

The Pleasanton project delivered a payback of under two years.

Situation

Pleasanton has four labs with Constant Air Volume (CAV) fume hoods and snorkel exhausts. The goal was a safe, effective way to reduce operating costs. TEL provided a turn-key Variable Air Volume (VAV) solution to optimize the building's exhaust air rates. The laboratories still meet or exceed all industry-accepted air-change rates, fume hood face velocities, and contaminant / pressurization envelope standards. The system is safe and utility costs are dramatically reduced.

Project Scope

TEL provided and installed 14 TEL VAV fume hood controllers and their associated exhaust dampers / actuators. PIR sensors (passive infrared to detect proximity) were fit on each hood and the controllers are programmed to alarm if the combination sash is left open for an extended period of time.

Exhaust volume feedback is sent from the hoods to the existing Siemens BMS which provides room pressure and temperature control. TEL is integrated into the Siemens system through a BACnet interface.

TEL utilized the Siemens BMS to implement an Occupied / Unoccupied schedule that reduces air flow considerably when lab staff is not present. TEL Engineers produced considerable kW savings during the system commissioning through equalizing the flow through the two lab exhaust fans.

Work locations included laboratories, utility rooms, hallways, and the rooftop. All work in labs, or that would require shutdown of HVAC equipment was performed during off-hours.

Thermo Fisher **ThermoFisher**
Summary **SCIENTIFIC**

Client Industry: Bio-Pharma

Client Location: Pleasanton, CA

Project Type: Fume Hood & Lab Retrofit

Project Cost: \$211,855

Annual Energy Savings:
\$130,853
591,249 kWh
1,282 KW
41,978 Therms

“We worked with TEL to deliver a comprehensive project with significant energy savings. The team did a great job collaborating across busy laboratories without interrupting production schedules.”

Jason Clark, Project Manager, Siemens



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

We are the North American affiliate of TEL, a world leading manufacturer of laboratory airflow controls and monitors. TEL America provides engineered turn-key retrofits (including retro-commissioning), certification services, relocatable fume hoods, modular laboratories, and the latest TEL products for new and existing laboratories. For more information, please visit www.tel-americas.com, or call us at 920.267.6111.