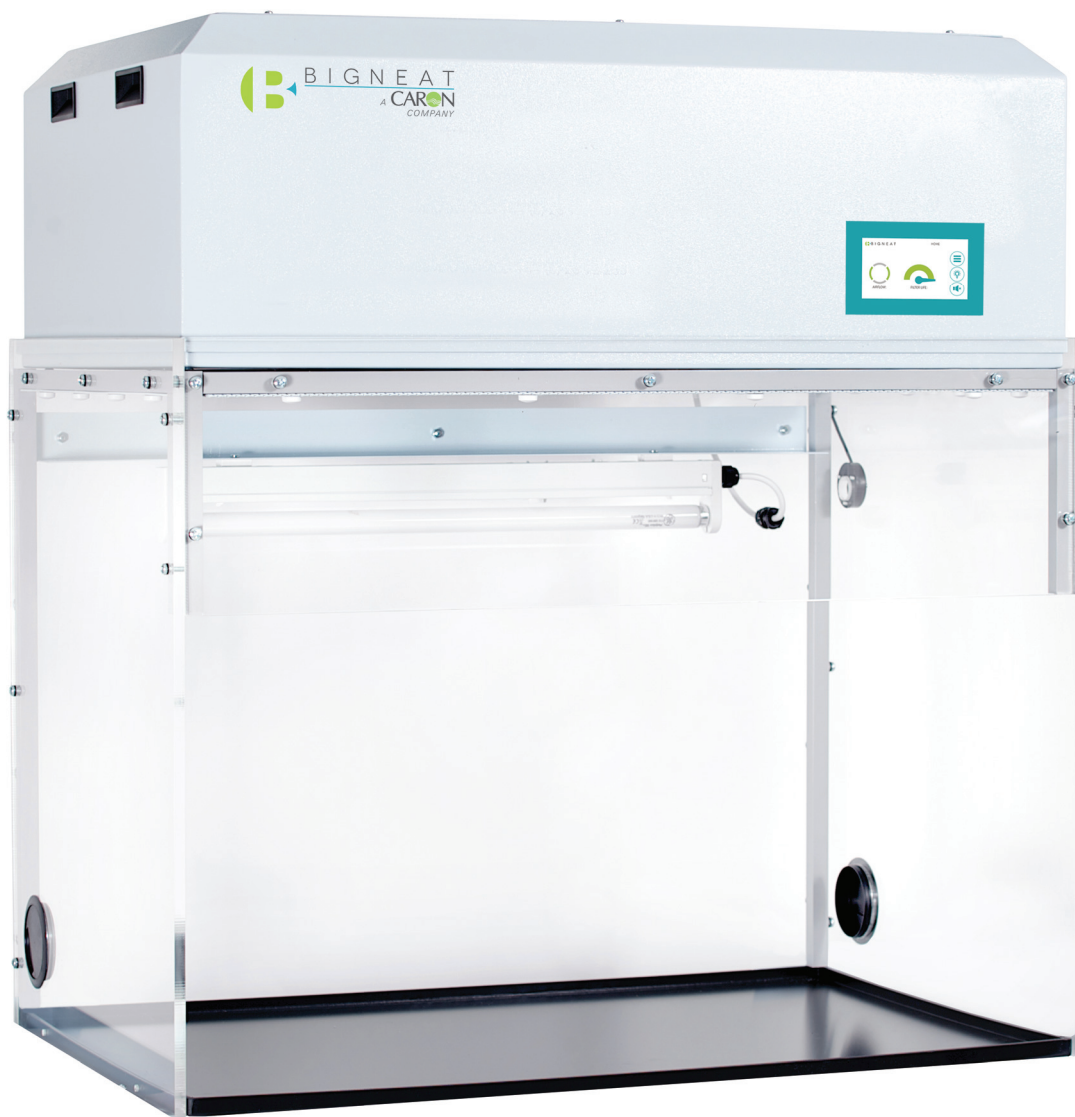


VERTICAL AND HORIZONTAL HEPA FILTERED SYSTEMS

Laminar Flow Cabinets

For product or operator protection



FOR PROCEDURES REQUIRING PROTECTION FROM PARTICULATE CONTAMINATION
AND FOR ASEPTIC TECHNIQUES

REV: 06/22

▶ LAMINAR FLOW CABINETS

Caron's Laminar Flow Cabinets have been specifically designed to provide particle-free, bacteria free, clean air conditions to the work area while providing unparalleled user comfort and convenience.

A cabinet may be positioned on an existing bench or can be supplied as a free standing system on a supporting mobile bench or static stand with adjustable height feet.

Laminar Flow Cabinets are manufactured to a very high standard using only the best quality materials, fans and components. Materials used are resistant to corrosion and easy to clean.

Experience has shown that Caron Laminar Flow Cabinets give consistent performance which is only dependent on replacement of the prefilters and HEPA filters at recommended intervals.

▶ DESCRIPTION AND OPERATION

Room air is drawn into the top of the cabinet, passes through the pre filter and enters the fan housing. The speed controllable fan pushes the air through the HEPA filter located above the working area. Ultra-clean air exits the HEPA filter to provide a sterile working environment which protects the samples and manipulations from external contamination.

The cabinet structure is fabricated from 10mm thick clear UV stabilised cast acrylic which provides excellent all-round visibility for the operator whilst carrying out manipulations and aseptic procedures.

BENEFITS

- Comfortable to use
- Flexible access
- Excellent view of working area
- Easy to maintain
- Quiet operation
- Meets all worldwide standards

▶ INCLUDED AS STANDARD

- Variable fan speed control (pre-set at factory, adjustable by installation/service engineer.
- Fan speed and filter life monitored through integral touchscreen display.
- HEPA Filtration to remove particles greater than 0.3micron @ 99.995% efficiency.
- Pre-filtration to remove particles greater than 5micron @ 92% efficiency.
- HPL work surface with margin groove to catch and contain spills.
- Service port in each side panel.

▶ TYPICAL APPLICATIONS

For materials or processes that require protection from particulate contamination: Semiconductor handling, laboratory procedures, preparation of sterile medical devices and materials, in pharmaceutical research and food, for cell culture, PCR and RNA and many other general industry uses requiring a particulate-free environment

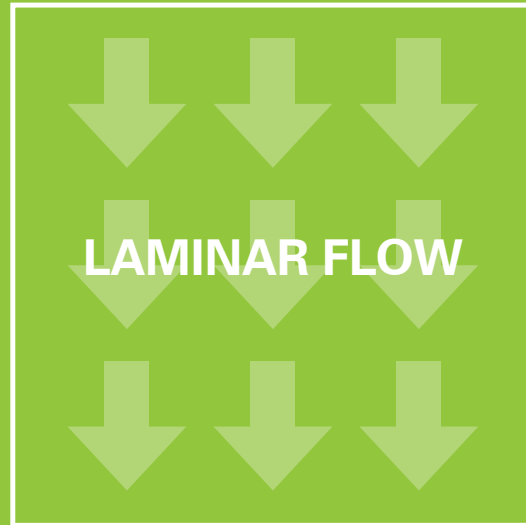
LAMINAR FLOW WORKSTATION

Definition and classification of clean air safety systems as specified by ISO 14644

A dedicated space in which the concentration of airborne particles is controlled and is constructed and used in a manner to minimise the introduction, generation and retention of particles inside the zone.

LAMINAR AIRFLOW

Airflow moving along parallel flow lines minimises air turbulence within the workstation.



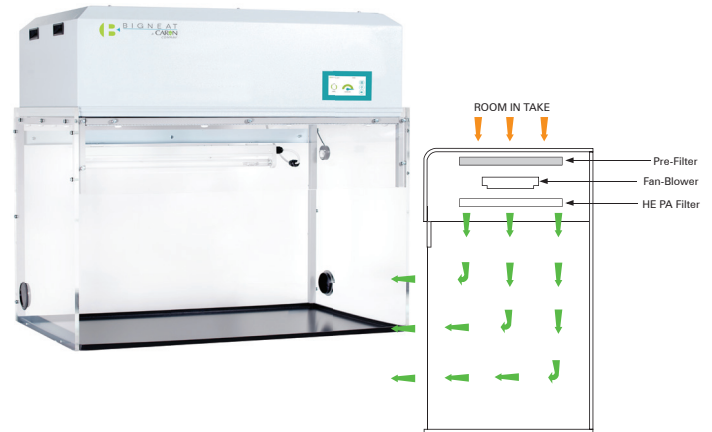
FILTRATION USED IN LABS ENCLOSURES

- Pre-filtration eliminates particles 5.0 microns or greater to an efficiency of 92% as defined in BS EN ISO 779.
- HEPA filtration (H14 Standard) eliminates particles 0.3 microns or greater to an efficiency of 99.995% providing ultra-clean particle free Class 5 BS EN ISO 14644-1:2000 air conditions.
- Laminar Flow Cabinets are manufactured to comply with the guidelines of ANSI/EST/ISO 14644 – 1:1999 Class 5, also described as Class 100 or FED STD-209- D:1988, to provide sterile working environment and air velocity at filter face of 0.45 m/s.
- Negative pressure workstation for operator protection includes Carbon Filtration which has a filtration efficiency of 99.9%, meets BS 7989:2001 Standard.

▶ VERTICAL LAMINAR FLOW

- VLF cabinets are available in 3 different widths; 1m, 1.5m, 2m.
- Fan housing design ensures that the positive pressure developed pushes air evenly across the full width of the filter.
- Base tray has margin groove to catch and contain spillages.
- May be installed on existing bench or be supplied with a robust static stand.
- Flat-packed for easy shipment around the world.

When your choice is sterile air delivered downwards onto the work area then a Bigneat VLF cabinet/ workstation is ideal. It offers a particle-free, clean-air environment with all-round view into the work area. The acrylic frameless construction allows the operator to work by laboratory illumination and natural light and eliminates the need for internal lighting (offered as an option).

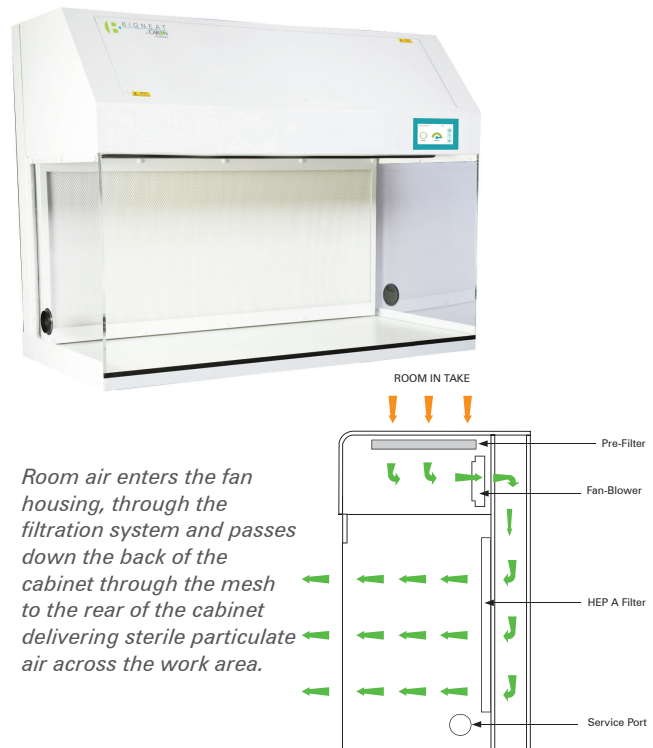


Room air enters the fan housing and passes through the filtration system delivering sterile particulate air to the work area.

▶ HORIZONTAL LAMINAR FLOW (HLF)

- VHLF cabinets are available in 3 different widths; 1m, 1.5m, 2m.
- Fan housing design ensures that the positive pressure developed pushes air evenly across the full width of the cabinet work area.
- Base tray (HLF) has margin groove to catch and contain spillages
- May be installed on existing bench or be supplied with a robust static stand.
- HLF Cabinets are flat-packed for easy shipment around the world.

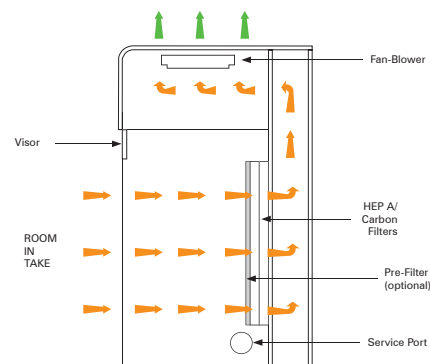
When your choice is sterile air delivered horizontally across the work area then a Bigneat HLF cabinet/ workstation is ideal. It offers a particle-free, clean-air environment with excellent view into the work area to the front and through the side panels



Room air enters the fan housing, through the filtration system and passes down the back of the cabinet through the mesh to the rear of the cabinet delivering sterile particulate air across the work area.

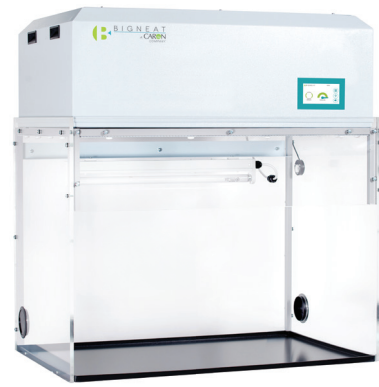
▶ OPERATOR PROTECTION CABINET

When protecting the operator from particulates or chemical fumes or solvents vapours released during your procedures, then a Caron negative pressure horizontal flow cabinet is ideal. Essentially of the same design as a positive pressure cabinet with flow reversed and filtration system reconfigured with a more powerful fan and different filter arrangement. It returns particle-free, clean-air, back into the laboratory and provides an even flow across the work area. This cabinet style allows excellent view into the work area to the front and through the side panels.



Room air enters the cabinet passing the operator and horizontally through the rear mesh back panel, up the back of the cabinet and through the filtration system returning clean air back into the laboratory.

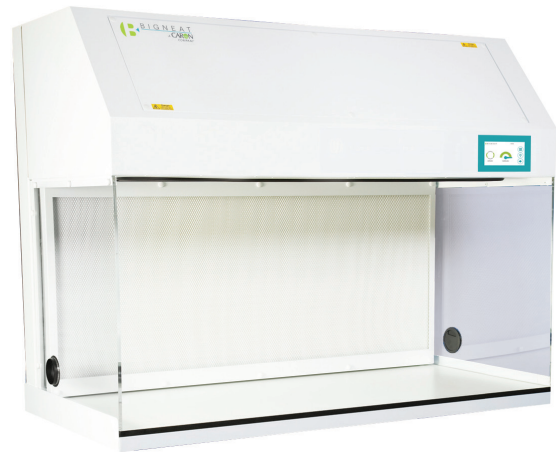
▶ VERTICAL LAMINAR FLOW CONFIGURATIONS



| Model | External dims mm (WxDxH) | Internal dims mm (WxDxH) | Sound Levels | Air velocity at filter face |
|--------|--------------------------|--------------------------|--------------|-----------------------------|
| 1000mm | 1000 x 725 x 1040 | 966 x 700 x 700 | <65dBa | 0.45 m/s |
| 1500mm | 1000 x 725 x 1040 | 1466 x 700 x 700 | <65dBa | 0.45 m/s |
| 2000mm | 2000 x 725 x 1040 | 1966 x 700 x 700 | <65dBa | 0.45 m/s |

Cabinets available for power supply: 230V, AC, 50/60Hz, 5Amp, 1Ø or 110V, AC, 60Hz, 8Amp, 1Ø

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| 1000mm | 1000 x 762 x 1160 | 960 x 600 x 665 | <65dBa | 0.45 m/s |
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| 2000mm | 2000 x 762 x 1160 | 1960 x 600 x 665 | <65dBa | 0.45 m/s |

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▶ OPTIONS AND ACCESSORIES

Vertical

Horizontal

Vertical



▶ BENCH OPTION

Your laminar flow cabinet can be provided with an open box-section bench with levelling/adjustable feet or there is an electrically operated height adjustable bench alternative.



▶ Services Port and filter mesh

▶ QUALITY ASSURED



Caron 230V systems
are CE marked

Caron manufactures from UL listed components

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CARON