



**Attention: Before operating BSW Biological Clean Bench, user must read this operating manual carefully, please! Keeping the manual for reference.**

## **BSW Biological 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 biological clean workbench, 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, 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, It offers great effects on improving technical conditions and raising the accuracy purity and reality of the products. Along with science technical rapidly develop, air clean technology already cover extensively should be used for laboratory, electron technology, aviation and space, precision instrument, appearance, subtle chemical industry, biology preparation of drugs, cure food waits for each scientific research line department. BSW type biology clean workbench supplies high clean job environmental an ambition part air cleaning equipment.

Its use to ameliorate craft condition, guarantee product high accuracy, high-purity and high reliability possesses good effect average.

## 2. Technical Specifications

model Parameter	BSW-1000V		BSW-1300V	
Cleanliness	100 class@≥0.5 μ m(US fed 209E)			
No. of Colony	≤0.5/C.C. hour			
Velocity (m/s)	0.25--0.45m/s（Adjustable）			
Noise	≤62dB（A）			
vibration half pack	≤5 μ m			
Illumination	≥300LX			
Power supply	AC 220V/50Hz			
MAX. consumption (VA)	800			
Weight (Kg)	260Kg		300Kg	
working Zone	1000×700×630mm		1300×700×630mm	
Overall Dim.	1160×760×1780mm		1460×760×1780mm	
Size & No. of HEPA	915×610×①mm		1220×610×①mm	
Size & No. of Exhaust Filter	610×90×①mm		480×200×①mm	
Size & No. of Light UV Lamp	20W×②/20W×②		20W×②/20W×②	
Person capacity	single	double	single	double

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

### 3. Operating Principle

BSW belongs to vertical unidirectional airflow, Possess positive and negative press wind channels circular system:

① under the usual condition(positive press) 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 the high efficiency particulate air filter (HEPA) to reach the bench work surface, than 30% air is the sucked into grid of the rear of bench 40% rest air is sucked into the bottom of bench, by the front grid, system air re-circle by negative pressure air dust, 30% air is exhausted out from front door. 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.

② If it should occur the peculiar smell and stimulating injury to human body in experience operation, we need to use negative press wind channels circle system. Insert to the board on the top suck mouth, this moment, air intake flow is from the front grid of workbench, enter to the body rear of by the bottom of workbench to form negative press wind channels circle system, secondly filtered by the high efficiency particulate air filter (HEPA) , All gas be enclosed in the chamber for cycle which has certain protection effect to operator.

### 4.Structural feature

4.1 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 which is beautiful and durable. 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.

4.2 Fan with shockproof installing to ensure noise low and vibration small.

4.3 The table-board and rear liner board are made of No .304 high intensity stainless steels which possesses resist-corrode, it can pick up table-board from operating area without needing tool, which makes to be convenient for cleaning up dirt from bottom

of workbench.

4.4 the front window open style adopts counterweight balance, the orientation is flexible.

4.5 the workbench rear linerboard equips with power plug which has a splash-proof lid.

4.6 The emission wavelength of the ultraviolet lamp is 2573A. The ultraviolet lamp can kill not only the microbial active cell but also the anti-heat blastosphere and other cell blast spore, fungus spore.

## **5.Installation**

5.1 His device must be installed in the cleaning room (100000---300000 class at lowest).

5.2 The workbench does not possess flameproof ability, forbid to use at flammable, explosive place

5.3 Please confirm that this product's rated voltage, frequency conform to power supply's parameter, prevent electric element and device from damage and lead to fire.

5.4 The power cord must be connecting to the socket which is grounded.

## **6. Usage**

6.1 Turn-on the power supply, open the ultraviolet bacteria-killer lamp, after 30 minutes, close ultraviolet bacteria-killer lamp and open the fluorescent lamp. Then, switch on the flow motor and start operating after 20 minutes, open the fluorescent lamp when operating

6.2 under usual situation, the intake of equipment is opened when leaving the factory, which is be positive press model, when it is needed for the negative press wind flue, the intake of equipment should be enveloped with two sides insert board

6.3 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.

6.4 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.

6.5 In the cleaning operating range any obvious action to disturb the flow track is not allowed.

6.6 Operating area's usage temperature can not be more than 60 °C .

## **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.and look at arrowhead sign on the filter, arrowhead point is airflow direction. Check sealing state of the frame when replacing the HEPA

7.5 it can be replaced when the lighting and ultraviolet lamp reach to the lifespan,

7.6 when replacing fuse, ensure capacity same as original to avoid fire.

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

**Remark: if it has dimension deflection, according to upgrade version.**

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