

Vita

Laboratory solutions

Laboratory solutions

Exceptionally safe and efficient workspaces for laboratory professionals



Halton Vita solutions offer intelligent and efficient management of laboratory airflow conditions and thermal comfort in healthcare, research, production, and educational laboratories

Safety | Energy efficiency | Flexibility

Halton Vita Lab Solo

Halton Vita Lab Solo is a fast and accurate airflow management solution for all types of fume cupboards and exhausts in laboratories where safety needs to be ensured in all conditions.

- Suitable for all fume cupboards and laboratory exhausts.
- Constantly safe operations thanks to unique double sensor control.
- User-friendly control and alarm panel.
- Enhanced energy efficiency with occupancy control.

Halton Vita Lab Room

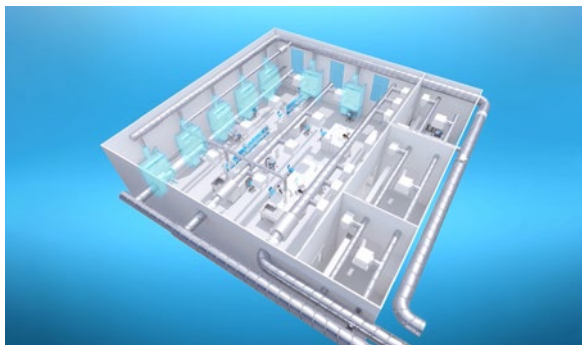
Halton Vita Lab Room provides intelligent and efficient control of laboratory airflow pressure and thermal comfort for optimal space management.

- Thermal comfort and safety for the entire room.
- Energy efficiency.
- User-friendly control and alarm panel.
- Integrated temperature control.
- Enhanced system stability with Halton Vita Lab Zone that ensures constant conditions for the Halton Vita Lab Solo and Halton Vita Lab Room solutions.
- Easy design and layout modification with simple installation and maintenance.

Total room control integrates the Halton Vita Lab Solo units to the intelligent Halton Vita Lab Room control system and provides continuous control and monitoring of the room conditions.

Halton Vita Lab Solo

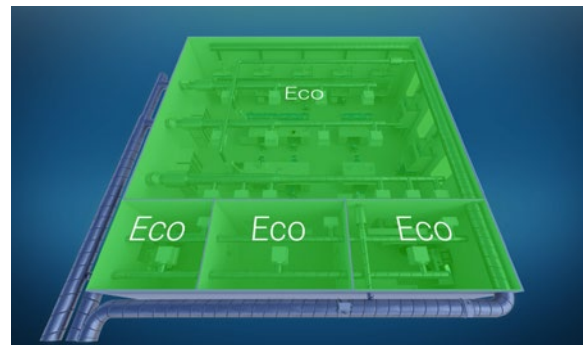
The fastest and most accurate airflow management system for all types of fume cupboards, provides safety and energy efficiency through variable airflow control.



Suitable for all kinds of fume cupboards and laboratory exhaust applications in research, industrial production and educational laboratories.

- An exceptionally fast response time and constantly stable operations guarantee the safety of laboratory professionals.
- Energy efficiency is enhanced by an occupancy sensor.
- Complies with the European fume cupboard standard EN 14175-6.

Halton Vita Lab Solo is available in different configurations for various application needs. Advanced solutions meet the requirements for the most demanding laboratory spaces.



Halton Vita Lab can achieve significant savings in the day-to-day operation of a laboratory by activating the ECO mode in fume cupboards when the fume cupboard is not in active use.

The ECO mode can be also activated when the work is done and staff are leaving the space.

Energy savings can be up to 30% when fully face velocity is 0,5m/s and ECO mode can reduce the velocity to 0,35m/s.

Unique Double Sensor Control



Fast response time – key to minimising the risk of exposure to harmful substances.

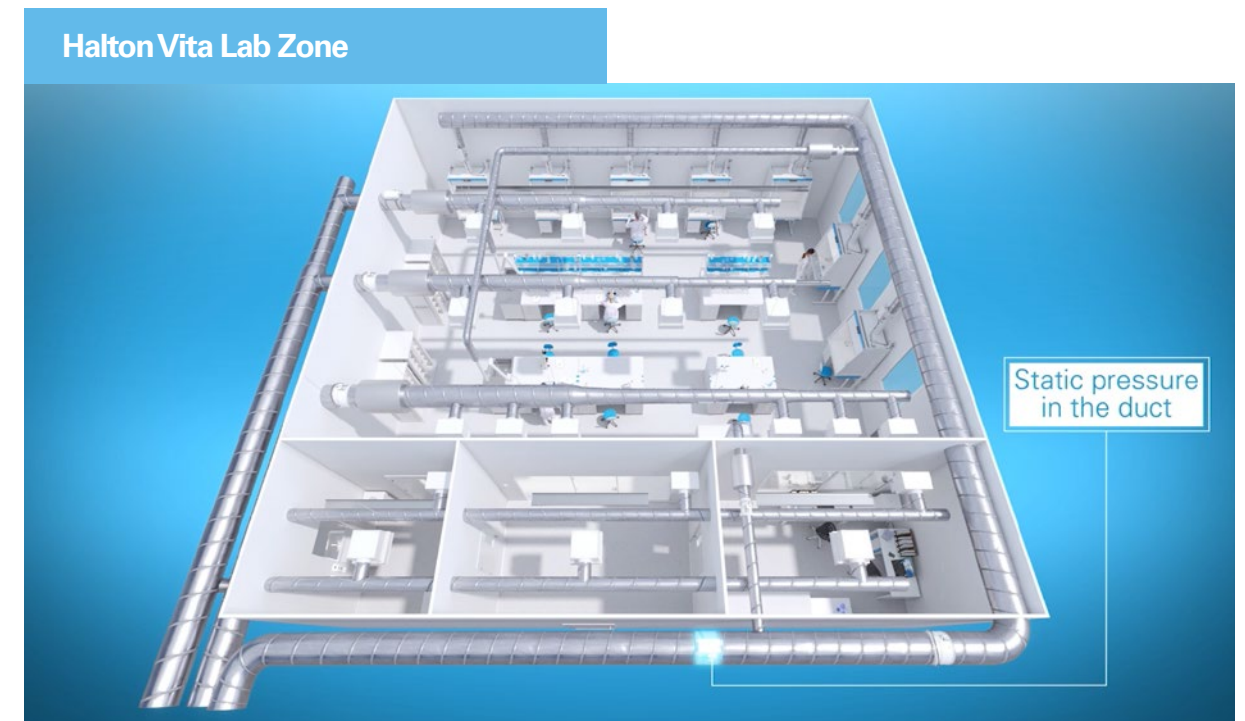
When a fume cupboard sash is opened, a fast and stable control has a significant effect on the exposure. A delay of more than 3 seconds significantly increases the exposure risk, after 5 seconds, emission concentrations reach their maximum level.

The Halton Vita Lab Solo Double Sensor Control solution provides the fastest reaction time and system stability.

- Stability is reached in less than 3 seconds.
- Tested and validated according to the European standard EN 14175-6.
- Combines face velocity measurement and sash window control.

Halton Vita Lab Room

Intelligent and efficient management of laboratory airflow pressure and thermal comfort. Designed for the airflow and pressure control of laboratories spaces where safety, air quality and comfort need to be maintained at the required level.



Enhanced system stability

The Halton Vita Lab Zone solution maintains static pressure in the exhaust duct despite of the changes in airflow. This increases reliability and the speed of the response of the fume cupboard operation.

Flexibility

Halton Vita Lab Zone maintains the duct pressure in balance, measures the total exhaust airflow and sends the information to room controller, which controls the supply airflow. It also collects all exhaust airflow information from a single source what guarantees flexibility in laboratory layout throughout the life cycle. Flexible and easy layout modifications considerably reduce refurbishment costs, simplifies system design. Installation is simple with no internal wiring to fume cupboards and no commissioning is needed after changes the layout.

- Continuous control of the room conditions and seamless interaction between the system components provide stable room airflow conditions.
- Consistently optimal indoor air quality, air diffusion and thermal comfort.
- Controlled over – and underpressure conditions ensure the safety of the laboratory environment by preventing the dispersal of contaminants.

Halton Vita Lab Room is available in a range of configurations for different applications.

Easy controlling and monitoring of the system



Both Halton Vita Lab Solo and Lab Room have user friendly touch panels that inform users about the conditions in fume cupboards and in the room.

The Halton Touch Panel is equipped with a temperature sensor and a user key for adjusting the temperature for maximum comfort.

Staff are able to control the room temperature, light and airflow rate from the user-friendly touch panels.

Alarms let users know when the measured values go below the alarm limit values so they can react for the situations quickly.



Remot control of the system – money savings and fast response

Information can be reviewed remotely from Halton Connect, a cloudbased system that enables 24/7 monitoring of the solutions designed by Halton.

Halton Connect allows access to useful information along with powerful data analytics to the end users. It also provides crucial information to our engineers.

In return, they can remotely and safely control all systems and their settings when required.

Seamless integration – superior performance



Total room control integrates the Halton Vita Lab Solo units to the intelligent Halton Vita Lab Room control system.

Based on continuous measurements from the Halton Vita Lab damper, the system controls the room pressure by adjusting and maintaining the airflow difference between the supply and exhaust, simultaneously keeping the energy consumption to a minimum.

A lifetime journey with Halton

Halton ensures the best outcome from early design to validation and support throughout the building lifecycle.



Halton helps you find the optimal solution for cleanroom environments at the design phase and verifies excellent system performance at the handover. During building use, our services offer a proactive and user-centric tool for managing the safety and comfort of your indoor environment.



Halton Design Studio services

- Co-designing with the customer, defining the requirements and performance targets, matching targets to optimal cleanroom solutions
- Halton CFD simulations for thermal comfort, air quality and system performance analysis
- Halton Mock-up for system performance and full-scale indoor environment testing conducted in Halton Innovation Hubs



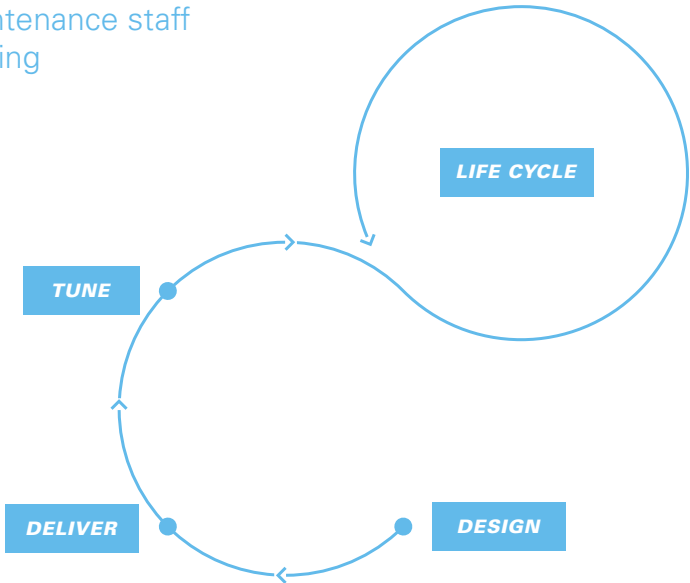
Halton Tune services

- Securing the safety and functionality of spaces with smooth commissioning and optimal system performance validation services
- Ensuring safe and comfortable working conditions with space cleanliness and indoor climate validation services
- End-user and maintenance staff training



Halton Life Cycle services

- Continuous validation and fine-tuning services for guaranteeing the safety, hygiene and comfort of spaces
- Regular maintenance services
- System performance evaluation and optimization
- Halton Connect, a cloud-based system for remote control





Vita

Wherever air quality is critical, we take care of every breath you take.

Your partner in indoor air quality

Halton is your lifetime partner from the design of the systems, through the construction process to annual maintenance. Our services cover your project from end to end, ensuring the best solution for all your needs.

- Project design and support
- Pre-validation with mock-up or CFD modelling
- Commissioning and performance validation
- Annual maintenance
- Halton HIT Design tool and solution documentation

Halton is a key supplier for all indoor air solutions in the ultra-modern Nya Karolinska Solna University Hospital in Sweden – the world's largest PPP hospital with LEED Gold certification. Illustration: White Tengbom Team.

Halton Vita Solutions

Demanding spaces

- Operating rooms
- Laboratories
- Patient environments
- Isolation rooms
- Cleanrooms

Specialised needs

- Outdoor air intake hygiene
- Fire and smoke safety
- Air diffusion and thermal comfort
- Solutions for hospital kitchens

Halton Vita solutions are designed for

- Maximum safety, reliability and comfort for professionals and patients
- Easy and intuitive system use and monitoring with smart controls and interfaces
- Optimised energy efficiency with demand-based system operation



Halton Vita Values

Putting people first

Halton Vita solutions are made for people who depend on them. From laboratory and pharmaceutical professionals to doctors, nurses and their patients, our first responsibility is the safety, comfort and wellbeing of these people and their environment.

Passion for better solutions

We are driven by our customers' needs, and demanding spaces demand better solutions. Halton Vita solutions are designed, produced and delivered to the highest standards of safety, quality and efficiency.

Solving each challenge together

Delivering the best solutions for demanding spaces requires great flexibility, a commitment to continuous development, and close cooperation with our customers. Together, we can ensure that every Halton Vita solution meets the unique demands of your project and the people it serves.