TROX® TECHNIK
The art of handling air

FUME CUPBOARDS AND SAFETY CABINETS: AIR REMOVED SAFELY AND EFFICIENTLY

Fume cupboards and safety cabinets are essential for minimizing risks in laboratories. They ensure a safe environment by removing contaminated or potentially harmful air. Hazardous work is limited to the area in the fume cupboard, so the devices provide additional protection against splashing liquids, flying particles and fires.

Safety cabinets differ from classic fume cupboards in the filter classes used. Here, the supply and extract air is cleaned via high-performance filters to ensure sterile work.

In order to protect the people working in the laboratory, the daily work there with substances hazardous to health must take place under the highest safety standards. Our LABCONTROL "EASYLAB" air management system ensures that gases, aerosols and other contaminants are extracted, diluted and, if necessary, filtered directly at the point of origin. In recirculation systems with appropriate filter stages, the purified air can be safely returned to the laboratory. As a result, fume cupboards and safety cabinets not only protect laboratory personnel, but also the environment and the immediate surroundings.

FUME CUPBOARDS

Learn more about fume cupboards and variable control options adapted to your laboratory needs.

To the fume cupboards

SAFETY CABINETS

Safety cabinets with different protection levels meet even the most stringent requirements in the laboratory.

To the safety cabinets

REAL TIME CONTROL FOR MORE EFFICIENT LABORATORY EXTRACT AIR

To remove contaminated air from the laboratory in the shortest possible time, fume cupboard systems must act fast and sensitively. Only in this way can the premises be protected from a contaminant outbreak. The LABCONTROL air management system with integrated EASYLAB controller reacts in the millisecond range and has a particularly fast action time of less than three seconds. This action time was specified in the EN 14175 fume cupboard standard and certified by an independent testing institute. For comparison: standard controllers usually have an action time of 120 seconds.

The high demands on a control system for fume cupboards also result in increased requirements for the downstream components in the room, such as room supply and extract air. As soon as a fume cupboard or safety cabinets acts, the air management system must detect the change and adjust it according to the desired strategy. In the EASYLAB system, this is implemented fully automatically by the integrated room management controller - all components in the room are networked via a common patch cable and therefore communicate with each other fully automatically, a complex integration of data points during commissioning is not necessary here. The room air conditions specified in DIN 1946-7 are thus ensured at all times while, at the same time, the

air change rates are kept as low as possible.

More on standards in laboratories

CONSULTING AND PROJECT DEVELOPMENT

I AM HAPPY TO ASSIST YOU

We will be happy to help you with the individual planning and implementation of air distribution strategies for your laboratories. Arrange your non-binding consultation now!

Patric Unterdorfer

Global Key Client Manager Pharma & Food

Phone: +49 (0) 2845 202 1128