ELEMENTAL MACHINES

ESSCO CALIBRATION LABORATORY

Essco Calibration Laboratory SAVES UP TO 40 HOURS A WEEK with Elemental Machines' real-time lab monitoring software.

INDUSTRY
- Calibration Laboratory

PRIMARY VALUE
- Time Savings
- Accurate Data Collection

APPLICATION
- Lab Monitoring

SITUATION

" EVERY TIME A TECHNICIAN PERFORMED A CALIBRATION ON AN INSTRUMENT, HE OR SHE WOULD NEED TO WALK OVER TO ONE OF THE MANY ENVIRONMENTAL MONITORS PLACED THROUGHOUT THE LAB, LOOK AT THE CURRENT TEMPERATURE, LOOK AT THE CURRENT HUMIDITY, AND RECORD IT."

Essco Calibration Laboratory is an ISO/IEC 17025 accredited calibration laboratory that ensures its customers that test and measurement instrumentation meet the manufacturers' specifications. Being able to make accurate measurements requires that technicians constantly monitor and record the ambient temperature, humidity, and pressure conditions of the laboratory. This proved to be a tedious manual process.

"Every time a technician performed a calibration on an instrument, he or she would need to walk over to one of the many environmental monitors placed throughout the lab, look at the current temperature, look at the current humidity, and record it," said Jarrett Cameron, an account executive at Essco Calibration Laboratory. "That was super time consuming for us." Furthermore, Essco's Quality Control Department would manually collect and download the data of the ambient lab conditions on a weekly basis.

"It was difficult for our Quality Manager to constantly monitor the ambient conditions of our lab," said Jarrett. "He would either need to walk around checking all of our data-loggers throughout the day or rely on someone in the lab to alert him of a temperature fluctuation."

Essco needed an automated lab monitoring solution that allowed the technicians and Quality Control Department to track temperature, humidity, and barometric pressure in real time.

SOLUTION

" [IF ANYTHING GOES WRONG,] THE QUALITY CONTROL DEPARTMENT AND LAB MANAGER WILL GET AN EMAIL IMMEDIATELY..."

Essco Calibration Laboratory partnered with Elemental Machines for their lab monitoring software. Now, the lab is able to constantly monitor the lab's temperature, humidity, and even the barometric pressure, in real time.

In addition to the convenience of live monitoring, Essco's technicians benefit from the time savings. Jarrett estimated the technicians previously had to check the temperature and humidity readings 15 to 20 times per day. With Elemental Machines, those checks are automatic, resulting in time saved and interruptions avoided.

The Lab Management and Quality Control Departments are also able to save time and avoid inaccurate calibration thanks to automated alerts.

"If at any point the ambient temperature or humidity of our lab exceeds the acceptable threshold, our entire management team will be notified immediately, and we can assess the situation," said Jarrett. "Also, having a digital log of our lab's environmental conditions helps us stay compliant for auditing purposes."

RESULTS + BENEFITS

ESSCO NOW SAVES 20 TO 40 HOURS PER WEEK AND HAS REDUCED TRANSCRIPTION ERRORS THANKS TO THE AUTOMATED REAL-TIME DATA AND ALERTS.

Time Savings

Essco technicians perform approximately 250 calibrations per day and used to spend about two minutes manually gathering readings. Since Elemental Machines has automated this process, Essco now saves 20 to 40 hours per week.

Accurate Data Collection

Elemental Machines uses an API to seamlessly automate the transfer of data from all types of lab equipment, thus reducing transcription errors.