

HEPA FILTER



Breif Introduction

Air filter is Air filtration devices, which is generally used for clean room, clean room, laboratory and clean room, or as the dust proof for the electronic communications equipments and other machineries. There are pre-filter, medium filter, high-efficiency HEPA filter and sub-efficient models. Various models have different standards and use performance.

Component

In pneumatic technology, the air filter, regulator and lubricator called pneumatic Big Three . In order to obtain a variety of functions, these three air source treatment components are assembled together in sequence , known as pneumatic FRL, which are used for air purification and filtration , vacuum and provide lubrication

Installation

The installation sequence of Big Three based on the direction are the air intake filter , regulator, lubricator . The Big Three are the most indispensable pneumatic system air source device, which are installed near the device in the vicinity of the gas. They are also The final guarantee of compressed air quality. Its design and installation, besides ensuring the quality of their Big Three , but also considering space-saving, easy installation, operation, and easy combination etc.

Function

The air from compressed gas source contains excessive amount of water vapor and droplets, as well as solid impurities, such as rust , sand , pipe sealants , which can damage the piston seal ring and the small vent components , shorten the service life of components or rendered ineffective. The air filter is the role of the liquid in the compressed air , the liquid droplets separated and filtered air of dust and solid impurities, but can not remove gaseous water and oil.

Product Groups



Medium efficiency air filters

Medium efficiency air filters are combined of the man-made fibers and galvanized iron. There are a variety of efficiency options, including 40-45 % , 60-65 % , 80-85 % , 90-95%. Flange is composed by a 26 gauge galvanized iron.

This series of products can be used in industrial, commercial, hospitals, schools, buildings and other kinds of plant air-conditioning equipments (They are the pre-filter of air conditioning system, primary protecting the filtration system under a filter and the system itself, for the place of cleanliness requirements is not strict, the air filtered by medium filter efficiency can be directly sent to the user)which can also be installed in the gas turbine inlet device or computer room, to extend the life of equipment.

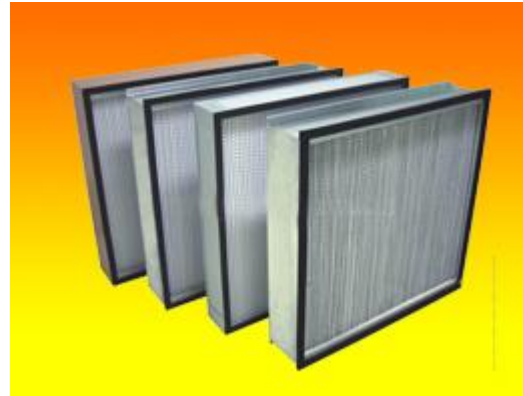
Pre-Filter

Pre-Filter is Mainly used in pre-filtering of air conditioning and ventilation systems, clean room return air filtering, high efficiency filter unit of local pre-filtering , it is also used to filter above 5 μ m particle size of dust particles, using the weight method tests. It is also as Used as previous protection of multi-stage filtration system. The Filtering materials are non-woven filter, nylon mesh, aluminum wave mesh, stainless steel net , non-woven filter media outlet side after finishing treatment, to prevent scattering of non-woven fiber breakage cause secondary pollution.

Crude and efficiency bag filter

Using the pre, medium non-woven fabric as the efficiency filter, cold plate spray as framework, which are also as secondary filters, the product has a high dust holding capacity , low resistance , and can be easily cleaned, etc., according to the environment and the selection of difference, the filter efficiency levels are F5, F6, F7, F8.

Technical Specifications



Pre-portfolio filter

Outside Dimension	Portable	Normal Air Velocity
595*595*600	8	3200
595*595)600	6	2700
595*495*600	6	1600
495*295*600	4	2200
495*295*600	4	800

High HEPA Filter

Model	Air Velocity(m3/h)	Outside Dimension(mm)	Volume(g)
GB-5B	500	320X320X220	300
GB-8A	800	600X600X150	500
GB-10A	1000	484X484X220	500
GB-10B	1000	420X600X200	500
GB-10C	1000	610X610X150	600
GB-10D	1200	600X420X200	500
GB-12A	1200	820X600X150	750
GB-12B	1300	560X600X200	750
GB-13A	1500	720X760X150	800
GB-15A	1500	630X630X220	900
GB-15B	1500	726X484X220	750
GB-15C	1500	915X610X150	850
GB-15D	2000	820X600X200	1000
GB-20A	2000	968X484X220	1200
GB-20B	2200	1220X610X150	1200
GB-22A	2200	945X630X220	1400
GB-30A	3000	1260X630X220	1800

Industry Standards



GB/T 13554-2008 High-Efficiency HEPA Filter

GB/T 14295-2008 Air Filter

GB/T 15187-2005 Wet dust separator performance test

GB/T 17939-2008 Nuclear grade HEPA filter

GB/T 6165-2008 HEPA filter efficiency and resistance performance test methods

HG/T 2061-1991 Rubber machinery with air filter

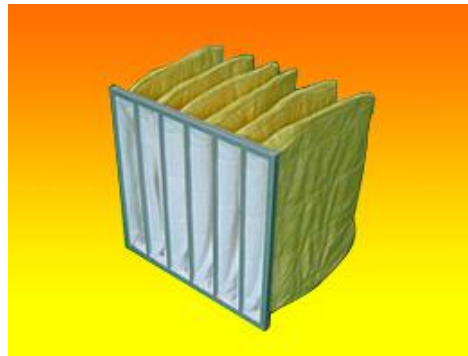
JB/T 6417-1992 Air conditioning with air filter

JB/T 7374-1994 Pneumatic air filters technical conditions

JG/T 22-1999 Air filters for general ventilation performance test method

TB/T 3135-2006 Locomotives, air filters with bodywork

Clean Methods



1.Clean areas

Change the pre and medium efficiency filters of the surface, internal of the unit to HEPA high-efficiency filter.

You can also take reference for pre and high efficiency filter in the above procedures.

2.Cleaning devices

Rags, trough , detergent, stainless steel frame

3. Cleaning conditions

The final resistance of pre and medium filters is about 2 times of the initial resistance.

4.Clean Content

4.1 Cleaning methods of Pre and medium filter

When the filter surface is not dirty, the filter should be double-Side purged with clean compressed air, double-side purging for the filter with clean compressed air in the outdoor until the eye can not see the dust in the light.

When the surface of filter is dirty, then washing is needed. In the general area of water chamber (air-conditioned room) with a trough placed within about 100 pounds of drinking water,1 kg bottle of detergent will be diluted ,the filter into the tank should be all drown in the water. Rinsed several times until not any pollution, and finally rinse with water until clear water far out on the stainless steel grille mop over the water, and then dried flat on a shelf, cooling on the ground when turning in order to accelerate the drying rate.

4.2 Surface cleaning unit

4.4.2.1 Clean the outer surface of the air conditioning case and ancillary pipelines, instrumentation every day, so as to the device more clean and bright.

4.2.2 Wipe the oil, glue with moistened detergent cloth, wipe again with clean drinking water, no trace left.

4.3 Internal cleaning of air conditioning systems

4.3.1 After replacing the pre and medium filter, thorough cleaning inside paneling, fans, heaters, coolers, diffuser plate, thorough cleaning the dust, dirt, grease, nothing left, then install pre and medium filter again.

4.3.2 Clean the inner side system every month, wipe with wet cloth for it, then wipe again with dry cloth.

4.4 Change the high efficiency HEPA Filter

4.4.1 When replacing HEPA filter, repeated clean the surrounding with a wet cloth, install the high-efficiency filter immediately, HEPA filter should be unpacked in the field and install immediately after inspection, to prevent dust fall into the high efficiency filter.

4.4.2 Replace Conditions

4.4.2.1 Cleanroom testing result is exceeded the number of particulates.

4.4.2.2 The final air volume air volume of HEPA filter below 70%.

4.4.3 After HEPA filter replaced, dust particle counter should be inspected for efficient filter and install connections. In inspection while tightening bolts or epoxy silicone plugging.

4.4.4 HEPA filter testing, replacement should be recorded.

4.4.5 After HEPA filter replaced, leak test should be carried out and verified.

5. Precautions

Wuxi Yijing Purification Equipment CO.,LTD

TEL:86-0510—83575883 Fax:86-510 83570093 86-510-83570063

5.1 After cleaning cloth, if the initial filter resistance value is below the first installation ,then stop using and change it immediately. If after 2 times cleaning, even the pressure value is more than the initial resistance value, the filter should be still changed.

5.2 Take HEPA filter should be backwards suitcase , so that a smooth landing HEPA filter.

Taking HEPA filter backwards, so that it could be smooth landing.

5.3After cleaning the filter, check whether it has damages, if yes, change it timely, Do not rub it when cleaning or machine wash or drying.

5.4 Do not make confusion for pre and medium filter when cleaning, numbers should be marked in case of distinguish.

5.5 There should be one filter in every air purification system, as to change it timely when cleaning.