

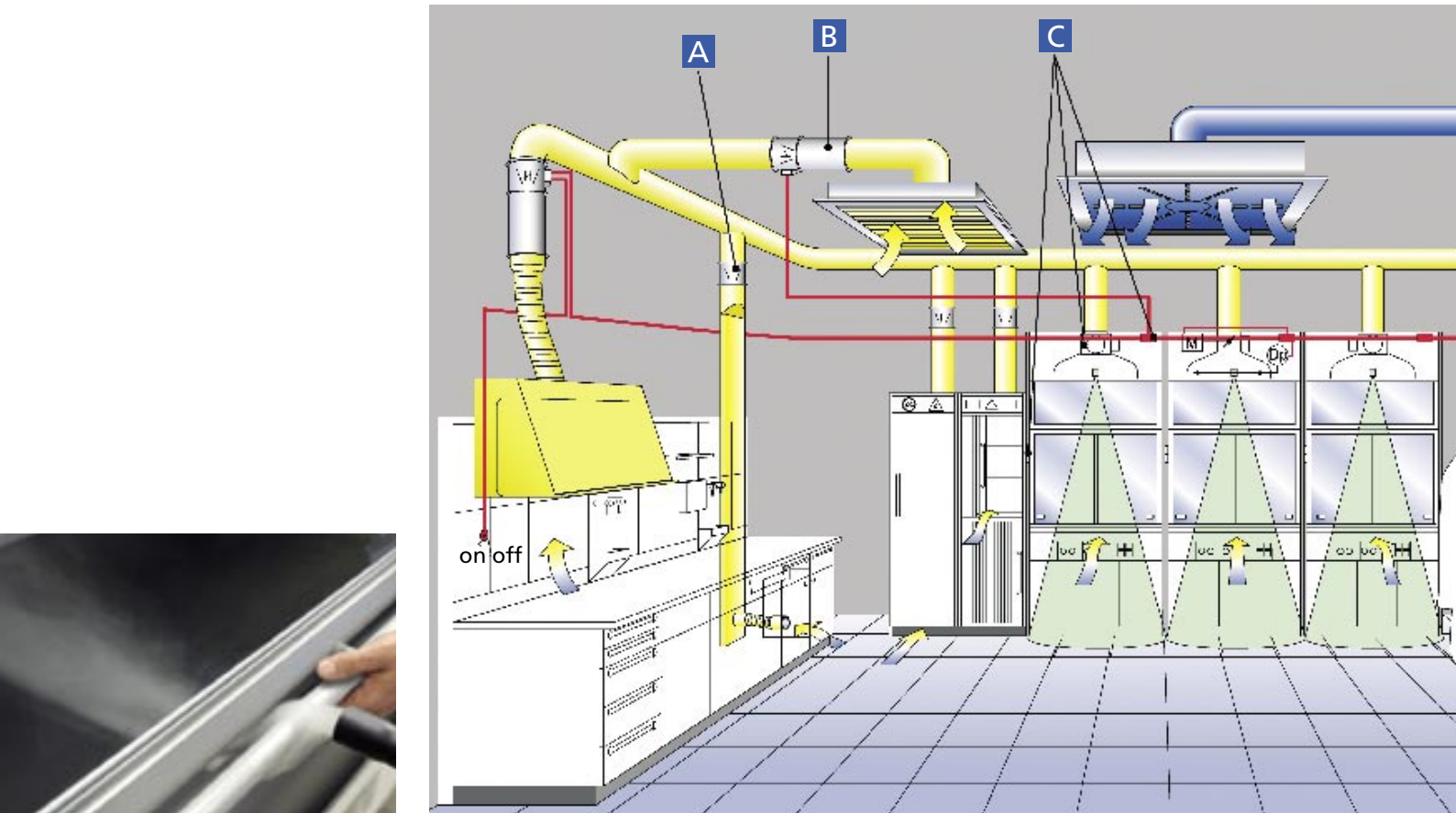
Laboratory
control



Labor

WALDNER
Firmengruppe

Safe, reliable laboratory operation with considerably reduced operating costs: laboratory control from Waldner



Saving operating costs whatever the operating status

Today, the furniture in your laboratory and the ventilation of the entire laboratory building can no longer be regarded as separate entities from an economical point of view. Waldner's intelligent laboratory control considerably lowers the operating costs of the ventilation system and guarantees maximum safety at work.

Carefully thought-out technology for optimum function

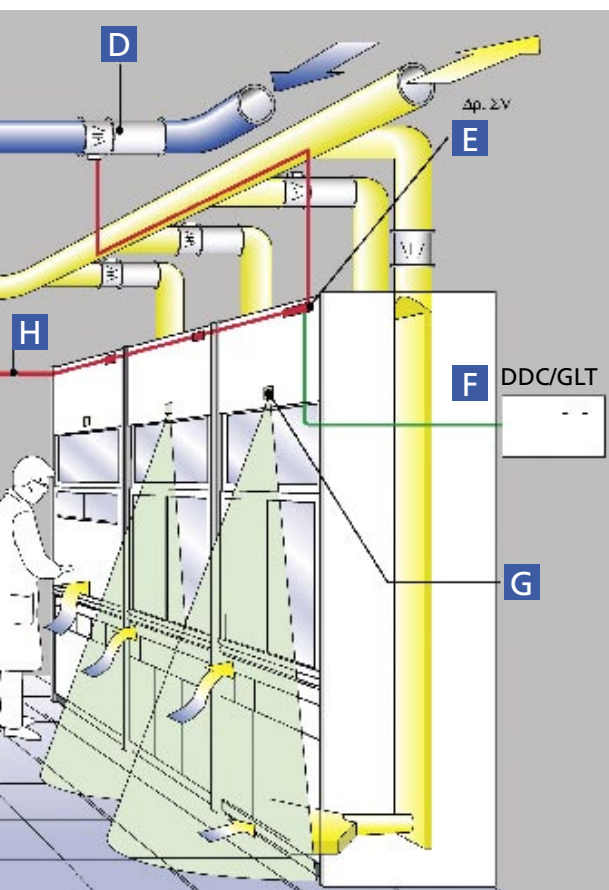
As a vital part of the laboratory ventilation scheme, our fume cupboards can be integrated in the building ventilation concept in an ideal way. The measuring and control unit of our airflow controller recognises the degree of usage of the fume cupboard reliably and corrects the air exchange rate precisely and safely within just three seconds. If necessary, the air exchange rate can be increased or lowered manually at any time by means of a switch on the fume cupboard.

Laboratory control pays for itself very quickly

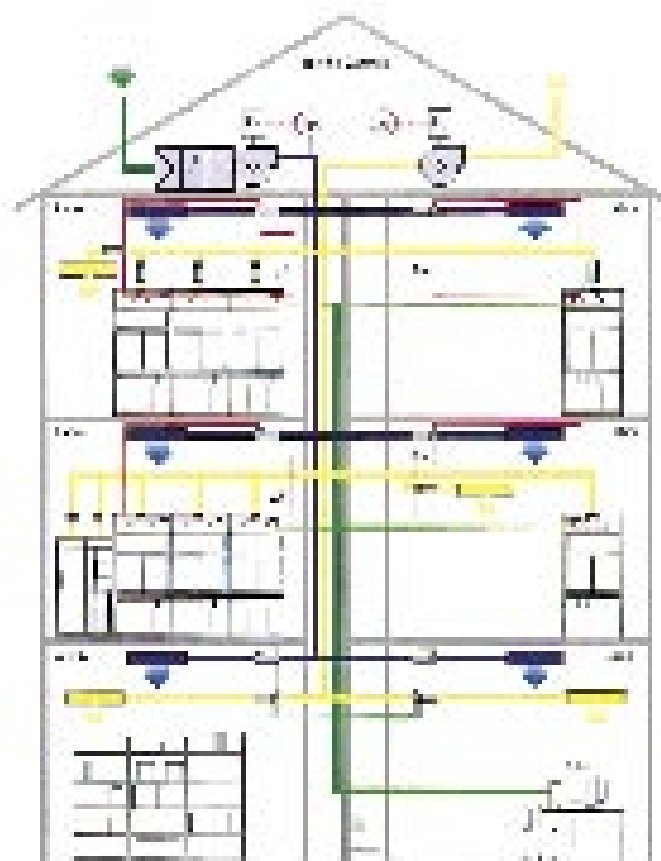
Considerations of economic efficiency speak clearly in favour of our laboratory control: thanks to the efficient use of the ventilation system and resulting reduced use of energy, the investment in the laboratory control pays for itself after just one or two years. This is a major advantage if you consider the constantly rising price of energy.

Laboratory

Work economically and comfortably under all operating conditions



- A** Mechanical airflow damper
- B** Extract air airflow damper
- C** Airflow-Controller
- D** Supply-air airflow damper
- E** Airflow-Controller with activated master function and interface to the DDC/BMS
- F** The following methods of communication with the DDC/building control are possible: Analogue I/O, LON bus, MOD bus, Profi bus, CAN bus, BAC-Net
- G** Sash controller
- H** Internal bus system CAN bus or LON bus



Ventilation and control as an overall concept

As a leader system partner, we produce the overall concept for your laboratory. This starts with the appropriate sizing of the central ventilation system and the ducts and finishes with the use of suitable measurement, control and instrumentation technology.

control





Recording the sash position ensures high safety levels

The extract volume flow rate of the fume cupboard remains unaffected even if the sash opening is changed by users standing in front of it or if extensive add-ons have been fitted in the fume cupboard. You can forget all about negative influences on the extract volume flow rate control, which can normally arise due to abrupt occurrences such as fluctuations in room pressure or cross-currents.

No unpleasant draughts

Our laboratory control reacts rapidly to changing extract volume flow rates. Flow rates of supply air are adjusted quickly and precisely to momentary conditions ensuring that unpleasant draughts in rooms are largely avoided – providing a pleasant working environment in the laboratory.

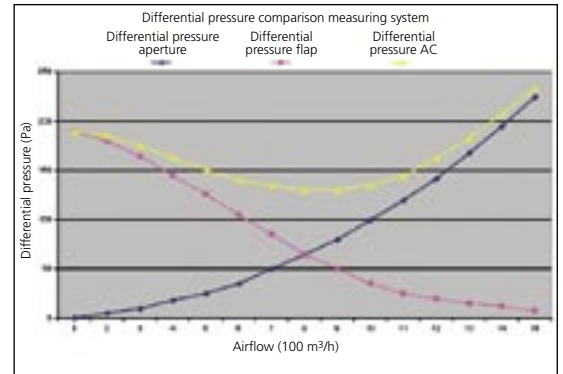
All functions at a glance

The control elements and displays integrated in the fume cupboard side posts provide information about the operating state of the fume cupboard at ideal eye level. Perfect function is clearly indicated here by visual and acoustic signals.



Highly operational reliability through self-monitoring

Due to the patented self-monitoring process, which the system executes automatically every 24 hours, the user is guaranteed maximum operational reliability and the plant operator is promised highly efficient operation of the ventilation system.



Differential pressure curve AC

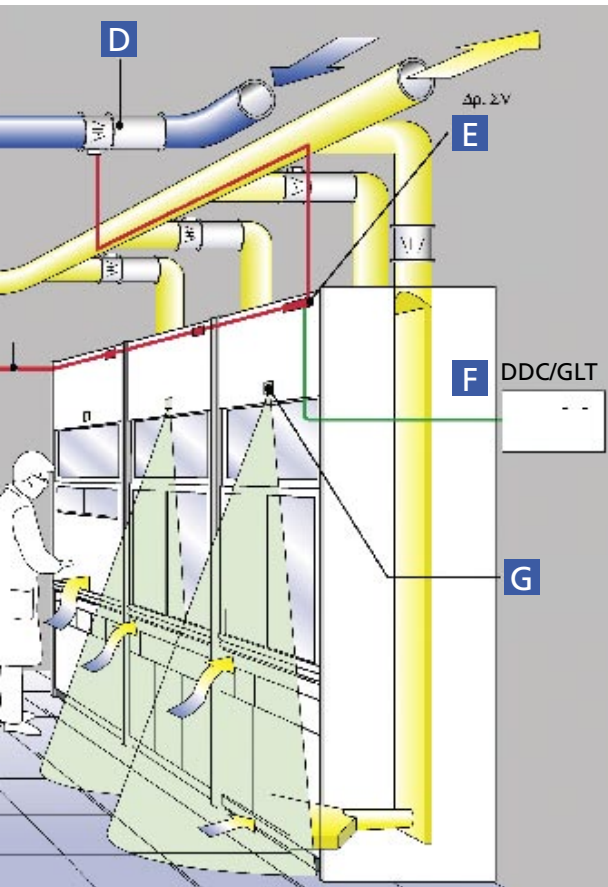
Automatic zero point compensation

With the aid of the patented zero point compensation on the pressure sensor, the air exchange rate is measured precisely with constant measuring accuracy throughout the service life of the system, absolutely guaranteeing the most economical operation.

Rapid commissioning

We supply our pre-assembled fume cupboards with ready-configured airflow dampers – this saves valuable time on your premises and makes a noticeable difference to your budget.

Fume cupboard, monitoring and control combine to form a type-tested unit



The fume cupboard and controller form one unit

The perfectly mutually co-ordinated systems provide maximum reliability during day-to-day laboratory operations. As a complete safety device, the fume cupboard and variable air quantity control are type-tested to DIN EN 14175 Part 6. They avoid the need for the time-consuming, expensive co-ordination of different equipment and provide legal security and a warranty from a single source, should this ever be necessary.

Patented measuring technique and measuring device

Thanks to the variable measuring diaphragm coefficient and special method of operation of the measuring device, an air exchange rate stroke of 1:15 can be achieved. In this way, the air quantity in the fume



cupboard can be lowered to 100 m³/h during night-time operation.

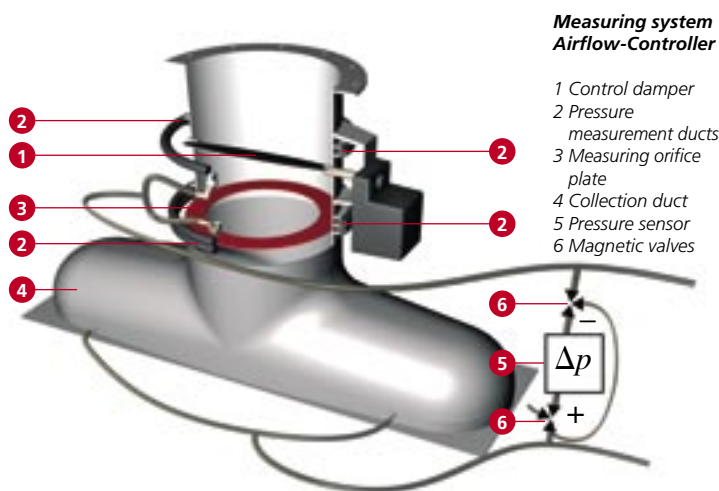
Here, too, a measuring accuracy of +/- 5% of the current actual air exchange value is assured. This is necessary in order to ensure that the directed air flow in the laboratory is adhered to, even at low air exchange rates.

Installation and upgrading even in low rooms

Our airflow damper has an installation height of just 280 mm. The low connection height provides space for further HVAC equipment, even in low laboratories.

One contact person for maintenance and service

Maintenance and service is carried out on your system swiftly and punctually, thanks to our precise documentation of your system – and completely without the need for time-consuming co-ordination. Waldner's way of doing things – that's a promise.



control

Make use of our expertise in laboratory control



We adapt our technology precisely in line with your requirements

We are the only manufacturer of laboratory furniture to offer you fume cupboards and variable fume cupboard control from a single source. All over the world we have achieved a large number of projects of varying size, which have all been conducted to the great satisfaction of our customers.

This confirms our philosophy of acting as a system provider. In addition, it is also pleasant and economical for you as a customer to have only one contact person for all questions on this matter, not to mention for maintenance.

Use our competence to realise your laboratory project

As a complete system provider, we plan and carry out your project in the shortest possible time in the Waldner fashion. As a market leader, we have the capacity to take on your project – whether big or small. Just ask us, we'll be glad to advise you.

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