

Variable Volume Systems

Reduce operating costs, save energy.

Efficiency.

Controlling energy costs.

Accurex understands that by varying the speed of the fans based on the cooking load, you will save money by reducing power and heating and cooling costs.

Accurex Variable Volume Systems sense the heat output of the cooking operation, and exhausts only the amount of air necessary, reducing operating costs and saving energy.



*Supporting Green
Building Initiatives.*





Variable Volume Systems.

The future of energy management in kitchen ventilation.

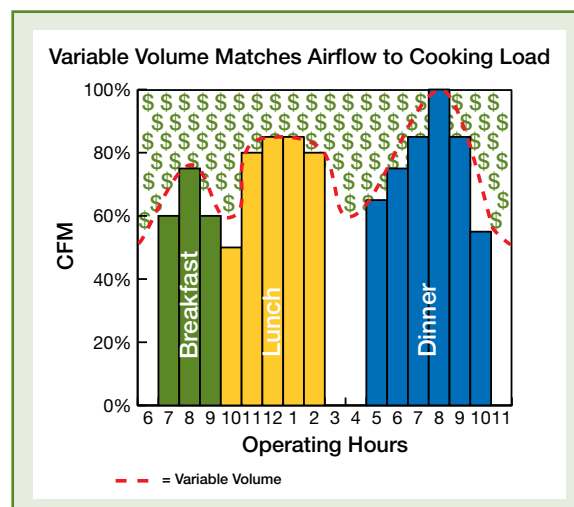
How do variable volume systems work?

Since the cooking load varies throughout the day, your exhaust system doesn't need to run at the maximum exhaust air volume all day.

The system monitors the cooking operation and adjusts the exhaust and supply unit fans so that when the cooking load is reduced, the fans operate at a reduced level providing energy savings

Benefits

- Fully modulating turndown of the design airflow, up to 50%, to maximize energy savings.
- Realize electrical energy savings.
- Realize savings associated with heating and cooling air.
- Systems meet International Mechanical Code 507.2.1.1 to automatically start fans when cooking operations occur.
- Reduced kitchen ventilation system sound levels to improve customer and employee comfort.
- 100% override button with adjustable timer to temporarily allow for planned heavy cooking periods.



A variable volume system will track the cooking load (dashed red line) and vary the exhaust and supply ventilation. The area above the red line represents energy savings.

Going for LEED™ Certification?

The Vari-Flow Air Management System and the Melink Intelli-Hood system align with the following LEED credits and may contribute toward earning up to two LEED credits.

Innovation and Design Process

- ID Credit 1 – Innovation in Design

Energy and Atmosphere

- EA Credit 1 – Optimize Energy Performance.

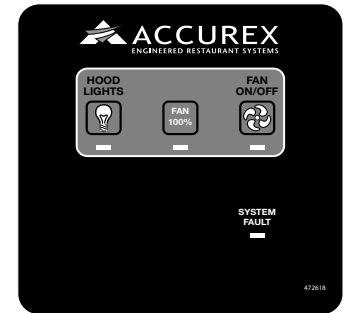


Accurex Vari-Flow Air Management System

The Accurex Vari-Flow Air Management System senses the heat output of the appliance lineup and exhausts and supplies only the amount of air necessary, thus providing valuable energy savings.

Key Features

- **Exceptional Value** — The Vari-Flow system is an economical choice. Considering up-front costs, maintenance and ongoing payback, the Vari-Flow is an all around cost-saver.
- **Space Pressure Control** — Accurex's Vari-Flow system controls the make-up air unit by sensing static pressure in the space, independent of the exhaust fan speed, to ensure proper room pressurization at all times. Other similar systems control the make-up air unit proportionally with the exhaust. This approach accounts for other ventilation in the space that is not controlled by the Vari-Flow, which can often lead to periods of improper building pressurization (proportional control is also an available program setting).
- **5 Times Quicker Response** — Maintaining capture and containment of cooking effluent and heat is important so it is critical for the variable volume system to respond quickly. The Vari-Flow system is designed with the temperature sensor in the capture tank versus in the duct collar where many other systems detect heat. Accurex's placement provides a response that is ready 5 times faster than a duct mounted sensor for superior performance.

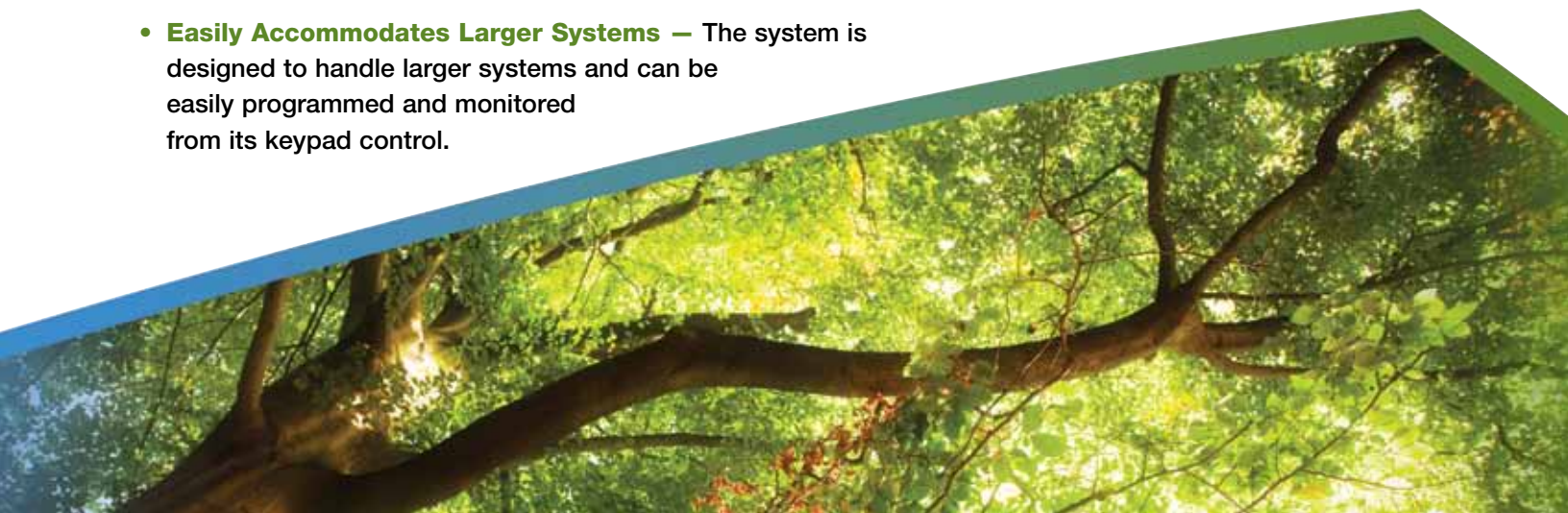


Melink® Intelli-Hood® System

Like the Vari-Flow system, the Intelli-Hood system senses the cooking activity and varies airflow to meet the demand.

Key Features

- **Secondary Optic Sensors** — In addition to a primary temperature sensor in the duct collar the Intelli-Hood system includes optic sensors to sense steam and/or smoke being generated from the cooking process, regardless of the heat load. When as little as seven percent of the optics infrared beam is blocked the exhaust fans will be brought up to full speed to capture the effluent. The system will return back to the required speed based on temperature when the hood has been cleared of smoke and steam.
- **Professional Start-up in the Field** — Melink includes a factory start-up with the purchase of their system. This start-up includes a site visit from a Melink field technician to ensure that the system is installed correctly and programmed based on the application. The technician will also provide basic training to operators present during the start-up and answer any questions about the system.
- **Easily Accommodates Larger Systems** — The system is designed to handle larger systems and can be easily programmed and monitored from its keypad control.



Variable Volume

*Which variable volume system
is best for your application?*

System Decision Matrix	Accurex Vari-Flow System	Melink Intelli-Hood System
Factory Installed System – Fully Modulating Turndown Up to 50%	■	■
IMC 507.2.1.1 Compliant	■	■
Full Fan Speed Override	■	■
Supply Controlled by Space Static Pressure	■	
Supply Controlled Proportionally	Optional	■
Professional Start-up by Factory Representative		■
Lower Cost	■	
Secondary Optic Sensors for Smoke and Steam		■
Small to Medium Size Applications	■	
Large or Steam Intensive Applications		■

Looking to Decrease the Payback Period?

Many state and local governments offer rebate and credit programs for which the Vari-Flow Air Management System and Melink Intelli-Hood System may qualify. Rebates decrease the up-front cost of the systems and their payback.



P.O. Box 410 • Schofield, WI 54476
Phone: 800.333.1400 • Fax: 715.241.6191

www.accurex-systems.com



Prepared to Support
Green Building Efforts