

Saved Money & Energy: Safely Reduced Lab Airflows 50-70%

Situation

Goal: Improve safety and functionality in 98 campus research labs while increasing energy efficiency, creating utility cost savings, and reducing the carbon footprint.

Project Scope

ABM (and TEL) won the right to be the prime design-build contractor. TEL out-performed another vendor in a 3-lab competitive pilot project based on safety and savings criteria.

The TEL team trained ABM personnel to install, commission, and support advanced laboratory technology.

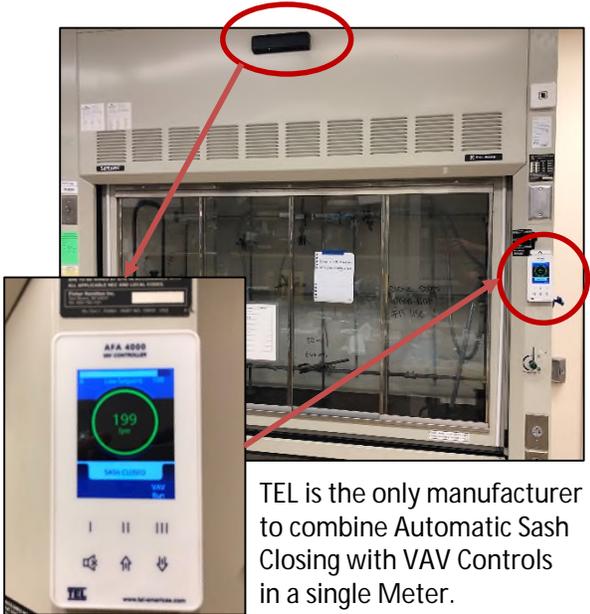
They also provided consulting and materials for the other laboratories.

Georgia Tech

Industry: Higher Education
Location: Atlanta, GA
Materials: \$1,300,000
Consulting: \$50,000
Project Type: Lab VAV Retrofit: Pilot, Parts, Design Assistance, Project Management, and Commissioning.

Project Detail:

- VAV retrofit training and materials
- JCI BMS integration
- 160 Auto Sash Closers
- 150 Snorkel Exhaust Control Systems
- 139 AFA 4000/E VAV FH Controllers
- 96 AFA 5000 Lab Space Controllers



TEL is the only manufacturer to combine Automatic Sash Closing with VAV Controls in a single Meter.

"I would like to pass along my sincere appreciation for a job well done. It has been a pleasure working with you. The task has been effortless thanks to your patience and devotion to this project. I look forward to working with you all in the future and you can be rest assured, you will come highly recommended for future projects."

Robert Daw, Project Manager, ABM

TEL provides laboratory solutions that deliver a safer workplace environment, increased energy efficiency, and improved operational performance.

TEL is a world leading manufacturer of laboratory airflow controls and monitors. In North American, TEL also provides engineered turn-key retrofits, retro-commissioning, and other products for new and existing laboratories. For more information, please visit www.tel-americas.com, or call us at 920.267.6111.

Customization

The ambitious Georgia Tech plan required re-coding core software parameters at the factory to deliver the most remote controllability available today.

TEL developed real-time Air Change per Hour (ACH) reporting on the AFA 5000 screen. This flexibility allowed Georgia Tech to precisely match system metrics with operational goals.



GESPC Smart Lab Initiative

FY20 M & V Report (annual report required by GEFA)

- Project completed construction ahead of schedule
- Saved \$192,984 in utilities
- Airflow savings due to higher actual floor rates than predicted
- Received \$75,000 in Georgia Power rebates to date and anticipate an additional \$139,554
- High construction savings due to successful implementation. Savings in Year 0 is much lower than years 1-10

Building	Modeled Savings	Measured Savings	% Reduction over Baseline
ES&T	74,880 CFM	112,058 CFM	73.7

FY21 M & V Report

ES&T	Measured Savings	Compared to Guarantee	\$ Savings
July	112,058 CFM	+42,351 CFM	\$68,965
August	112,562 CFM	+42,855 CFM	\$73,276
September	112,160 CFM	+42,453 CFM	\$50,198