

**Professional supplier of air
filtration consumables**



Dawei Purification Technology (Hebei) Co., Ltd



Company Profile

The company's products cover various types of air filters and purification engineering supporting products. The company has nearly 5000 meters of production and warehousing workshops, with product sales covering multiple countries and regions across the country and the world. It is an important air filter manufacturer in North China.

The company has obtained certifications for ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and ISO 45001 Occupational Health and Safety Management System. The air filter series products have passed the quality inspection and testing certification of national professional institutions. The company has advanced testing equipment such as a performance testing platform for middle and high efficiency air filters, a scanning testing platform for high-efficiency filters, and a performance testing platform for filter media. It has also established an "Air Filtration Equipment Technology Research and Development Center". The company has a 100000 level standardized clean production workshop of 600 square meters, with an annual production capacity of over 500000 sets of air filters.

Dawei Purification has established a nationwide brand marketing service network, built a real-time response system for after-sales service, and pioneered the "Dawei one-stop" service. Relying on the constantly increasing brand appeal, driving force, and radiation, we are committed to building a comprehensive supply chain for air purification products.

Dawei Purification adheres to the business philosophy of "treating people with sincerity and benefiting from trust", providing one-stop services for customers in industries such as new energy manufacturing, semiconductors, electronics, pharmaceuticals, medical, food, environmental precision instruments, aerospace, biotechnology, fresh air purification, animal husbandry, automobile manufacturing and parts processing, airports, high-end buildings, gas turbine power generation, etc.

Dawei Purification continuously promotes the development of core competitiveness, integrates professional talent teams, constantly surpasses and elevates, and works hand in hand with customers to achieve our vision!



Qualifications and Honors



Catalogue

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FILTER COTTON

Media	Synthetic
Final Pressure Drop	250 Pa
Operating Temperature	80°C
Filter Efficiency*	G2-G3-G4
Filter Class**	ISO Coarse



Applications

- Pre-filter for HVAC
- Electrical switchboards
- Industrial plants

Advantages

- Customized dimensions
- Depth loading
- High dust holding capacity

Part Number	EN 779:2012 Efficiency	ISO 16890 Class	Dimensions			Media Area (m ²)	Air Flow (m ³ /h.m ²)	Pressure Drop (Pa)
			Width (m)	Length (m)	Thickness (mm)			
DW-175-2X20	G2	Coarse 30%	2	20	10	40.00	1700	25
DW-200-2X20	G3	Coarse 40%	2	20	15	40.00	2500	25
DW-270-2X20	G4	Coarse 60%	2	20	20	40.00	3400	25

* According to EN 779:2012 ** According to ISO 16890

FILTER TOP COTTON

Media	Synthetic
Final Pressure Drop	450 Pa
Operating Temperature	80°C
Filter Efficiency*	M5
Filter Class**	ISO@PM10



Applications

- Paint spray booths

Advantages

- Customized dimensions
- Uniform air distribution
- Optimal laminar air flow

Part Number	EN 779:2012 Efficiency	ISO 16890 Class	Dimensions			Media Area (m ²)	Air Flow (m ³ /h.m ²)	Pressure Drop (Pa)
			Width (m)	Length (m)	Thickness (mm)			
DW-600-2X20	M5	ISO@PM10 50%	2	20	20	40,00	800	25
DW-600-1X20	M5	ISO@PM10 50%	1	20	20	20,00	800	25

* According to EN 779:2012 ** According to ISO 16890

FIBERGLASS COTTON

Media	Fiberglass
Final Pressure Drop	250 Pa
Filter Efficiency*	G2-G3-G4
Filter Class**	ISO Coarse



Applications

- DS, Pre-filter for HVAC
- Pre-filtration for gas turbines
- PS, Painting booths

Advantages

- Customized dimensions
- High dust holding capacity
- Cost saving
- Prevention of machine damage

Operating Temperature PS: 120°C, DS: 100°C

Part Number	EN 779:2012 Efficiency	ISO 16890 Class	Dimensions			Media Area (m ²)	Air Flow (m ³ /h.m ²)	Pressure Drop (Pa)
			Width (m)	Length (m)	Thickness (mm)			
DW-GW-1"	G2	ISO Coarse 30%	2	20	25	40,00	5000	25
DW-GW-2"	G3	ISO Coarse 40%	2	20	50	40,00	5000	35
DW-GW-4"	G4	ISO Coarse 60%	2	20	100	40,00	5000	40
DW-GW-2"	G3	ISO Coarse 40%	2	20	50	40,00	5000	35
DW-GW-4"	G4	ISO Coarse 60%	2	20	100	40,00	5000	40

Plate disposable filter



Product Features

- High pleated design with excellent performance and sturdy structure
- High quality fluffy filter material with large dust holding capacity and good universal performance

Expanded pleated plate disposable filter, using a complete set of integral, hard mold cutting, equal height pleated, double-layer cardboard frame plate structure design, compact structure, lightweight and convenient

Product application

- Pre filtration of air conditioning and ventilation systems to avoid dust pollution inside the system
- Pre filtration of large air compressors
- Centralized ventilation and air conditioning system and return air filtration in the clean room extend the service life of the high-efficiency filter in the later stage
- The ventilation system of ordinary industrial plants meets the general cleanliness requirements for air
- Coarse dust filtration system for general building air conditioning

Efficiency

- G4(EN779)

Applicable conditions

- Maximum temperature: 70 °C (158 °F)

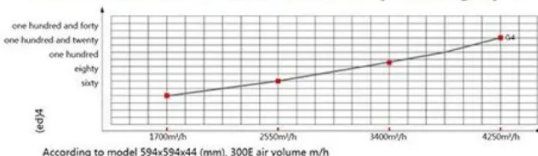
Material List

Framework: High strength cardboard

Available thicknesses: 25mm, 46mm, 96mm

Filter material: non-woven fabric and synthetic fiber coated metal mesh

Initial resistance air flow relationship curve graph



Product specifications

Nominal size W * H * D (inches)	Actual dimensions W * H * D (mm)	Rated wind turbine (m ³/h)			DP30		DP20		DP10	
					Number of folds (folds)	Filter paper area (m ²)	Number of folds (folds)	Filter paper area (m ²)	Number of folds (folds)	Filter paper area (m ²)
16*24*2	390*592*46	1270	2090	2660	18	0.95	14	0.74	10	0.53
20*20*2	493*493*46	1445	2380	2980	23	1.01	17	0.74	12	0.52
20*24*2	493*592*46	1700	2800	3570	23	1.21	17	0.89	12	0.63
24*24*2	592*592*46	2040	3400	4250	28	1.47	22	1.15	15	0.79
12*24*4	292*592*96	1020	1700	2125	10	1.13	8	0.91	7	0.79
20*24*4	493*592*96	1700	2800	3570	23	2.59	17	1.91	12	1.35
24*24*4	592*592*96	2040	3400	4250	21	2.37	18	2.03	15	1.70

※ Remarks: ① The maximum operating temperature is 70 °C (158 °F); ② Provide special size production; Suggested final resistance value of 150Pa; ③ Tolerance: (0~-2mm).

Plate type washable filter



Product Features

- Detachable frame design
- High dust holding capacity
- Cleanable high-quality filter material (recommended to clean 2-3 times)
- High strength
- The plate type washable filter adopts a lightweight plate structure, high-quality polyester synthetic fiber, low initial resistance, and good fire resistance.

Product application

- Pre filtration of air conditioning and ventilation systems to avoid dust pollution inside the system
- Centralized ventilation and air conditioning system and return air filtration in the clean room extend the service life of the high-efficiency filter in the later stage
- The ventilation system of ordinary industrial plants meets the general cleanliness requirements for air
- Coarse dust filtration system for general building air conditioning
- Pre filtration of large air compressors

Efficiency

- G2, G3, G4, M5, M6 (EN779)

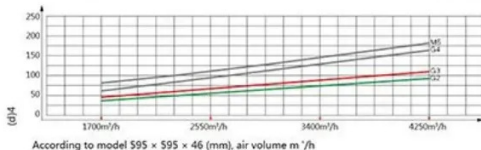
Applicable conditions

- Maximum temperature: 80 °C (180 °F)

Material List

Frame: Aluminum alloy/stainless steel/galvanized steel sheet
 Filter material: high-quality polyester synthetic fiber
 Frame optional thickness: 46mm, 96mm
 Skeleton: galvanized wire/stainless steel wire
 Connection angle: sturdy, heat-resistant ABS plastic angle/aluminum alloy angle

Initial resistance air flow relationship curve graph



Product specifications

Actual dimensions W * H * D (mm)	Efficiency EN779	Rated air volume (m ³ /h)	Initial resistance at different air volumes (Pa)			Suggested final resistance (Pa)
			70%	100%	120%	
290*595*46	G2	1700	45	70	100	Initial resistance 2-2.5 times
490*595*46	G2	2800	45	70	100	
595*595*46	G2	3400	45	70	100	
290*595*46	G3	1700	65	95	135	
490*595*46	G3	2800	65	95	135	
595*595*46	G3	3400	65	95	135	
290*595*46	G4	1700	85	130	175	
490*595*46	G4	2800	85	130	175	
595*595*46	G4	3400	85	130	175	
290*595*46	M5	1700	100	140	205	
490*595*46	M5	2800	100	140	205	
595*595*46	M5	3400	100	140	205	

※ Remarks: ① The initial resistance tolerance of the performance is ± 10 ② Special dimensions can be provided for production

Metal mesh filter



Product Features

- The outer frame adopts an aluminum alloy frame
- The aluminum mesh adopts high-strength aluminum alloy mesh
- Detachable frame design
- Cleanable aluminum mesh, long service life
- Low resistance

Product application

- Primary filtration of industrial grade air ventilation equipment
- Spray painting room filtration in the automotive assembly workshop
- Equipped with an electrostatic filter
- Coarse dust filtration system for general building air conditioning
- High strength and high-temperature resistant ventilation system
Oil/grease separator, range hood

Applicable conditions

- Maximum temperature: 300 °C (572 °F)

Material List

Frame: Aluminum alloy frame/Galvanized frame/Stainless steel frame

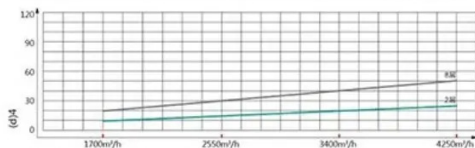
Frame optional thickness: 10mm, 21mm, 25mm, 46mm, 96mm

Filter material: high-strength aluminum alloy mesh/stainless steel mesh

Reinforcement: Standard without reinforcement, can be added according to customer requirements

Connection angle: Aluminum alloy angle/sturdy, high temperature resistant
ABS plastic angle

Initial resistance air flow relationship curve graph



According to the report model 595 × 595 × 46 (mm),
28 corresponds to three types of metal layer air volume m³/h

Product specifications

External dimensions W×H×D(mm)	Rated air volume (m³/h)	Rated initial resistance (Pa)
290*595*25	1700	20
595*595*25	3400	20
290*595*46	1700	40
595*595*46	3400	40

※ Note: Non standard customization is acceptable

Plate type mesh filter



Product Features

- High dust holding capacity
- Low resistance
- High quality polyester synthetic fiber with low initial resistance and good fire resistance performance

Product application

- Pre filtration of large air compressors
- Pre filtration of air conditioning and ventilation systems to avoid dust pollution inside the system
- Centralized ventilation and air conditioning system and return air filtration in the clean room extend the service life of the high-efficiency filter in the later stage
- The ventilation system of ordinary industrial plants meets the general cleanliness requirements for air

Efficiency

- G2, G3, G4, M5, M6, F7, F8 (EN779)

Applicable conditions

- Maximum temperature: 80 °C (180 °F)

Material List

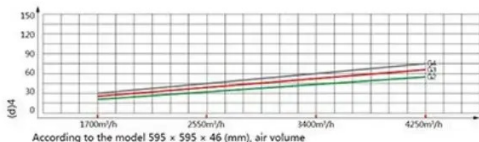
Frame optional thickness: 25mm, 46mm, 96mm

Frame: Aluminum alloy frame, galvanized frame

Filter material: mesh filter cotton/mesh non-woven fabric

Reinforcement: galvanized, stainless steel

Initial resistance air flow relationship curve graph



Product specifications

Actual household size W * H * D (mm)	Efficiency EN779	Rated air volume (m ³ /h)	Initial resistance at different air volumes (Pa)			Suggested final resistance (Pa)
			70%	100%	120%	
290*595*46	G3	1700	35	40	50	Initial resistance 2~2.5 times
490*595*46	G3	2800	35	40	50	
595*595*46	G3	3400	35	40	50	
290*595*46	G4	1700	38	45	55	
490*595*46	G4	2800	38	45	55	
595*595*46	G4	3400	38	45	55	

※ Remarks: ① The initial resistance tolerance for performance is ± 10%. ② Special dimensions can be provided for production

Bag filter



Material List

Frame: Galvanized frame/Aluminum alloy frame/Stainless steel frame

Frame optional thickness: 21mm, 25mm, 46mm

Filter material: two-component filter bag

Internal frame connection process: riveting, buckle strip

Connection angle: sturdy, heat-resistant ABS plastic angle, aluminum alloy angle

Product specifications

Actual dimensions W * H * D (mm)	Number of bags (pieces)	Filter material area (m ²)	Rated air volume (m ³ /h)	Rated initial resistance (Pa)								Suggested final resistance (Pa)	
				G3	G4	M5	M6	F7	F8	F9	G3_G4	M5_F9	
592*592*635	8	6.60	3400	37	45	55	58	90	95	125	250	450	
490*592*635	6	4.94	2850	37	45	55	58	90	95	125	250	450	
490*490*635	5	3.50	2300	38	47	55	58	90	95	125	250	450	
287*592*635	4	3.30	1700	38	48	55	58	90	95	125	250	450	
592*592*550	8	5.68	3400	40	49	60	65	100	115	135	250	450	
490*592*550	6	4.26	2850	40	49	60	65	100	115	135	250	450	
490*490*550	5	3.02	2300	42	50	60	65	100	115	135	250	450	
287*592*550	4	2.84	1700	42	50	60	65	100	115	135	250	450	
592*592*381	8	3.86	3400	45	58	70	75	110	120	145	250	450	
490*592*381	6	2.90	2850	46	60	70	75	110	120	145	250	450	
490*490*381	5	2.06	2300	46	60	70	75	110	120	145	250	450	
287*592*381	4	1.94	1700	46	60	70	75	110	120	145	250	450	

※ Remarks: ① The initial resistance tolerance for performance is $\pm 10\%$. ② Special dimensions can be provided for production

Product Features

- Sturdy all metal frame structure
- High dust holding capacity, low resistance
- High quality fluffy multi-layer synthetic fiber filter cotton
- Ultrasonic seamless composite bag structure

Product application

- Pre filtration of large air compressors
- Coarse dust filtration system for general building air conditioning
- Pre filtration of air conditioning and ventilation systems to avoid dust pollution inside the system
- Centralized ventilation and air conditioning system and return air filtration in the clean room extend the service life of the high-efficiency filter in the later stage
- The ventilation system of ordinary industrial plants meets the general cleanliness requirements for air

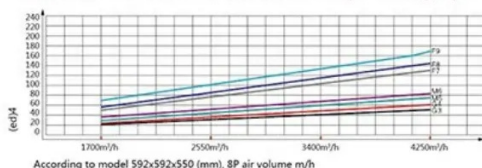
Efficiency

- G3、G4、M5、M6、F7、F8、F9(EN779)

Applicable conditions

- Maximum temperature: 60 °C (140 °F)

Initial resistance air flow relationship curve graph



Fiberglass bag filter



Product Features

- Sturdy all metal frame structure
- Optimized V-shaped filter bag structure with low resistance and long service life
- Ultra fine glass fiber filter material, with stable efficiency throughout its entire service life

Product application

- M6 is the main filter for commercial and industrial ventilation and air conditioning systems, and the pre filter for clean room ventilation and air conditioning systems;
- F7 and F8 are the main filters for commercial, industrial, and cleanroom ventilation and air conditioning systems

Efficiency

- M6、F7、F8、F9(EN779)

Applicable conditions

- Maximum temperature: 150 °C (302 °F)

Material List

Frame: Aluminum alloy frame/Stainless steel frame/Galvanized frame

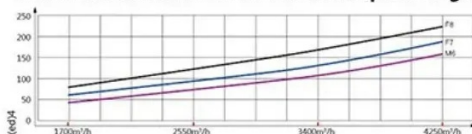
Frame optional thickness: 21mm, 25mm, 46mm

Filter Material: Glass Fiber Filter Bag Inner Frame

Connection Process: Buckle Strip

Connection angle: sturdy, heat-resistant ABS plastic angle/aluminum alloy angle

Initial resistance air flow relationship curve graph



According to model 592 × 592 × 600 (mm), 8P air volume m³/h

Product specifications

Actual dimensions W * H * D (mm)	Number of bags (pieces)	Filter material area (m²)	Efficiency	Rated air volume (m³/h)	Initial resistance at different air volumes (Pa)			
					50%	75%	100%	125%
592*592*600	8	6	M6	3400	43	72	110	154
490*592*600	6	4.5	M6	2800	43	72	110	154
287*592*600	4	3.1	M6	1700	43	72	110	154
490*490*600	6	3.8	M6	2380	43	72	110	154
592*592*600	8	6	F7	3400	58	93	138	191
490*592*600	6	4.5	F7	2800	58	93	138	191
287*592*600	4	3.1	F7	1700	58	93	138	191
490*490*600	6	3.8	F7	2380	58	93	138	191
592*592*600	8	6	F8	3400	80	120	169	224
490*592*600	6	4.5	F8	2800	80	120	169	224
287*592*600	4	3.1	F8	1700	80	120	169	224
490*490*600	6	3.8	F8	2380	80	120	169	224

※ Remarks: ① The initial resistance tolerance for performance is ± 10%. ② Special dimensions can be provided for production

Partition series with medium efficiency/sub high efficiency/high efficiency



Product Features

- Aluminum/paper partition, frame available with no flange, single flange, double flange
- Using ultra-fine glass fiber filter paper
- With partition design, high efficiency, low resistance, and large dust holding capacity
- Suitable for variable air volume systems

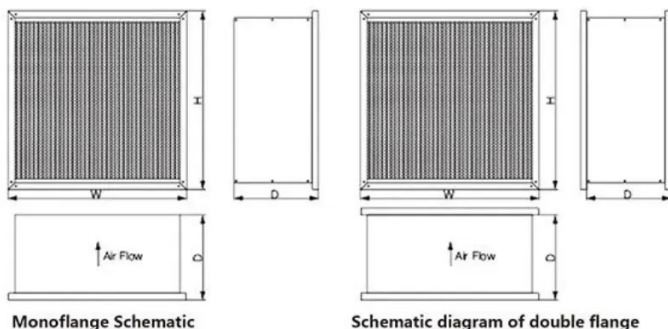
Product application

- Medium/high efficiency filters for ventilation and air conditioning systems used in clean rooms, commercial and industrial applications
- Ventilation and air conditioning system for high humidity environments
- Variable air volume ventilation and air conditioning system
- Ventilation and air conditioning systems with high fire prevention requirements or high ventilation temperatures
- Widely used in clean rooms and other fields with strict requirements for air cleanliness

Efficiency

- Medium efficiency: M6, F7, F8, F9 (EN779)
- Sub high efficiency: 85% @ 0.3 μ m (E10),
95% 0.3 μ m (E11), 99.5% 0.3 μ m (E12) (EN1822)
- Efficient: 99.95% @ MPPS (H13), 99.995% @ MPPS (H14), (EN1822)

Structural description



Monoflange Schematic

Schematic diagram of double flange

Material Table

Framework	Galvanized sheet/aluminum sheet/stainless steel sheet
Frame optional thickness	80mm/150mm/220mm/292mm
Filter material	Ultra fine glass fiber filter paper
Segmented object	Aluminum foil/adhesive sheet paper
sealant	Polyurethane

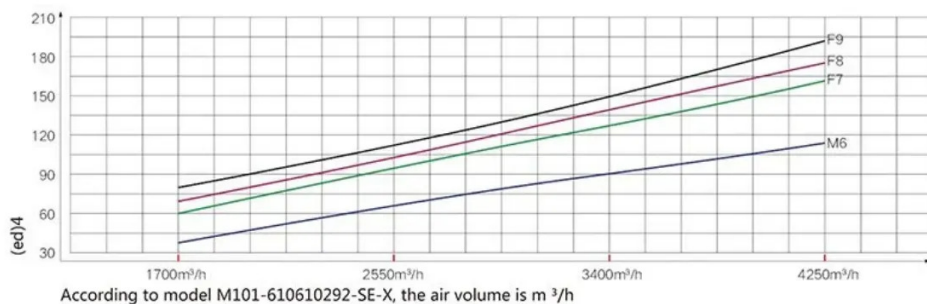
Applicability

Maximum temperature	80°C (180°F)
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FILTER MODEL AND PARAMETERS



INITIAL RESISTANCE AIR FLOW RELATIONSHIP CURVE GRAPH



Efficient partition filter

Actual size W*H*D (mm)	a partition	flange	Rated air volume (m ³ /h)	Surface wind speed (m/s)	Rated initial resistance (Pa)		Suggested final resistance (Pa)
					H13	H14	
305*610*80	Aluminum partition	No flange	200/400	0.36/0.60	249	280	Initial resistance 2-2.5 times
610*610*80	Aluminum partition	No flange	420/800	0.36/0.60	249	280	
305*610*150	Aluminum partition	No flange	420/550	0.77/1.00	249	280	
610*610*150	Aluminum partition	No flange	900/1170	0.77/1.00	249	280	
305*610*220	Aluminum partition	No flange	650/850	1.20/1.55	249	280	
610*610*220	Aluminum partition	No flange	1400/1820	1.20/1.55	249	280	
305*610*292	Aluminum partition	No flange	860/1120	1.60/2.00	249	280	
610*610*292	Aluminum partition	No flange	1860/2400	1.60/2.00	249	280	

※ Remarks: ① The initial resistance tolerance for performance is $\pm 10\%$. ② Special dimensions can be provided for production

V-shaped pleated series medium efficiency/ sub high efficiency/high efficiency



Product Features

- V-shaped low pressure loss filter screen
- No partition design, glass fiber filter paper/PP filter paper;
- High dust holding capacity and long service life
- Sturdy structure ensures good performance under turbulent flow conditions
- Can provide single flange or no flange
- ABS frame can be completely incinerated for waste disposal

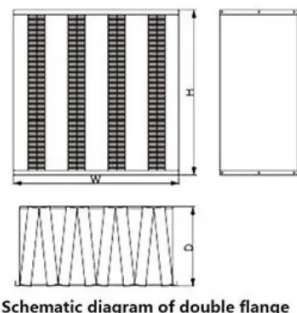
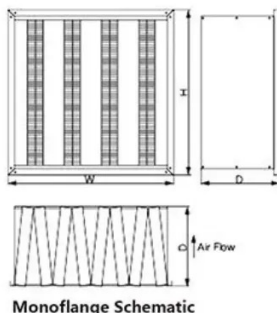
Product application

- Medium/high efficiency filters for ventilation and air conditioning systems used in clean rooms, commercial and industrial applications
- Ventilation and air conditioning system for high humidity environments
- Variable air volume ventilation and air conditioning system
- Install ventilation and air conditioning systems with limited space
- Widely used in clean rooms and other fields with strict requirements for air cleanliness

Efficiency

- Medium efficiency: M6, F7, F8, F9 (EN779)
- Sub high efficiency: 85% @ 0.3 μm (E10), 95% 0.3 μm (E11), 99.5% 0.3 μm (E12) (EN1822)
- Efficient: 99.95% @ MPPS (H13), 99.995% @ MPPS (H14), (EN1822)

Structural description



Material Table

Framework	Plastic frame/galvanized sheet/aluminum alloy frame/stainless steel frame
Frame optional thickness	292mm
Filter material	Ultra fine glass fiber filter paper/PP filter paper
Segmented object	Hot melt adhesive
sealant	Polyurethane

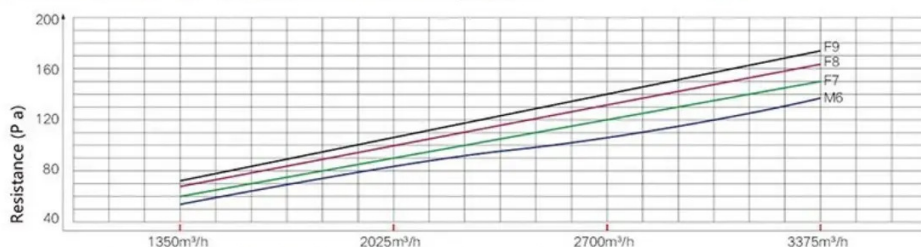
Applicability

Maximum temperature	80°C(180°F)
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Model and parameters of V-shaped pleated filter

M-MV initial resistance air flow relationship curve



According to model MV01-592592292-4V-D1, the air volume is m^3/h

M-MV product specifications

Dimensions W * H * D (mm)	Structure	Frame body	Filter area (m ²)	Rated air volume (m ³ /h)	Initial pressure drop (Pa)				
					F8	E10	H13	H14	
287*287*292 287*490*292 287*592*292	287 single flange 25mm	2V Plastic frame/ metal frame	4.2	800	≤110	≤180	≤220	≤280	
			7.7	1200					
			9.4	1600					
490*287*292 490*490*292 490*592*292	490 single flange 25mm	3V Plastic frame/ metal frame	6.4	1100					
			11.6	1900					
			14.4	2400					
592*287*292 592*490*292 592*592*292 592*287*292 592*490*292 592*592*292	592 single flange 20/25mm	3V Plastic frame/ metal frame	6.4	1100					
			11.6	1900					
			14.4	2400					
		4V Plastic frame/ metal frame	8.4	1600					
			15.4	2500					
			18.8	3200					
592*287*292 592*490*292 592*592*292	592 single flange 25mm	5V Plastic frame/ metal frame	10.5	1800					
			19	3200					
			23.5	3900					
305*305*292 305*610*292	610 box type	2V Plastic frame/ metal frame	5.4	850					
			10.8	1700					
610*305*292 610*610*292		4V Plastic frame/ metal frame	11	1700					
			22	3400					

High efficiency filter without partition liquid tank



Product Features

- The filtration efficiency levels H14~U15 are available for selection.
- Specialized ultra-fine glass fiber filter paper is used as the filter material, with high efficiency and low resistance.
- Can be equipped with double-sided protective mesh to protect the filter material, with good strength.
- Fill the groove with blue jelly glue.
- Lightweight and compact structure.

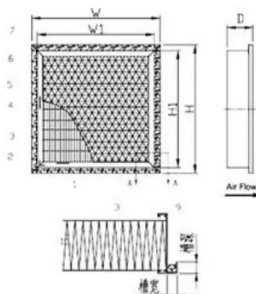
Product application

- Used for end air supply in industries such as electronics, pharmaceuticals, clean rooms, high-efficiency air outlets, laminar flow equipment, etc. that require ultra-high cleanliness

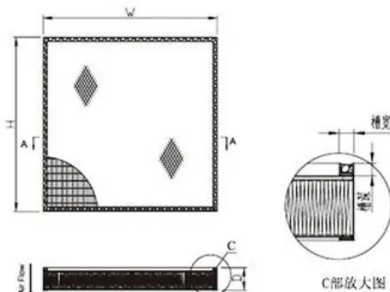
Efficiency

- 99.995%@MPPS(H14),
- 99.9995%@MPPS(U15)

Structural description



A-A section diagram



Enlarged image of part C

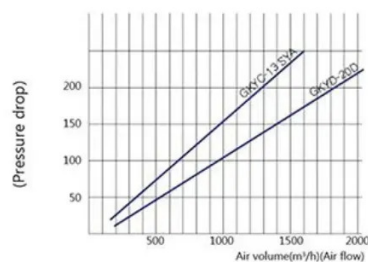
Material Table

Frame optional thickness	82mm/95mm (top tank) 90mm/93mm side tank
Filter material	Ultra fine glass fiber filter paper
Separation line sealant	Hot melt adhesive
Face protection net	Polyurethane
Face protection net	Painted steel plate mesh

Applicability

Maximum temperature	80 °C
Maximum humidity (% RH)	80%

The relationship between air volume and resistance



Product Specifications - Top Liquid Tank

Actual dimensions W * H * D (mm)	Thickness D (mm)	Face protection net	Rated air volume (m³/h)	Surface wind speed (m/s)	Rated initial resistance (Pa)	
					H14	U15
570*570	82	Double sided protective mesh	472	0.45	120	140
1170*570	82	Double sided protective mesh	1000	0.45	120	140
610*305	82	Double sided protective mesh	258	0.45	120	140
610*610	82	Double sided protective mesh	545	0.45	120	140
762*610	82	Double sided protective mesh	687	0.45	120	140
915*610	82	Double sided protective mesh	831	0.45	120	140
570*570	95	Double sided protective mesh	472	0.45	90	110
1170*570	95	Double sided protective mesh	1000	0.45	90	110
610*305	95	Double sided protective mesh	258	0.45	90	110
610*610	95	Double sided protective mesh	545	0.45	90	110
762*610	95	Double sided protective mesh	687	0.45	90	110
915*610	95	Double sided protective mesh	831	0.45	90	110

Product Specifications - Edge Liquid Tank

Internal dimensions W * H (mm)	External dimensions (mm) (W+40) * (H+40)	Thickness D(mm)	Face protection wind	Rated air volume (m³/h)	Surface wind speed (m/s)	Rated initial resistance (Pa)	
						H14	U15
570*570	610*610	90	472	0.45	90	110	472
1170*570	1210*610	90	1000	0.45	90	110	1000
610*305	650*345	90	258	0.45	90	110	258
610*610	650*650	90	545	0.45	90	110	545
762*610	802*650	90	687	0.45	90	110	687
915*610	955*650	90	831	0.45	90	110	831

※ Remarks: ① The initial resistance tolerance for performance is $\pm 10\%$. ② Special dimensions can be provided for production

High temperature resistant and efficient filter



Product Features

- Aluminum partition, frame can provide double flanges
- Adopting ultra-fine glass fiber
- We can provide differential products with temperature resistance up to 250 °C, 350 °C, and 450 °C
- Long term use, stable performance

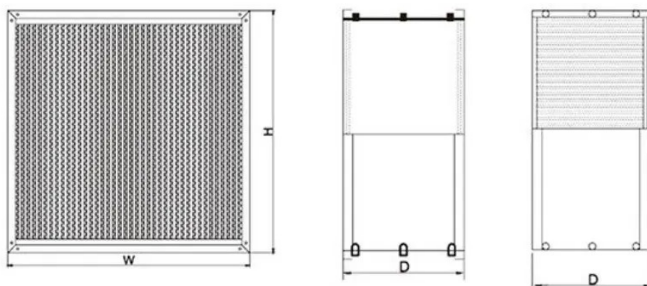
Product application

- Mainly used in the electronics industry, chemical industry, and pharmaceutical industry
- High temperature sterilization tunnels, ultra clean ovens, and other equipment require high-temperature air purification devices and systems
- Ventilation systems with high fire prevention requirements or high ventilation temperatures

Efficiency

- 99.95%@MPPS(H13)(EN1822)
- M6, F7, F8 ,F9(EN779)

Structural description



Material List

Framework : Galvanized sheet/aluminum sheet/stainless steel sheet

Frame optional thickness : 80mm/150mm/220mm/292mm

Sealing gasket material : Fiberglass/Silicone Rubber

Isolation seal: aluminum foil

Classified filtration: High temperature resistant sealant

Ultra fine glass fiber filter paper

Product specifications: High temperature resistant medium efficiency partition - standard air volume

Actual dimensions W * H * D (mm)	A partition	Flange	Rated air volume (m ³ /h)	Surface wind speed (m/s)	Rated initial resistance (Pa)				Suggested final resistance (Pa)
					M6	F7	F8	F9	
305*610*80	Aluminum partition	No flange	400	0.6	90	130	140	150	300
610*610*80	Aluminum partition	No flange	800	0.6	90	130	140	150	300
305*610*150	Aluminum partition	No flange	850	1.2	90	130	140	150	300
610*610*150	Aluminum partition	No flange	1700	1.2	90	130	140	150	300
305*610*220	Aluminum partition	No flange	1080	1.6	90	130	140	150	300
610*610*220	Aluminum partition	No flange	2160	1.6	90	130	140	150	300
305*610*292	Aluminum partition	No flange	1700	2.5	90	130	140	150	300
610*610*292	Aluminum partition	No flange	3400	2.5	90	130	140	150	300

Product specifications: High temperature resistant and efficient with partition - standard air volume

Actual dimensions W * H * D (mm)	A partition	Flange	Rated air volume (m ³ /h)	Surface wind speed (m/s)	Rated initial resistance (Pa)		Suggested final resistance (Pa)
					H13	H14	
305*610*80	Aluminum partition	No flange	200	0.36	249	280	Initial resistance 2~2.5 times
610*610*80	Aluminum partition	No flange	420	0.36	249	280	
305*610*150	Aluminum partition	No flange	420	0.77	249	280	
610*610*150	Aluminum partition	No flange	900	0.77	249	280	
305*610*220	Aluminum partition	No flange	650	1.20	249	280	
610*610*220	Aluminum partition	No flange	1400	1.20	249	280	
305*610*292	Aluminum partition	No flange	860	1.60	249	280	
610*610*292	Aluminum partition	No flange	1860	1.60	249	280	

Product specifications: High temperature resistant and efficient partition filter - large air volume

Actual dimensions W * H * D (mm)	A partition	Flange	Rated air volume (m ³ /h)	Surface wind speed (m/s)	Rated initial resistance (Pa)		Suggested final resistance (Pa)
					H13	H14	
305*610*150	Aluminum partition	No flange	550	1.00	249	280	Initial resistance 2~2.5 times
610*610*150	Aluminum partition	No flange	1170	1.00	249	280	
305*610*220	Aluminum partition	No flange	850	1.55	249	280	
610*610*220	Aluminum partition	No flange	1820	1.55	249	280	
305*610*292	Aluminum partition	No flange	1120	2.00	249	280	
610*610*292	Aluminum partition	No flange	2400	2.00	249	280	

Product specifications: High temperature resistant and efficient partition filter - high air volume and low pressure loss

Actual size W*H*D(mm)	A partition	Flange	Rated air volume (m ³ /h)	Surface wind speed (m/s)	Rated initial resistance (Pa)		Suggested final resistance (Pa)
305*610*292	Aluminum partition	No flange	1400	2.50	330	380	Initial resistance 2-2.5 times
610*610*292	Aluminum partition	No flange	3000	2.50	330	380	

※ Remarks: ① The initial resistance tolerance of the performance is 10% of the soil. ② Special dimensions can be provided for production

High temperature resistant non partition filter

High Temperature Minipleat Filter



Product Overview

Using ultra-fine glass fiber filter material as auxiliary material and special high-temperature resistant glass fiber rope as separator.

Use ultra-fine glass fiber filter as auxiliary material and special high-temperature resistant glass fiber rope as separator.

Use fiberglass heat-resistant sealing strips. Use aluminum profiles and galvanized sheets to make the outer frame. It can also be customized according to customer requirements. Use glass fiber high temperature resistant sealing tape. The outer frame is made of aluminum profile and galvanized sheet. It can also be customized according to customer requirements.

It has the characteristics of high efficiency, low resistance, light weight, high temperature resistance, easy installation, and low equipment operating costs.

Product specifications

Specification mm Dimen Speed	Level Type	Rated air volume m³/h	0.4um average counting efficiency (Em)	Filter area m² Type	Initial resistance Pa Initial Resistance	Final obstruction Pa FinalResistance	Temperature resistance °C TempeitueResitne
610×610×55	M6	1800	60%≤Em<80%	6.95	75	380	300
610×610×78	M6	2000	60%≤Em<80%	10.85	75	380	300
915×457×78	M6	2000	60%≤Em<80%	12.1	85	380	300
915×457×55	M6	2000	60%≤Em<80%	7.8	85	380	300
610×610×55	F8	1800	90%≤Em<95%	6.95	90	400	300
610×610×78	F8	2000	90%≤Em<95%	10.85	90	400	300
915×457×78	F8	2000	90%≤Em<95%	12.1	110	400	300
915×457×55	F8	2000	90%≤Em<95%	7.8	110	400	300
610×610×120	F8	2000	90%≤Em<95%	20.4	120	400	300

Efficient/ultra efficient non partition filter



Product Features

- No partition design to reduce operating costs
- Wide application range, compact structure, saving storage space
- Ultra thin design, saving installation space
- Customizable folding height of 100-300mm, high air volume, large dust capacity, low resistance fiberglass filter element
- Maximum width of filter: 1200mm

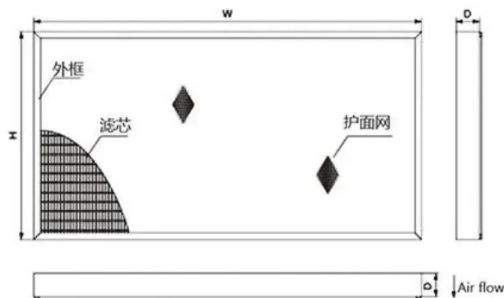
Product application

- Widely used in clean rooms and other fields with strict requirements for air cleanliness

Efficiency

- 99.95% @ MPPS (H13), 99.995% @ MPPS (H14)
- 99.9995% @ MPPS (U15), 99.99995% @ MPPS (U16) (EN1822)

Structural description



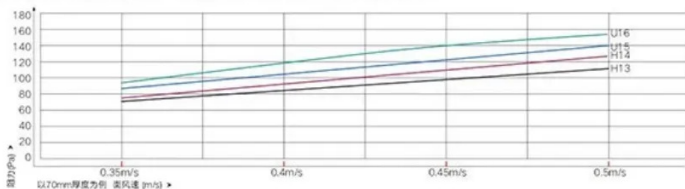
Applicable conditions

Framework: Anodized aluminum profiles with
 Frame optional thickness: 50mm/69mm/70mm/80mm/90mm/110mm/150mm/
 220mm/292mm
 Filter material: Ultra fine glass fiber filter paper
 Separation line: Hot melt adhesive
 Sealing glue: polyurethane
 Face protection net: baked paint steel plate net

Material list

Maximum temperature of 80 °C (180F)

Initial resistance air flow relationship curve graph



Product specifications

Dimensions W * H * D (mm)	Surface wind speed (m/s)	Rated air volume (m³/s)	Initial pressure drop (Pa)				
			E10	E11	E12	H13	H14
305*610*50	1.2	800	120	180	240	250	270
610*610*50	1.2	1600	120	180	240	250	270
610*915*50	1.2	2400	120	180	240	250	270
1170*570*50	1.2	2800	120	180	240	250	270
305*610*70	1.2	800	85	145	205	220	240
610*610*70	1.2	1600	85	145	205	220	240
610*915*70	1.2	2400	85	145	205	220	240
1170*570*70	1.2	2800	85	145	205	220	240
305*610*80	1.2	800	75	135	190	215	230
610*610*80	1.2	1600	75	135	190	215	230
610*915*80	1.2	2400	75	135	190	215	230
1170*570*80	1.2	2800	75	135	190	215	230
305*610*50	0.45	300	65	75	100	150	170
610*610*50	0.45	600	65	75	100	150	170
610*915*50	0.45	900	65	75	100	150	170
1170*570*50	0.45	1080	65	75	100	150	170
305*610*70	0.45	300	50	60	85	110	120
610*610*70	0.45	600	50	60	85	110	120
610*915*70	0.45	900	50	60	85	110	120
1170*570*70	0.45	1080	50	60	85	110	120
305*610*80	0.45	300	45	55	80	105	110
610*610*80	0.45	600	45	55	80	105	110
610*915*80	0.45	900	45	55	80	105	110
1170*570*80	0.45	1080	45	55	80	105	110
305*610*90	0.45	300	50	55	70	80	90
610*610*90	0.45	600	50	55	70	80	90
610*915*90	0.45	900	50	55	70	80	90
1170*570*90	0.45	1080	50	55	70	80	90
305*610*100	0.45	300	39	47	54	74	70
610*610*100	0.45	600	39	47	54	74	70
610*915*100	0.45	900	39	47	54	74	70
1170*570*100	0.45	1080	39	47	54	74	70

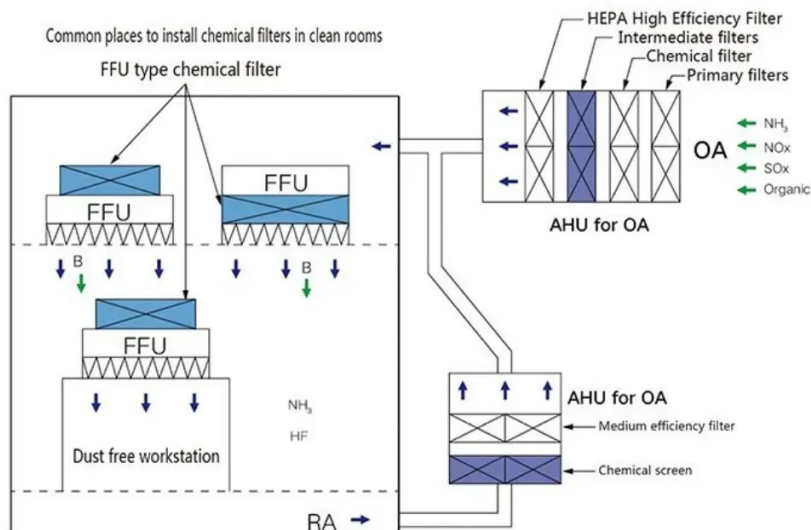
※ Remarks: ① The initial resistance tolerance of the performance is 10% of the soil. ② Special dimensions can be provided for production

AMC Chemical Filter

Product Features

- High efficiency in removing chemical pollutants, with an initial efficiency of over 95%
- High volume activated carbon coating characteristics
- Low wind resistance
- Long term lifespan
- Using hollow woven fabric for hot melt, the activated carbon is wrapped inside
- The coating material fine carbon adopts 60-80CTC 30-60mesh coconut shell activated carbon
- Low dust production
- No chemical release
- Three types of pollutants to be removed for selection
 - MA-ABE removes acidic gas (ACID) molecular pollutants
 - MB-AM - Removal of Alkaline Gas (BASE) Molecular Pollutants
 - MC-TA - Removing Volatile Organic Solvent (VOC) Molecular Pollutants
- Used for MAU with a carbon basis weight of 800g/m^2 , used for FFU with a carbon basis weight of 600g/m^2
- The air conditioning unit is installed between the primary efficiency filter and the medium efficiency filter, and the FFU is installed at the air inlet and inside the return air conditioning unit

System Installation Diagram





Chemical filter screen for air conditioning unit (MAU)

Box type

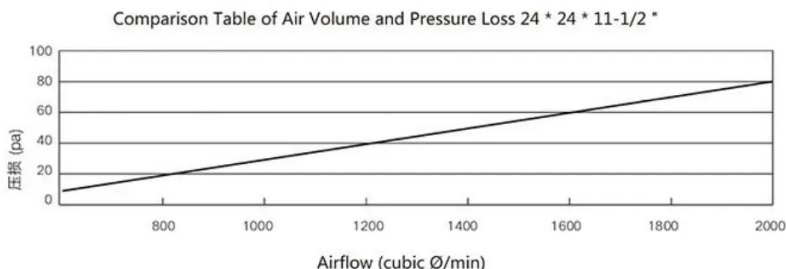
- Outer frame material: galvanized steel plate or stainless steel 304 material reinforced with tension bars
- The gasket is made of non chemical release EPDM material
- The sealant is made of non chemical release PU material

Standard size

size W*H*D(mm)	Processing air volume (CMH/CFM)	Wind resistance (Pa)	Wind speed (m/s)
592*592*292	3400/2000	80	2.5
287*592*292	1700/1000	80	2.5
610*610*292	3400/2000	80	2.5
305*610*292	1700/1000	80	2.5
490*490*292	2390/1400	80	2.5
490*592*292	2800/1650	80	2.5

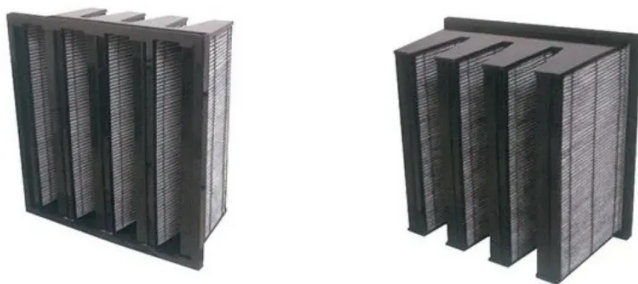
※ Other sizes can also be made according to customer requirements

Air volume pressure loss diagram



- ※ Remarks: ① The initial resistance tolerance of the performance is 10% of the soil
② Special dimensions can be provided for production

V-shaped chemical filter screen



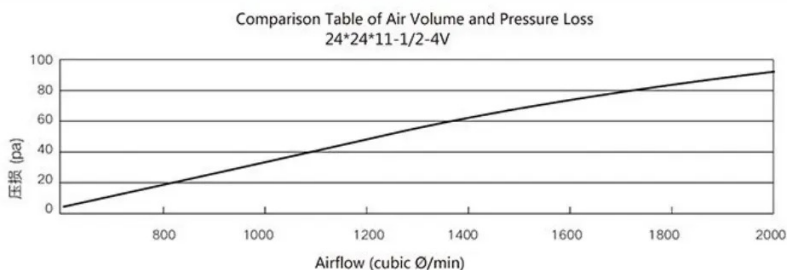
Product Features

- Single convex flange type
- The gasket adopts non chemical release EPDM
- Outer frame material ABS
- The sealant is made of non chemical release PU material

Standard size

size W*H*D(mm)	Processing air volume (CMH/CFM)	Wind resistance (Pa)	Wind speed (m/s)
592*592*292-4V	3400/2000	80	2.5
287*592*292-2V	1700/1000	80	2.5
490*592*292-4V	2800/1650	80	2.5
592*592*400-4V	4300/2500	80	2.5
287*592*400-2V	2100/1230	80	2.5
490*592*400-4V	3700/2170	80	2.5

Air volume pressure loss diagram



Charcoal bucket



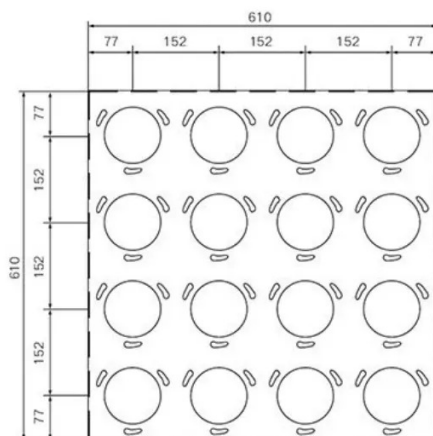
- Carbon bucket material: punched stainless steel, punched iron plate baked paint or electroplating, and ABS material are available for selection
- High adsorption efficiency
- Use 4 * 8mm cylindrical coal based activated carbon or 4 * 6mm coconut shell activated carbon in sheet form
- There are four types to choose from when filling activated carbon
 - ① Modified activated carbon with 60% or more CTC for treating acidic chemical pollutants - MA type
 - ② Modified activated carbon with over 60% CTC for treating alkaline chemical pollutants - MB type
 - ③ 80% or more of primary active carbon with CTC, used for treating volatile pollutants - MC type
 - ④ It can also be filled with potassium permanganate with a diameter of 3.175mm, or mixed with original active carbon or MA type modified activated carbon and filled in carbon drums to treat chemical pollutants

Standard size

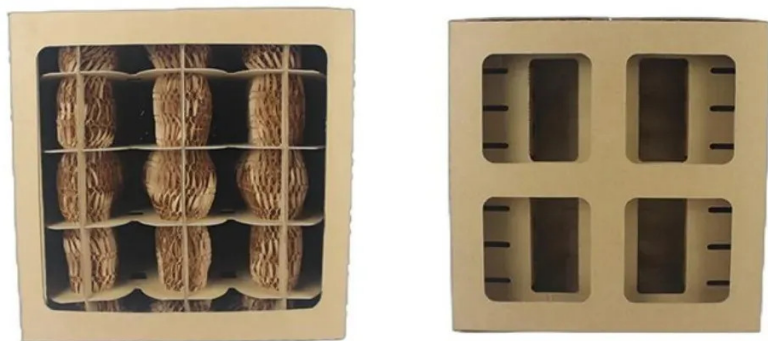
Charcoal barrel length (mm)	Outer diameter (mm)	Weight of charcoal (kg)
450	145	3.9
600	145	5.2

Carbon bucket installation side panel

- ① 610 * 610 with 16 charcoal drums, air volume 3400CMH
- ② 305 * 610 with 8 charcoal drums, air volume 1700CMH



Paint mist filter box



Product Features

- Maximum sustainable operating temperature: 120 °C
- Sustainable working humidity: 80% RH filtration accuracy: atomized particles over 5 microns
- Filtering effect: over 90%
- Environmentally friendly materials: Choose between flame-retardant and non flame retardant materials

Product application

- Widely used for spray line paint mist filtration and collection

Material selection

Material selection (1) The small honeycomb filter paper is made of recycled wood pulp material

- 1、Filter paper is made of wood pulp fibers and is made using different methods according to different purposes.
- 2、Due to its thickness and aperture, it is made for paint particles of different sizes to pass through.
- 3、The surface of the paper is subjected to a reinforced rough treatment to provide an inert carrier for the viscous fine paint particles to adhere to.
- 4、This characteristic allows for the separation of mixed liquids and solid substances.
- 5、With the flow of air, atomized paint particles form an affinity and interdependence with filter paper, tightly embracing each other

Material selection (2): Synthetic fibers are used for filtering cotton

- 1、Synthetic fibers are chemical fibers produced by spinning and post-treatment of artificially synthesized linear polymers with suitable molecular weight and solubility (or meltability).
- 2、Polymers with fiber forming properties are commonly referred to as fiber forming polymers.
- 3、Common synthetic fibers include polyester, nylon, acrylic, chlorinated polyester, vinylon, spandex, polyolefin elastic yarn, etc.
- 4、Compared with natural fibers and synthetic fibers, synthetic fibers are made from synthetic materials and their production is not limited by natural conditions
- 5、Synthetic fibers not only have the general superior properties of chemical fibers, such as high strength, light weight, easy to wash and dry, good elasticity, resistance to mold and decay, wear resistance, and chemical corrosion resistance, but different varieties of synthetic fibers also have certain unique properties

Product specifications

Model number	Specification (mm) Size	Airflow (m ³ /H)	Initial Resistance (Pa)	Efficiency% @ Atomized particles above 5 microns Efficiency
DW-DX-100A	480*480*100	1500	16Pa@400m ³ /H	≥90
DW-DX-300A	485*485*300	1500	17Pa@400m ³ /H	≥90
DW-DX-300B	485*485*300	1500	15Pa@400m ³ /H	≥90
DW-DX-500B	485*485*490	2500	18Pa@400m ³ /H	≥90
DW-DX-9001A	470*470*490	1500	15Pa@400m ³ /H	≥98
DW-DX-9001	485*485*490	1500	15Pa@400m ³ /H	≥98
DW-DX-5001B	485*485*490	2000	12Pa@402m ³ /H	≥98
DW-DX-2001A	770*470*640	2200	100Pa@2200m ³ /H	≥98
DW-DX-3001A	835*820*665	2500	100Pa@2200m ³ /H	≥98
DW-DX-1180A	780*1180*1960	3300	90Pa@3300m ³ /H	≥99

Hepa box



Product Features

- Removable structure
- Two options: mechanical seal/liquid tank seal, with better sealing performance
- Can meet on-site PAO testing requirements
- The insulation layer is easy to produce and has strong universality

Product application

- Professional application in pharmaceutical factory cleanrooms, electronic factory air supply, etc

Efficiency

- 99.95%@MPPS(H13)
- 99.995%@MPPS(H14)

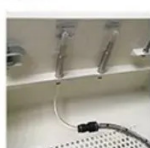
Applicable conditions

Maximum temperature (°C) 80
Maximum humidity (% RH) 100

Material List



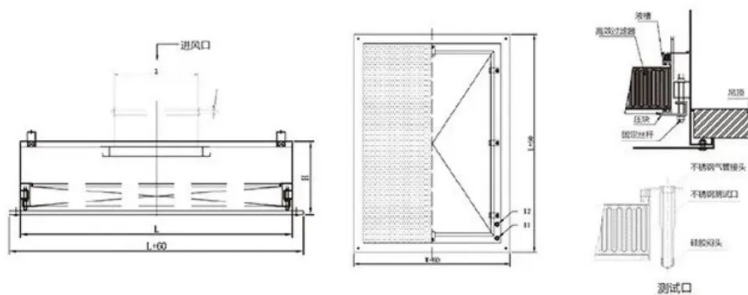
Top connected type



Side connected type

Regulating valve for the uniform flow plate of the air inlet ring of the box	Press block	Face protection net
Spray coated cold-rolled steel plate	ABS/Stainless Steel	Aluminum plate/spray coated cold-rolled steel plate/Stainless steel plate (SUS304)

Structural description



Diameter of air outlet (mm)	Short tube standard height (mm)	Standard height of regulating valve (mm)
φ250	60	230
φ300	60	280
φ350	60	330
φ450	60	430

Product specifications

model	Box size (mm)		Adjust valve size	Diffusion plate size	Filter size	Rated air volume	Top plate opening size
	Top air supply	Side air supply	mm	mm	mm	m ³ /h	mm
Type 320 (with partition)	360*360*376	360*360*510	200*200	430*430*15	320*320*220	500	370*370
484 type (with partition)	524*524*376	524*524*510	320*200	594*594*15	484*484*220	1000	534*534
630 type (with partition)	670*670*376	670*670*510	Side air supply 400 * 200; Top air supply 320 * 250	740*740*15	630*630*220	1500	680*680
Type 320 (without partition)	360*360*270	360*360*376	200*200	430*430*15	320*320*90	500	370*370
484 type (without partition)	524*524*270	524*524*376	320*200	594*594*15	484*484*90	1000	534*534
630 type (without partition)	670*670*270	670*670*376	Measure air supply 400 * 200; Top air supply 320 * 250	740*740*15	630*630*90	1500	680*680

Note: Resistance values vary at different wind speeds. Special size specifications can be customized according to customer requirements

Weighing hood



Product Features

- Modular structural design, quick and convenient on-site assembly
- The overall stainless steel material is durable and easy to clean
- The installation of high-efficiency filters adopts liquid tank sealing technology to avoid the risk of leakage at the connection between the filter and the frame.
- The real-time display of the supply air speed and filter pressure difference in the laminar flow area can be selected, and the air speed can be adjusted by a frequency converter to always meet national standards.
- The air outlet adopts a unique uniform flow film air supply form, making the air supply speed more uniform and reliable.
- Humanized design, quick and convenient replacement of filters

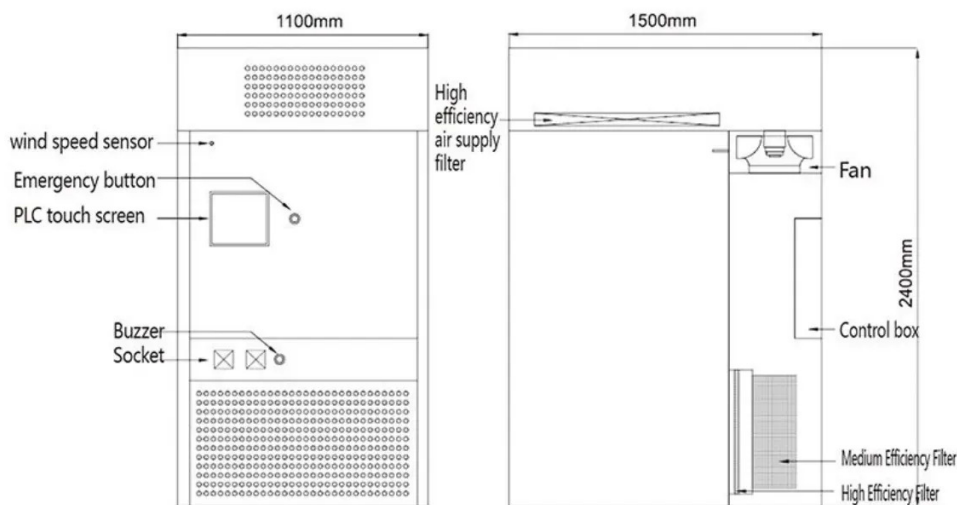
Product application

- Weighing hood is a specialized local purification device used in pharmaceutical, microbiology research institutes, and scientific experiments. It provides a vertical unidirectional airflow, with most of the clean air circulating in the work area and a small portion discharged to nearby areas, creating negative pressure in the work area and preventing cross contamination, to ensure a high cleanliness environment in the work area.

Structural description

- The overall structure is made of 304 stainless steel material and consists of an upper box, a lower box, and side panels. The side panel is detachable, making it easy to transport and modularize.
- The equipment adopts a vertical unidirectional airflow form, with 85% to 90% passing through the uniform airflow mesh plate to form a uniform vertical supply airflow, and 10% to 15% passing through the exhaust outlet to discharge the equipment.

Structural diagram



Technical parameter

Model	Dimensions W * H * D (mm)	Supply air speed (M/S)	Illuminance (LUX)	Noise (DB)	Power Supply	Power	Filter
WAIR500	1500*2600*2000	0.36-0.54	≥300	≤75	AC380V AC220V	2	G4+F8+H14
WAIR2000	2000*2600*2000	0.36-0.54	≥300	≤75	AC380V AC220V	3	G4+F8+H14
WAIR2500	2500*2600*2000	0.36-0.54	≥300	≤75	AC380V AC220V	4	G4+F8+H14

※ Note: Customization can be made according to customer requirements

Clean laminar flow hood



Product Features

- Modular structural design, quick and convenient on-site assembly
- The overall stainless steel material is durable and easy to clean
- The installation of high-efficiency filters adopts liquid tank sealing technology to avoid the risk of leakage at the connection between the filter and the frame.
- The real-time display of the supply air speed and filter pressure difference in the laminar flow area can be selected, and the air speed can be adjusted by a frequency converter to always meet national standards.
- The air outlet adopts a unique uniform flow film air supply form, making the air supply speed more uniform and reliable.
- Humanized design, quick and convenient replacement of filters

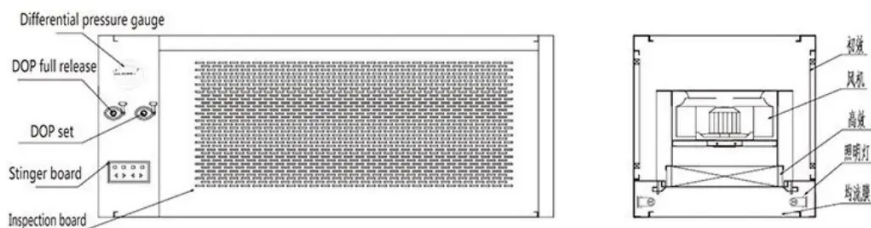
Product application

- A clean laminar flow hood is a local purification device that can provide high local cleanliness for places such as pharmaceuticals, microbiology research, and scientific experiments. It consists of a box, a fan, a high-efficiency filter, a flow equalization membrane, and lighting fixtures. It is to pass the air through a high-efficiency filter at a certain wind speed, and then through a uniform flow membrane to generate a hundred level vertical unidirectional airflow in the working area, preventing cross contamination and ensuring high cleanliness of the working area. Specially used for pharmaceutical filling equipment to provide a sterile laminar flow production environment, its advantages are that it can be suspended or supported on the ground, and can be used individually or combined into a strip like clean area.

Structural description

- The overall material is made of 304 stainless steel, and it is conveniently controlled for temperature and humidity by using high-capacity fans or central air conditioning systems for air supply and return. The filter adopts a liquid tank sealing form to ensure no leakage. The laminar flow hood airflow is a vertical unidirectional flow, and a uniform flow film can be installed on the outlet surface. The unidirectional flow state can be verified through smoke testing at a wind speed of 0.36-0.54m/s.
- Install PAO dust outlet and PAO upstream sampling outlet on the laminar flow hood, which can be used for on-site verification of each filter. The laminar flow hood isolation device adopts anti-static PC board or tempered glass.

Structural diagram



Technical parameter

model	Dimensions W * H * D (mm)	Cleanliness	Supply air speed (M/S)	Illuminance (LUX)	Noise (DB)	Power Supply	Filter
WAIR1200	1200*800*600	ISO5(ClassA)	0.36-0.54	≥300	≤75	AC380V AC220V	G4+H14
WAIR1500	1500*800*800	ISO5(ClassA)	0.36-0.54	≥300	≤75	AC380V AC220V	G4+H14
WAIR2000	2000*800*1000	ISO5(ClassA)	0.36-0.54	≥300	≤75	AC380V AC220V	G4+H14

※ Note: Customization can be made according to customer requirements

Comparison of Efficiency Specifications for Air Filters

Chinese standards GB14295— two thousand and nineteen	European Business Standards EUROVENT 4/9	ASHRAE Standard meter Efficiency of Heavy Law/%	ASHRAE Standard Quasi colorimetric method effect Rate% (0.4 μm) average	Efficiency of the US DOP method (0.3 μm) /%	European standard EN779	European standards EN1822 (The easiest to wear) Transparent particle size MPPS)	German standards DIN24185	U. S. A ASHRAE standard (MERV)
Coarse efficiency filter 1	EU1				G1		A	1
Coarse efficiency filter 2	EU1				G1		A	2-4
Coarse efficiency filter 3	EU2	65—80			G2		B1	5-6
Coarse efficiency filter 4	EU3	80—90			G3		B2	7-8
Medium efficiency filter 1	EU4	≥90			G4		B2	9-10
Medium efficiency filter 2	EU5		40—60		M5		C1	11-12
Medium efficiency filter 3	EU6		60—80	20—25	M6		C1/C2	13
High efficiency filter	EU7		80—90	55—60	F7		C2	14
High efficiency filter	EU8		90—95	65—70	F8		C3	15
High efficiency filter	EU9		≥95	75—80	F9		—	15
Sub efficient filter	EU10			>85		E10	Q	16
Sub efficient filter	EU11			>98		E11	R	16
Efficient filter A	EU12			>99.9		E12	R/S	17
Efficient filter A	EU12			>99.97		H13	S	17
High efficiency filter B	EU14			>99.997		H14	S/T	18-19
Efficient filter C	EU15			>99.9997		U15	T	19
Efficient filter D	EU16			>99.99997		U16	U	—
Efficient filter E-F	EU17			>99.999997		U17	V	—

Industry standard for air filters

Comparison Table of International Classification Standards

Number of particles	U.S.A		Europe	France	European union	Number of particles
$\leq 0.1 \mu\text{m/m}$ (approximate value)	Federal Standard 209E 1992		ISO14644-1 1996	AFNOR NFX44.101 1996	Pharmaceutical Industry Guide GMP one thousand nine hundred and eighty-nine	$\leq 0.1 \mu\text{m/m}$ (approximate value)
	—	—	ISO1	—	—	10
1	—	—	—	—	—	35
4	—	—	ISO2	—	—	100
10	M1	—	—	—	—	350
35	M1.5	1	ISO3	—	—	1,000
100	M2	—	—	—	—	3,500
353	M2.5	10	ISO4	—	—	10,000
1,000	M3	—	—	—	—	35,000
3,530	M3.5	100	ISO5	4,000	A and B	100,000
10,000	M4	—	—	—	—	350,000
35,300	M4.5	1,000	ISO6	—	—	1,000,000
100,000	M5	—	—	—	—	—
353,000	M5.5	10,000	ISO7	400,000	C	—
1,000,000	M6	—	—	—	—	—
3,530,000	M6.5	100,000	ISO8	4,000,000	D	—
10,000,000	M7	—	—	—	—	—
35,000,000	—	—	ISO9	—	—	—

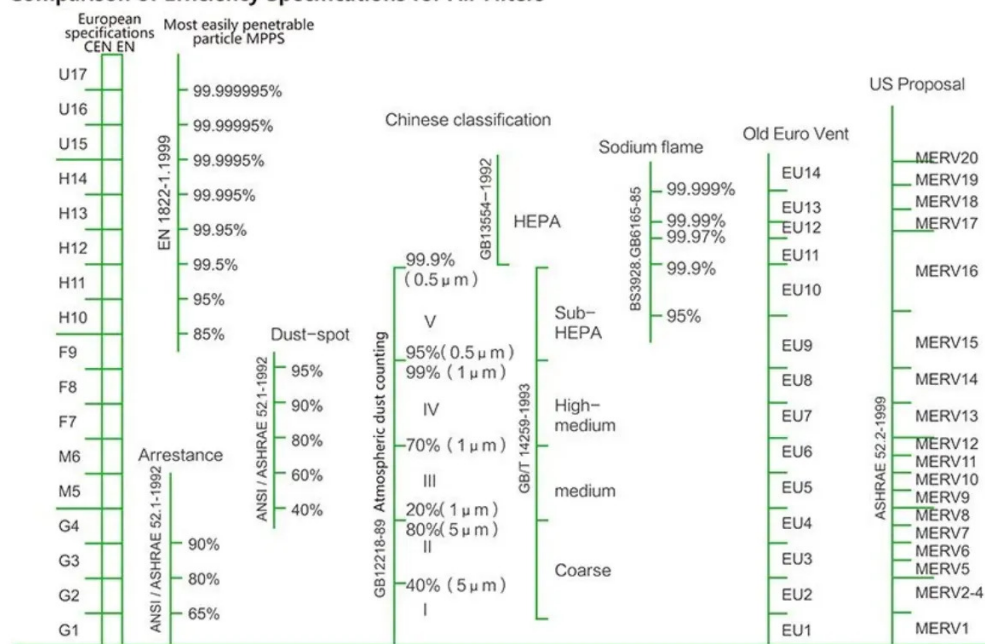
Maximum allowable particle count for cleanrooms or clean areas of different levels

ISO Classification Standard CD14644-1 (1996)	Level Range					
	0.1 μm	0.2 μm	0.3 μm	0.5 μm	1 μm	5 μm
ISO1	10	2	—	—	—	—
ISO2	100	24	10	4	—	—
ISO3	1,000	237	102	35	8	—
ISO4	10,000	2,370	1,020	352	83	—
ISO5	100,000	23,700	10,200	3,520	832	29
ISO6	1,000,000	237,000	102,000	35,200	8,320	293
ISO7	—	—	—	352,000	83,200	2,930
ISO8	—	—	—	3,520,000	832,000	29,300
ISO9	—	—	—	35,200,000	8,320,000	293,000

Current classification standards in Europe

standard		EN779:2012		EN1822-1:1999t
Filtration efficiency	Specifications	Weighting method (%)	Colorimetric or Counting Method (%) 0.4 μm	Most easily penetrated particle size method (%)
	G1	50≤E<65	one	one
	G2	65≤E<80	one	one
	G3	80≤E<90	one	one
	G4	90≤F	40≤E<60	one
Middle to high school efficiency	M5	one	60≤E<80	one
	M6	one	80≤E<90	one
	F7	one	90≤E<95	one
	F8	one	95≤E	one
	F9	one		85≤E<95
Efficient HEPA	H10	one	one	
	H11	one	one	99.5≤E<99.95
	H12	one	one	99.95≤E<99.995
	H13	one	one	99.995≤E<99.9995
	H14	one	one	99.9995≤E<99.99995
Ultra efficient ULPA	U15	one	one	99.99995≤E<99.999995
	U16	one		99.999995≤E
	U17			

Comparison of Efficiency Specifications for Air Filters



Comparison Table of ISO 14644-1 Standard Air Cleanliness Classification with Chinese GMP Standard and Chinese Operating Room Standard

Air cleanliness level (N) greater than or equal to the maximum concentration limit of particle size in the table (PC/m³) (particles per cubic meter of air)

ISO 14644-1 standard	GMP standard	Operating Room Standards	Maximum allowable number of suspended particles per cubic meter					
			≥0.1μm	≥0.2μm	≥0.3μm	≥0.5μm	≥1μm	≥5μm
1			1x10	zero point two one zero				
2			1x10	0.24x10 ²	0.1x10 ²	0.04x10	0.008x10	
3			1x10 ³	0.237x10 ³	0.102x10	0.035x10 ³	0.0083x10 ⁴	
4 (Level 10)			1x10	0.237x10 ⁴	0.102x10 ⁴	0.0352x10 ⁴	0.00832x10	0.00029x10 ⁵
5 (Level 100)			1x10 ⁵	0.237x10 ⁵	0.102x10 ⁵	0.0352x10		Static 0.0002x10 ⁵
	A-level		The level of airborne dust particles is ISO 4.8			Static 0.0352x10 ⁵		Dynamic 0.0002x10 ⁵
		Level I	The operating area of a specially clean operating room					
	Grade B		The level of airborne dust particles is ISO 5			Static 0.0352x10 ⁵		Static 0.00029x10 ⁵
6 (Thousand level)			1x10 ⁶	0.237x10 ⁶	0.102x10 ⁶	0.0352x10 ⁶	0.00832x10 ⁶	0.000293x10
		Level L	The surrounding area of the surgical area in a specially clean operating room					
		Level II	The operating area and its surrounding areas of a standard clean operating room					
7 (10000 level)						0.0352x10 ⁷	0.00832x10 ⁷	0.000293x10 ⁷
	Grade B		The level of airborne dust particles is ISO 7			Dynamic 0.0352x10 ⁷		Dynamic 0.00029x10 ⁷
		Grade III						
	Grade C		The level of airborne dust particles is ISO 7			Static 0.0352x10 ⁷		Static 0.00029x10 ⁷
8 (100000 level)			The level of airborne dust particles is ISO 7					
	Grade D		The level of airborne dust particles is ISO 8			Static 0.0352x10 ⁷		Static 0.00029x10 ⁷
						Dynamic 0.0352x10 ⁷		Dynamic 0.00029x10 ⁸
		Level II	Surrounding area of general clean operating room surgical area					
9 (one million level)						0.0352x10	0.00832x10 ⁸	0.00029x10 ⁸
						0.0352x10	0.00832x10 ⁸	0.00029x10 ⁸
		Grade IV	Quasi clean operating room					

Chinese GMP regulations:

- The design of the clean area must comply with the corresponding "static" standards to achieve the "dynamic" cleanliness requirements. Static "refers to the state where the installation is completed and running, but there is no operator present. And 'dynamic' refers to the state in which production facilities operate according to predetermined process modes and have a specified number of operators on-site for operation
- After all production operations are completed, the operators should evacuate the production site and self clean for 15-20 minutes (guidance value). The clean area should meet the "static" standard in the table. The dynamic test results of drugs or open containers directly exposed to environmental particles should meet the A-level standards in the table.
- The environmental level of the isolation operator for aseptic operations should be at least level D.
- In order to determine the level of Class A area, the sampling volume of each sampling point shall not be less than 1m³. The level of airborne dust particles in Class A area is ISO 4.8, with dust particles ≥ 0.5 μm as the limit standard. The level of air dust particles in Zone B (static) is ISO5, which includes two particle sizes listed in the table. For C-level zones (static and dynamic), the levels of airborne dust particles are ISO7 and ISO8, respectively. The level of air dust particles in the D-class zone (static) is ISO 8. The testing method can refer to ISO14644-1.
- When confirming the level, a portable dust particle counter with a shorter sampling tube should be used to avoid settling dust particles ≥ 5.0 μm in the long sampling tube of the remote sampling system. In a unidirectional flow system, an isokinetic sampling head should be used.
- Testing can be conducted during routine operations and simulated filling of the culture medium to demonstrate dynamic performance, but the simulation test of the culture medium requires dynamic testing under the "worst-case scenario".



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