface of the working cabin. After 30 minutes the bacteria-killer lamp should be off, meanwhile the fluorescent lamp is on.

6.2 Unnecessary things are not allowed to be put on the working table to assure the cleaning flow track in the working range not to be disturbed. In the cleaning operating range any obvious action to disturb the flow track is not allowed.

6.3 The mean flow rate of the operating range should be regularly (generally every

two months) measured by the flow rate instrument. If it does not conform with the technical demands the voltage of the power supply of the flow motor should be increased to keep the working cabin under the best operating condition.

6.4 If the working cabin has not been used for a long time, before operating its circle must be cleaned with super vacuum cleaners or other tools, which cannot make fiber. At last, bactericidal agent or ultraviolet rays should be used to kill the bacteria.

6.5 Operating area's usage temperature can not be more than 60 ℃.

7. Maintenance

7.1 According to environmental clean extent, the coarse filter cloth should be regularly (generally every 2-3months) cleaned by removing (Dacron non-woven cloth) or replacing.

7.2 Killing the bacteria job in the surroundings should be regularly (generally a week) done. Meanwhile, in order to keep to clean, ultraviolet lamp surface is wiped with gauze which dips on organic solvent, such as alcohol or acetone to avoid affect disinfecting effect.

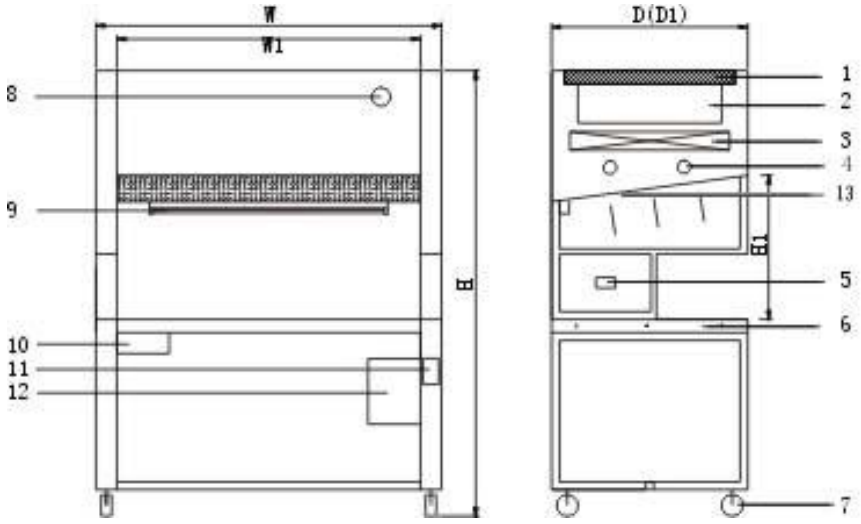
7.3 it must be replaced HEPA when the high-speed range of fan could not make working area wind speed reach to 0.30m/s,

7.4 when replacing the HEPA, open the top cover for the super cleaning workbench. (vertical unidirectional air flow); open the back cover for the super cleaning workbench.(horizontal unidirectional air flow).and look at arrowhead sign on the filter, arrowhead point is air flow direction.

7.5 after Replacing HEPA, use the CLJ — 03A lasers dust particle counter to check the frame seal condition and regulate the fan voltage, keep the average wind speed in operating area between 0.32m/s~0.48m/s, use CLJ— 03A lasers dust particle counter again to check cleanliness.

7.6 when checking and maintenance, please cut off power switch and pull out the power plug.

Type1



1．初效空气过滤器（primary filter）　　8　　．压差计（differential pressure）(选配)
2．可变风量风机组（blower fan sets）　　9　　．日光灯（fluorescent lamp）
3．高效空气过滤器（HEPA）　　10　　．抽屉（drawer）
4．离子发生器（ion generator）　　11　　．操作面板（operating panel）
5．插座（socket）　　12　　．垃圾桶（ash-bin）
6．不锈钢台面（S.S work board）　　13　　．导流板
7．万向脚轮（universal truckle）

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2004 Printed in Suzhou