

# Emission extraction system plus +

# **Functional description**

# System explanation too

Emission extraction as a personal protection system Molecular filter system: eliminates a wide range of harmful substances such as: solvents, acid gases, ozone and others combined with a clean room workplace: laminar flow ISO 5 / 14644-1.

All systems can be manufactured individually according to customer requirements. As a result, we are not bound to any fixed dimensions and expansion requests. This modular series gives the user the following significant advantages at no additional cost:

# **Particularities**

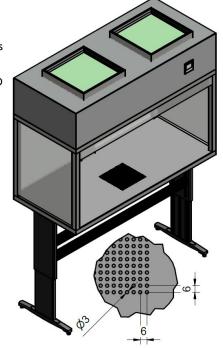
- The dimensions of the new systems can be designed flexibly and can be adapted to individual customer needs
- The module consists of aluminum construction, in which the high-performance blower is built on vibration dampers

## Technic

- Night reduction / weekend reduction 3 language display D / F / E (energy saving): optional
- Monitoring the flow rate (digital display)
- Filter contamination indicator: optional
- No interference from the operator by air flow
- Whisper-quiet operation 43 dB (A) at 0.20m / s
- (with currently the quietest fan on the market)
- · Individual dimensions
- Available with brightness-controlled high-performance LED on request
- Available with electrically height-adjustable table on request

# Additional benefits

When using the VarioClean Flow systems, a large amount of air is circulated and thus also cleaned of airborne viruses and bacteria. This massively improves the air quality in the surrounding area.



There are no limits to your individual wishes. Please contact us! Optimal planning and design guarantees years of successful quality.

# Emission extraction Plus + ISO5 clean room workstation

# Intended use

The unit is ideally suited to delimit work areas in accordance with clean room requirements. The unit is used to filter out particles or germs from the ambient air, to remove solvents from the ambient air and thus guarantees a clean room atmosphere with personal protection. Thanks to the modular system concept, the device can be used flexibly.

# Purety class

The laminar flow unit works on the principle of laminar displacement flow with vertical air flow. It meets the requirements of cleanliness class 5 according to DIN ISO 14644-1, this corresponds to cleanliness class 100 according to US-FED-STD 209e.

# Prefilter

The ambient air is pre-filtered using an easily exchangeable pre-filter of filter class G4. The pre-filter is designed for large volume flows and long filter service lives.

## Fine filter

The particles are separated using a high-performance H14 class particle filter. The degree of separation of this filter is 99.995% according to EN 1822. The maintenance-friendly device design makes it easy and inexpensive to replace.

# Molecular / activated carbon filter

- C1 against smells from offices, laboratories, hospitals, halls, kitchens. Against solvent
  vapors, ozone, exhaust gas odors and general hydrocarbon compounds
- C3 in general against acid gases, mercaptans and thiols, against odors from sewage treatment plants, putrefaction
- C5 in general against alkaline gases such as ammonia and amines, against odors from animal husbandry and slaughterhouses.
- C9 suitable for air filtration in high humidity
- CX for specific applications (formaldehyde vapors, mercury vapors, etc.

# Fan

The air flow is generated by high-performance fan modules with an energy-saving motor. The wheels are statically and dynamically balanced. The compact module housings are made of aluminum sheet

# Control with automatic speed control

The desired air speeds can be set manually via a multifunction display with plain text display.

With the automatic speed control, the air speed is automatically kept constant even with increasing filter resistance (increasing filter contamination). For this purpose, the air speed at the filter outlet is permanently measured with a precise flow probe and the engine speed is adjusted accordingly.

Other useful functions such as e.g. Timer function for any day / night changeover to save energy, change language to 3 languages etc.

## Frame

The Laminar Flow Unit is made of aluminum construction.

Unit dimensions:

External dimensions W  $\times$  D  $\times$  H (mm): 1000, 1250, 1500, 1750, 2000, 2250 and 2500  $\times$  600  $\times$  1950, available in any dimension for an additional charge

