

Cary-air Systems



CARY-AIR HDP300, HDP400, HDP500

model HDPE filters are WASHABLE and can be used as Pre and fine filters. They have efficiencies from 80 to 99% for particles down to 1,3,5,10,15 and 20 microns. Depending upon the usage conditions it life is expected over 2 years.

APPLICATION AREAS

Compressor air intake, Process air, Air conditioning and ventilation systems and as primary filters before HEPA filtrations.

CONSTRUCTION

Two to five layers of HDPE is stitched along with SNP material to obtain required filtration and efficiency. The pleats are separated by spacers for maximum air flow.



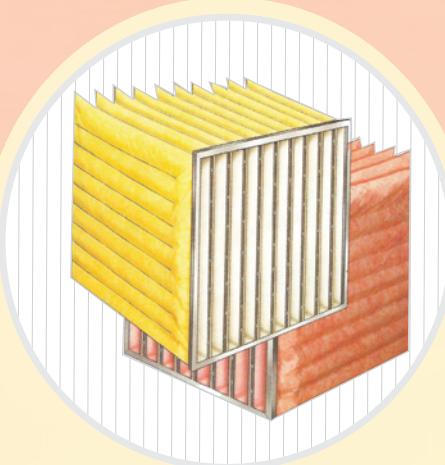
CARY-AIR MicroVee model filters are Cleanable and can be used as fine filters .They have efficiencies from 95 to 99% for particles down to 5. Depending upon the usage conditions it life is expected over 2 years.

APPLICATION AREAS

Pharmaceutical processing plants, Nuclear and Semiconductor facilities, Air-conditioning and ventilation systems, Fertilizer and Synthetic Fiber plants.

CONSTRUCTION

A layer of Non Woven media is stitched along with a layer of GI wire mesh on the downstream side to obtain required filtration and efficiency. The pleats are separated by spacers for maximum air flow.



CARY-AIR MBB Pocket filters are cleanable and can be used as pre and fine filters. The filters are available from 20 microns to 1 micron particulate efficiency.

APPLICATION AREAS

Air handling units, Sampling booths, Bio safety hoods ventilation systems and as primary filters before HEPA filtrations.

CONSTRUCTION

Synthetic melt blown media is welded to create bags and a special ultrasonic sealing technology is used for the creation of the bags. Due to large area available for filtration these filters operate at a low differential pressure and provide high efficiencies

CAPACITY in CMH with Minimum Final Pressure Drop 6.5mmWg

Model Number			HDP700_	HDP900_	MICROVEE_	HDP500_	HDP400_	HDP300_
SIZE IN INCHES	SIZE IN MM	SIZE CODE	EFFICIENCY 95-99%DOWN TO 1 μ	EFFICIENCY 95-99%DOWN TO 3 μ	EFFICIENCY 95-99%DOWN TO 5 μ	EFFICIENCY 95-99%DOWN TO 5 μ	EFFICIENCY 90-95%DOWN TO 10 μ	EFFICIENCY 80-90%DOWN TO 20 μ
24X24X12	610X610X300	1	3400	3400	3400	3400	5400	9540
24X24X6	610X610X150	2	1700	1700	1700	1700	2720	5610
20X20X6	508X508X150	3	1200	1200	1200	1200	1870	3400
24X24X2	610X610X50	4	850	850	850	850	1360	2470
20X20X2	508X508X50	5	410	410	410	410	630	1870
25X20X2	635X508X50	6	510	510	510	510	790	2340
20X16X2	508X406X50	7	330	330	330	330	510	1500

Eg: If you have selected 24x24x12 size filter in 5 microns then the selected filter code will be HDP5001 where HDP500 is the model number and 1 is the size code



CARY-AIR HEPA filters are designed to meet international standards such as IES, RP, MIL STD 282, ASHRAE52.2 etc

APPLICATION AREAS

Nuclear facilities, Operation theaters, Research labs, Aero space facilities, Film and photographic film manufacturing process, Electronic component manufacture and assembly, Pharmaceutical processing Food processing, Genetic research labs etc.,

CONSTRUCTION

The HEPA filter medium is crimped in deep pleated form along with crimped AL separators and bonded to the casing with epoxy based adhesives preventing fungal growth. Neoprene gaskets with shore A hardness is used to make it leak-proof.



CARY-AIR Mini Pleat HEPA filters offers excellent performance and comes with a test certificate for every filter. The filters meet international standards such as IES, RP, MIL STD 282, ASHRAE52.2 etc

APPLICATION AREAS

Same as in the case of HEPA filters.

CONSTRUCTION

The HEPA media is pleated on a special purpose pleating machine which pleats and applies hot melt adhesive which acts as a separator providing fine air passage path reducing the pressure. Standard Extrusions, face guard and gaskets provide the required protection for the filtration media.

HEPA FILTER SELECTION BY CAPACITY

MINI PLEAT FILTER SELECTION BY CAPACITY

MIN EFFICIENCY 99.97% DOWN TO 0.3 μ , RH up to 100% and Fire resistant

MIN EFFICIENCY 99.999% DOWN TO 0.3 μ , RH up to 100% and Fire resistant

SIZE IN INCHES	SIZE IN MM	MODEL NUMBER	CAPACITY in CMH with Minimum Final Pressure Drop 20mmWg
24x24x12	610x610x292	CDPN1	1700
24X24X6	610X610X150	CDPN2	850
24X12X12	610X305X292	CDPN3	850
12X12X12	305X305X292	CDPN4	425
48X24X6	1220X610X150	CDPN5	1700
36X24X6	915X610X150	CDPN6	1280
24x24x12	610x610x292	CDPS1	3400

SIZE IN MM	MODEL	CAPACITY IN CMH at Pressure Drop 13mmWg
Depth in mm (depth code)		
		66 (1) 93 (2) 117 (3)
24x24	610x610	CMPN1_ 600 800 1000
30X24	762X610	CMPN2_ 750 1000 1250
24X12	610X305	CMPN3_ 300 400 500
12X12	305X305	CMPN4_ 150 200 250
48X24	1220X610	CMPN5_ 1200 1600 2000
36X24	915X610	CMPN6_ 900 1200 1500

In case of mini pleat filter if you have selected 610x610 size filter in depth of 93 mm then your filter code will be CMPN12 where CMPN1 is the model number and 2 is depth code.



LAMINAR FLOW BENCH

FEATURES

Compact Design, Removable side walls and front window , both made of U.V. resistant tempered glass Materials and construction according to international standards with high quality components and easy service Very low noise level < 60 dB (A)

DESCRIPTION

The Caryair offers a range of horizontal and vertical laminar flow benches which provides conditions better than ISO class 5 at the work surface. These units are used for to protect product/specimen from particular contamination. The construction style ensures that there are no leaks from the gasket part of the filter. The equipment is constructed in either SS or GI powder coated as per the requirement. Excellent lighting and minimum obstruction to the work flow ensures that cleaning and installation of the equipment and cabinet is easy.

MODULAR CLEAN ROOMS

FEATURES

Low Erecting time, Easy to change design, versatile to add or remove facilities. Meets certification up to ISO Class 5. Available in 3'x4' to 30'x60' sizes.

DESCRIPTION

The Cary-air modular clean room is the most economical approach and design for your clean room needs. This design is commonly used in the microelectronics and medical mold injection industry as well as many others. Cary-air design allows it to be used as either a totally freestanding room or it can be used in combination with your existing walls and ceiling. Each room comes completely factory prefabricated for minimal on-site erection time and is totally self-contained with all components factory- finished.



SAMPLING & DISPENSING BOOTHS

FEATURES

- * Designed in accordance with WHO-GMP * 3-Stage Filtration with Pre , Fine Filter & HEPA filters
- * Heavy duty Low noise motor blower assembly * Suitable to accommodate to floor & table balances

DESCRIPTION

CARY-AIR Booths are designed to give mixed air flow stream for product and operator. Booths are used to control the hazardous emissions of dust powder during powder dispensing / sampling process. CARY-AIR booths for products sampling and dispensing are designed as front open containment systems with built-in scavenging arrangement that draw particulate aerosols away from the operator and the operating environment, protecting products and personnel.

COLD ROOMS & STORAGE

FEATURES

Screw compressors are designed to cover most capacity requirements for a wide range of Industrial Refrigeration applications. Microprocessor control system controls and monitors the Operation of the compressors.

DESCRIPTION

Cold rooms and freezers are mostly used in Food processing, pharmaceutical storage, refrigerated ware houses, marine cargo refrigeration and other industrial refrigeration processes. The CARY-AIR cold rooms comes with a wide range of temperature and humidity parameters. The special design of panels, doors and other process monitoring equipments ensure trouble free operation. The equipment is supplied with a temperature mapping certificate if required.





CLEANROOM DOORS

FEATURES

Available in Standard, Heavy and Extra Heavy duty models.

DESCRIPTION

The doors are used in areas of HIGH frequency traffic , utility buildings, clean rooms, and operation theaters. The core will be filled with high density PU foam for insulation purposes

AIR SHOWERS

FEATURES

Low noise operation, High performance blowers and filters, Interlocking system and manual over ride, Available in Custom built sizes, Adjustable Operation time

DESCRIPTION

The Air Showers are used in areas of Clean Room, Pharma Production ,Micro-Electronic Fabrications and Production Units , Semi-Conductor Production Lines etc., Cary-air air showers are closed cubicles and work on the principle of subjecting the personnel through adequate velocity of clean air. The velocity of air coming through different jets of the air shower dislodges the particles lying on the surface of the garment/body of the personnel entering the air shower and thus making him/her virtually free from the particulate matter. Air at a minimum velocity of 6000FPM is pumped to get the required effect.



PASS BOX

FEATURES

Compact Design., Available in Static and Dynamic Models, Electronic Interlock and indicativedisplay. Optional UV Light sterilization

DESCRIPTION

The Cary-air pass boxes ensure that the Particulate contamination does not pass along with the material while crossing clean room zones. The equipment is available in SS and GI powder coated variants. A toughened glass window is provided to monitor the situation in side the pass box. Apart from the standard sizes and CFMs custom built sizes and CFMs are also available on request.

BIO SAFETY CABINETS

FEATURES

The System comes with florescent lighting, SS work tray, Sliding tempered glass viewing screen, H14 grade HEPA Filters, low noise motors and state of the art electronics.

DESCRIPTION

Biosafety Cabinets are used for work in Biological Risk Groups 2, 3, and 4 organisms, for procedures that may produce Aerosols , for work with tissue cultures, particularly non-human primate and Human tissue and organ cultures and for work with antineoplastic drug processing. CARY-AIR's 'CARE' Biological Safety Cabinets will meet your laboratory requirements for life science research, clinical or industrial applications. Bio Safety cabinets and Hoods of all models pertaining to Class I, Class II A, Class II B1, Class II B2, Class II B3 and Class III type are available. Each Classification has a different level of protection and standard related to the safety of product, person and environment.

The product meets EN12469 Standards.





- Modular & Ridge less wall and ceiling construction. Walk able ceiling construction.
- Progressive or non progressive wall construction.
- Panel laminate -PCGI/ S304 / Plain GI.
- Core -TF grade EPS/RPUF (Expanded Polystyrene / Rigid Poly Urethane Foam).
- Flush suspension system for ceiling where span exceeds 3,500 mm.
- Return air risers and utility pendants embedded in wall panels if required.
- Cutouts on ceiling for HEPA filter fitment and light fixtures - complete with grill and capping.



Vision Panels: Double glazed, Frameless, flush to wall panel, frameless construction, with anti condensate feature.

Covings for closing wall to wall joints and wall to ceiling joints. Kerb coving notch feature on wall panels for termination of floor coving. Food grade PVC or Aluminium powder coated materials used for coving.

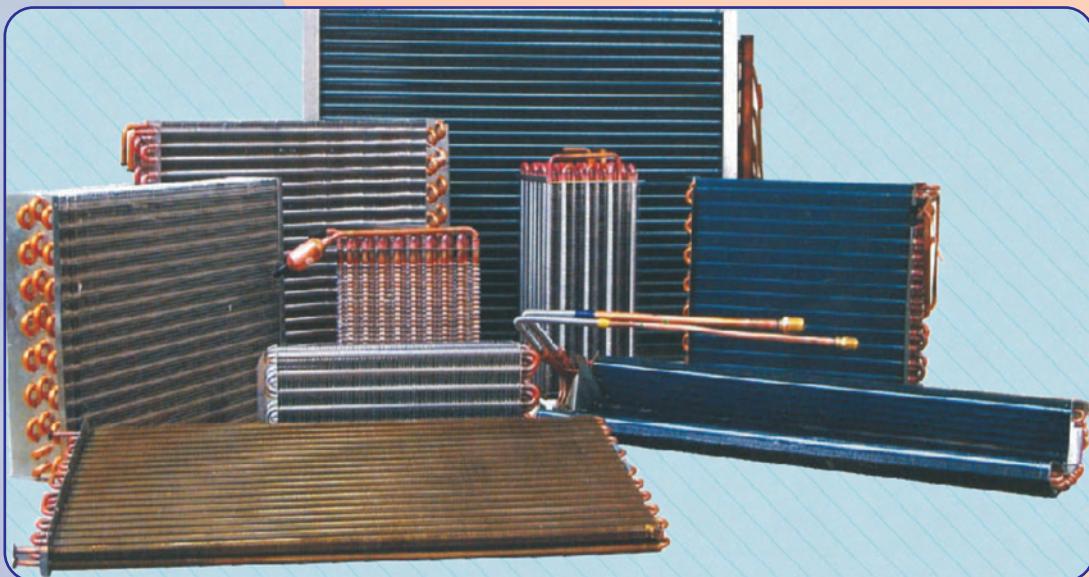
Door leaf made of RPUF core with metal (PCGI) laminate, using frame of extruded Aluminium, powder coated to panel colour.

Door closer hinges and handle locks made of SS304.

Gasket for doors made of EPDM. Door bottom equipped with wiper/drop.

Bottom gasket doors available in single leaf / double leaf construction.





HEAT EXCHANGE COILS

CARY-AIR coils provide excellent heat transfer ratio and manufactures a range of coils namely

- Chilled Water Coils
- Condenser Coils
- Evaporator Coils
- Steam / Hot Water Coils
- Heat Exchangers

Construction capability

- Tube sizes: 3/8", 1/2", 5/8"
- Tube and Fin Materials: Aluminum, Copper and Stainless Steel
- Headers: M.S., Copper, Galvanized and Stainless steel

Protective Coatings: Thermoguard™, Polyurethane / Epoxy Coating.

CARY-AIR Coils are constructed using imported copper tubes with uniform wall thickness. Inner grove tube is also used on request. The coils are tested by various means to ensure absolute leak proof situation.

AIR HANDLING UNITS

CARY-AIR produces a range of single skin and double skin AHUs ranging from 1000 CFM to 60,000CFM

CARY-AIR AHUs are best suited and widely used in Health care, Food Processing, Semi-Conductor, Pharmaceutical industries

CARY-AIR AHUs come with a factory mounted motorized dampers and other accessories on request. Capability to provide information to BMS are done on request



FEATURES

- Compliance with EN1886 and VDI 6022 standards.
- Smooth and cleanable inner surfaces with joints and grooves duly sealed.
- View Window and factory wired lights for each section.
- A range of Mechanical or Electronic monitors of users choice.
- High performance Vibration mounts to extend the life of the AHU
- Optional choice of Mist eliminators and filtration range.
- GI base Frame with Lift lugs.
- Low Noise while in operation
- Construction using Thermal break profile is optional
- Usage of HRW is Employed for reducing the energy costs.



CARY-AIR has established a complete range of test facilities to meet the following international standard for testing of the filters.

- ASHRAE52.2 :2007
- BSEN 779-2002
- Eurovent4/4 & 4/5
- ISO 5011
- IES-RP

CARY-AIR is also equipped with multiple sets of validation instruments to do validation of clean rooms as per ISO 146441 and GMP standards.

Apart from the above we are also established Test facilities for Shock & Vibration, Core tightness, water repellency test and others pertaining to MILSTD282B as per the requirement of DoAE.



OTHER PRODUCTS:

- ◆ CROSS OVER BENCHES
- ◆ STERILE GARMET RACKS
- ◆ FUME HOODS
- ◆ GRILLS
- ◆ DIFFUSERS
- ◆ DAMPERS
- ◆ SOUND ATTENUTORS
- ◆ FAN COIL UNITS up to 3.5Tr
- ◆ MIST ELIMINATORS

CARY-AIR SYSTEMS PVT. LTD.

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