

**Attention: Before operating BSU Fan Filter Unit, user must read this operating manual carefully, please! Keeping the manual for reference.**

## **BSU Fan Filter Unit**

Executing standard: Q/320500BSK 011-2005

# **OPERATING MANUAL**

ISO9001: 2000 CERTIFIED

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

**Welcome to use BSU Fan Filter Unit, thank you warmly entering into our company's consumer team!**

## **1. General**

The fan filter unit is a modular new-typed air clean device designed to provide a supply of high-quality clean air over a specific area, It possesses compact structure, beautiful appearance, low noise and easy maintenance.

As unit modular, we can use it to make simple clean workbench, laminar flow cover, cleanness wardrobe and carry out the assembly for vertical flow, horizontal flow and disorderly flow pattern clean room or part purifying product line, it possesses advantage of low cost, short cycle, fast effects, easy operating & assembly and strong applicability, this device is widely used in the technical unit and factories which need non-bacteria and cleaning operating circles such as hospitals, laboratories and plants manufacturing, pharmaceuticals, foodstuffs and electronic components.

## **2. Construction**

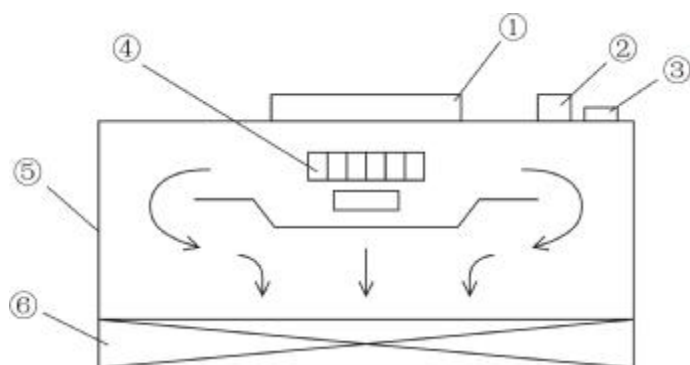
Outline structure is as fig 1, on the basis of original fan filter unit, we design the product by improving. Make its airflow reasonable, noise lower, air quantity bigger, it possesses perfect appearance quality and dependable immanent quality.

2.1 Use three ranges and adjustable rotate speed centrifugal type fan, performance stability, high credibility, low noise.

Adopt stainless steel plate for fabrication, use Japan advanced riveting craft, make its more beautiful and no deform.

2.3 The product doesn't usually use primary filter, it is commonly used in the class 100,000 clean rooms. Commonly, the more the number of the fan filter unit installed to supply air to the room, the cleaner the environment within the room, for example, class 100 clean rooms commonly have full ceiling coverage with HEPA fan filter unit.

2.4 The filter is made of no plywood filter paper and by have not clapboard sieve low and aluminum alloy outside frame, it possesses small beginning resistance, high filter efficiency, and easy replacing which doesn't need to disassemble any spare parts.



Picture 1

- 1、Intake
- 2、Speed switch
- 3、Brand mark
- 4、Motor
- 5、Body
- 6、HEPA

## Technical specification

Operating Conditions Temperature: 5℃~35℃

Relative humidity: ≤45%---75%

Atmospheric pressure: 86kPa~106kPa

Class: 300000

Power supply: 220V ± 11V, 50Hz ± 1Hz

## 3. Technical Parameter

model parameter			BSU-305	BSU-484	BSU-570	BSU-610
1	Rated air quantity m <sup>3</sup> /h		120~200	300~500	450~800	450~800
2	Mean speed		0.3~0.6m/s (Adjustable)			
3	Filter efficiency		99.99%(≥0.5 μ m Particle) *remark			
4	Noise level		≤58dB(A)			
5	Input power		100VA	150VA	150VA	150VA
6	Power supply		220V, 50Hz			
7	Outline dimension	L	310mm	489mm	575mm	615mm
		W	310mm	489mm	575mm	615mm
		H	170mm (NO HEPA)	230mm (NO HEPA)	280mm(NO HEPA)	
8	Weight		10kg	12kg	18kg	20kg
9	Size & No. of HEPA (mm)		305×305×①	484×484×①	570×570×①	610×610×①

model parameter			BSU-950	BSU-1170	BSU-1220
1	Rated air quantity m <sup>3</sup> /h		900~1100	900~1400	900~1400
2	Mean speed		0.3~0.6m/s (Adjustable)		
3	Filter efficiency		99.99%(≥0.5 μ m Particle) *remark		
4	Noise level		≤58dB(A)		
5	Input power		150VA	150VA	150VA
6	Power supply		220V, 50Hz		
7	Outline dimension	L	955mm	1175mm	1225 mm
		W	575mm	575mm	615 mm
		H	280mm(NO HEPA)		
8	Weight		25kg	30kg	32 Kg
9	Size & No. of HEPA (mm)		950×570×①	1170×570×①	1220×610×①

\* **Note:** 1、 we supply the class 100-3000000 clean unit for consumer choice, China medicine product clean room (Area) air cleanliness is as follows, the standard is for consumer reference.

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

Class name	Dust biggest permit number /cubic meter		Microorganism biggest permit number /cubic meter	
	≥0.5 μ m	≥5 μ m	Airborne germ / cubic meter	Sedimentation germ / utensil
100	3500	0	5	1
10000	350000	2000	100	3
100000	3500000	20000	500	10
300000	10500000	60000	NA	15

## 4. Install

4.1 for considering the lifespan, if intake port 's cleanliness class is for 100 degree, this product should be used in the class 100,000 environment.

4.2 (Picture 2), we can usually adopt bracket style or hang style to install. It is ok for

putting product on the bracket 。 Pay attention to level seal.

4.3 fix the air diffuse on the corresponding position of the FFU with the installing bolt.

#### 4.4 usage

① For ensuring purifying area clean, turn on the FFU ahead of 15 minutes each time before operating.

② the intake port should be faced to the area needed purifying, meantime ,it can not be covered with anything.

③ avoid dig extent action in cleaning area.

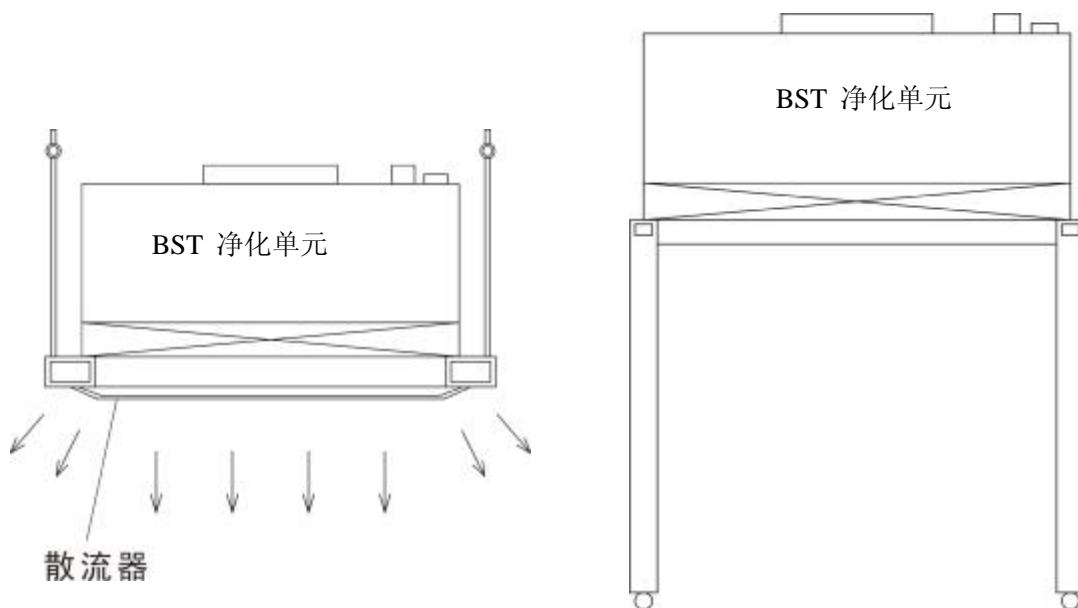
④ when using, according to clean room's size , the cleanliness class request and rated air quantity, fix on the air change times and number of the FFU.

⑤ regulate fan's air quantity with the switch if it is necessary

## 5. Maintenance

5.1 Replace the HEPA, pay attention to airflow arrowhead points , lift up the FFU, after replacing ,cover it equably and reposefully, pay attention to seal .

5.2 Regular (Usually 2 times every month),Use the dust particle counter to determine the product cleanliness in the working area. If the HEPA is lapse state, replace new HEPA, please.



Picture 2 FFU installing style

## **6. Attention Item**

6.1 Replacing HEPA, pay attention to airflow ↑ Arrow, only need to rise FFU, after changing , cove it smoothly and steadily, pay attention to seal up.

6.2 Replacing fuse, must cut off power supply , ensure capacity same as original, avoid to cause fire.

## **7. Service after sale**

The machine is lifetime maintenance, when breakdown, supply spare parts by manufacturer after a years, the cost be received for replacing spare parts.

## **8. Transportation**

Fitting ordinary transport tool, avoid to impact, collision and raid and sunlight insolate directly.

## **9. Storage**

Packed security cabinet should put in good ventilation storeroom ,its comparative absolute humidity is not more than 85%, surrounding air has not acid, alkaline and causticity gas.

## **10. Product accessories**

Certificate 1copy

Operation instruction 1copy

## **11. Enterprise standard :**

**Q/320500 BSK 011-2005**

**BSU Fan Filter Unit**  
**OPERATING MANUAL**

**SUZHOU CLEANING TECH. RESEARCH INSTITUTE**  
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注意：敬请用户在操作使用BSU 系列净化单元之前，必须  
详细阅读使用说明书！并妥善保管。

## BSU 系列净化单元

执行标准: Q/320500BSK 011-2005

# 使用说明书

本企业已通过 ISO9001:2000 质量体系认证

苏州市洁净技术研究所  
苏州市百神科技有限公司



**欢迎使用 BSU 系列净化单元！  
由衷地感谢您加入本公司的用户队伍！**

## 一、 产品概述

BSU 系列净化单元，是为了提高局部净化环境而设计的新型的空气净化单元。它具有结构紧凑，外形美观、噪音低、维护方便等优点。

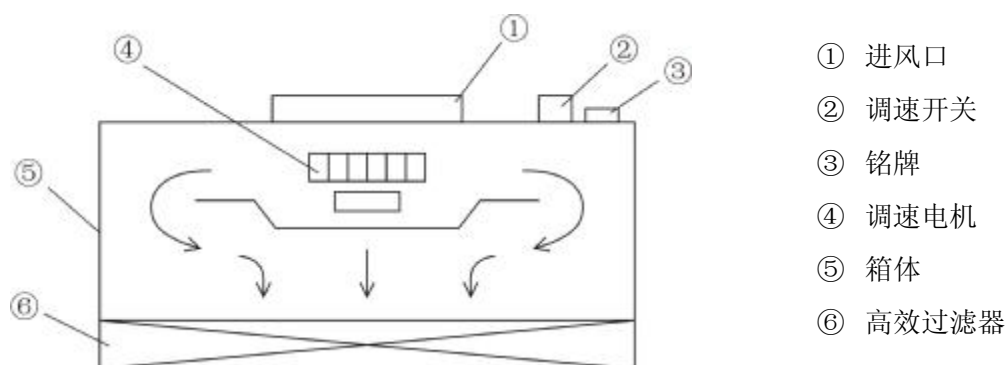
## 二、适用范围

利用本产品可以根据实际情况制作简易的净化工作台、层流罩、洁净存衣柜（橱）等空气净化产品，还可以组装成垂直流、水平流及紊流等气流形式的洁净室或局部净化生产线具有投资少、周期短、收效快、组装使用方便，适用性强等优点，广泛用于制药、医院、实验室、电子、食品、等行业。

## 三、结构特点

外型结构如（图一），本产品在原净化单元基础上，精心设计改进而成。使其气流更合理，噪音更低，风量更大，具有理想的外观质量和可靠的内在质量。

- 1、用三档可调的离心式风机，风速可调，性能稳定，可靠性高，噪音低。
- 2、选用不锈钢板制作，运用日本先进的铆接工艺，使其外观不变形更美观。
- 3、本产品一般不用初效过滤器。一般在净化等级 10 万级以上使用效果会更好。而且风量大、噪音低，特别适用流水线或多个使用。
- 4、本高效过滤器由无隔板滤纸与铝合金外框构成，具有初阻力小、容尘量大、过滤效率高，而且更换方便。可直接调换，不需拆卸任何零部件。



图一

## 四、使用环境

- 1、环境温度：5℃～35℃；
- 2、相对湿度：45%～75%；
- 3、大气压力：86KPa～106KPa；
- 4、使用环境洁净度：30 万级以上；
- 5、使用电源：工作电压 220V±11V、 50Hz±1Hz；

## 五、技术参数

产品型号		BSU-305	BSU-484	BSU-570	BSU-610
产品参数					
1	额定风量 m³/h	120～200	300～500	450～800	450～800
2	额定风速	0.3～0.6m/s （可调）			
3	净化效率	99.99%(粒径≥0.5 μ m 的尘埃) *注			
4	噪 声	≤58dB(A)			
5	输入功率	100VA	150VA	150VA	150VA
6	电 源	220V, 50Hz			
7	外形尺寸	长	310mm	489mm	575mm
		宽	310mm	489mm	575mm
		高	170mm(同右)	230mm (同右)	280mm(不含高效过滤器)
8	重 量	10kg	12kg	18kg	20kg
9	高效过滤器规格及数量 (mm)	305×305×①	484×484×①	570×570×①	610×610×①

产品型号		BSU-950	BSU-1170	BSU-1220
产品参数				
1	额定风量 m³/h	900～1100	900～1400	900～1400
2	额定风速	0.3～0.6m/s （可调）		
3	净化效率	99.99%(粒径≥0.5 μ m 的尘埃) *注		
4	噪 声	≤58dB(A)		
5	输入功率	150VA	150VA	150VA
6	电 源	220V, 50Hz		
7	外形尺寸	长	955mm	1175mm
		宽	575mm	575mm
		高	280mm(不含高效过滤器)	
8	重 量	25Kg	30Kg	32 Kg
9	高效过滤器规格及数量 (mm)	950×570×①	1170×570×①	1220×610×①

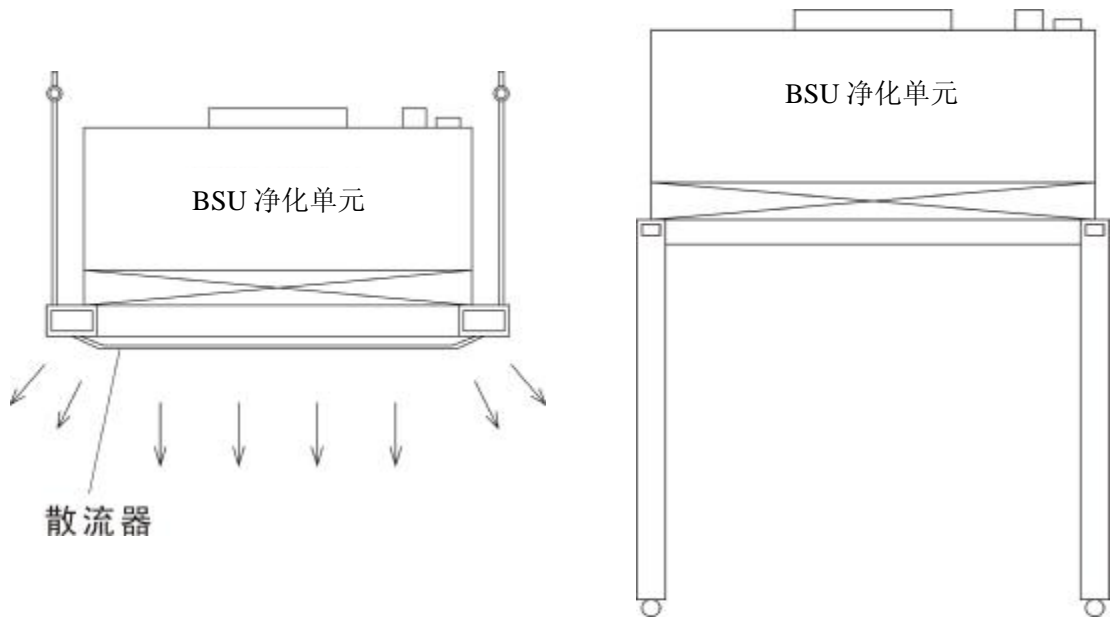
\*注：1、提供 100～300000 级的净化单元供用户选择，附中国药品产品洁净室（区）的空气洁净度，标准供用户选用参考。

2、注：过滤器厚度规格选配 50/69mm。

级别名称	尘埃最大允许数/立方米		微生物最大允许数	
	$\geq 0.5 \mu m$	$\geq 5 \mu m$	浮游菌/立方米	沉降菌/皿
100	3500	0	5	1
10000	350000	2000	100	3
100000	3500000	20000	500	10
300000	10500000	60000	NA	15

## 六、安装

- 1、如出风口的洁净度需要百级，考虑到使用寿命，最好将本产品置于 10 万级以上的环境中使用。
- 2、如（图二）所示，一般可选用支架式或吊装式二种。本产品只要按放在支架上即可。注意水平密封。
- 3、当需要使用散流器时，如图螺钉将散流器固定在相应位置。
- 4、务必将设备接地端子可靠接地，请使用带漏电保护装置的电源。



图二 BSU 系列净化单元安装方式

## 七、使用方法：

- 1、为了保证净化区域的洁净度，每次使用之前提前 15 分钟开机。
- 2、出风口应正对需要净化的区域，其间不得有任何遮掩。

3、净化区域内应尽量避免作大幅度激烈动作。

4、使用时，应根据洁净室的大小及所需净化等级要求，确定需要的换气次数，结合本产品的额定风量，决定所需净化单元的台数。

5、根据实际需要量，可用开关调节风机的风量。

## 八、注意事项

1、更换高效过滤器，要注意气流↑箭头指向，只需要将净化单元提起，然后将新高效过滤器更换后，平稳、均匀盖上即可，注意密封。

2、更换保险丝时，必须切断电源。要确保其容量与原来的相同，以免引起火灾。

## 九、维护保养

1、更换高效过滤器，要注意气流↑箭头指向，只需要将净化单元提起，然后将新高效过滤器更换后，平稳、均匀盖上即可，注意密封。

2、定期（一般为每月 2 次）用尘埃粒子计数器测定用本产品实施净化的洁净区域的洁净度。当实测的洁净度与要求的洁净度不符时，应查明原因（是否有泄露、高效过滤器是否失效等）。若高效过滤器已失效，则应更换新的高效过滤器。

3、本设备只要将电源线插上，设备就带电，保养维修设备务必将电源线拨下，确认断电后再进行。

## 十、售后服务

本产品实行三包。整机保修一年。并提供终生维修服务，需更换的零配件收成本费。

## 十一、运输

适用于一般交通工具运输，运输中不得侧置、冲击、碰撞。且不能受雨雪的直接侵袭及日光曝晒。

## 十二、贮存

包装好的安全柜应放在相对湿度不大于 85%，通风良好的库房中，周围空气中不应有

酸性、碱性及其它腐蚀性气体。

### 十三、产品附件

- 1、合格证一张；
- 2、使用说明书一份

### 十四、企业标准：

Q/320500 BSK 011-2005



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