

Power Tools and Pipettes

Think back to the days before electricity and imagine trying to build a house without any of today's modern power tools. A hammer and a handsaw might be the only tools that you would have to work with. People did it, but it took a lot of time and a lot of energy.

A properly managed schedule has to account for all of the pipettes in the lab, ensuring that calibrations are carried out at regular intervals while not disrupting the regular laboratory workflow...

A full and complete inventory of all of the pipettes in the lab needs to be maintained in order to ensure that all pipettes are being included in the calibration procedure. For each pipette, records need to be kept as to the date of the last calibration and the time of the next calibration.

Reduce the time and effort required to get the job done.

Fortunately, times have changed and we now have a terrific assortment of modern tools at our disposal, that dramatically reduce the time and effort required to get the job done.

Trying to maintain a manual system for pipette calibration with a pen, a notebook and maybe a spreadsheet is a lot like trying to build a house in the days before electricity. The amount of scheduling, data collection, calculations and reporting will test the limits of any manual system as well as the patience of the person responsible for getting the job done.

Fortunately, advances in software have done for the laboratory what power tools have done for house builders. A software-based, automated solution can now be your "power tool" for pipette calibrations.

Organize and Schedule

The largest drain on time and resources and the most difficult part of a manual calibration system can be organizing and scheduling regular calibrations of all your pipettes. A properly managed schedule has to account for all of the pipettes in the lab, ensuring that calibrations are carried out at regular intervals while not disrupting the regular laboratory workflow.

A process also needs to be in place to identify, which pipettes are coming due for calibration in order to ensure that the pipette will be available. If an analyst is not made aware ahead of time that a pipette is due for calibration, they may have to set aside important work or reschedule the time for calibration. If a pipette is not calibrated according to schedule that will have to be documented and the calibration re-scheduled.

Depending on the frequency of calibration and the number of pipettes in the laboratory the manual system may need to schedule and monitor hundreds of calibration tests per year.



An automated system can maintain a secure database of pipettes, calibration schedules and calibration testing results. This database can be used to automate all aspects of scheduling pipette calibrations.

A complete and thorough calibration history assures clients and auditors that proper procedures are in place and being followed...

Record Results Accurately

Full and complete documentation of calibration activities and results is an absolutely essential component to any calibration procedure. Who performed the calibration, when was it performed, what were the results, what were the results for the last three calibrations, etc, etc.

A complete and thorough calibration history for each pipette not only ensures the lab that their pipettes are performing to specifications, it also assures clients and auditors that proper procedures are in place and being followed.

Maintaining that high level of documentation in a manual system is a time consuming task involving preparing, organizing and accessing paper based records. An automated solution, with a secure and comprehensive database, can eliminate the time required for documentation and provide a more complete and accurate record of calibration activities.

Save Time on Data Collection and Calculations

The amount of time spent to maintain a manual calibration system can be staggering. We have already discussed two of the most time consuming activities, scheduling and documentation. How about adding in the time spent on the actual calibration process?

Manual data collection combined with performing the many required calculations adds significantly to the amount of time that a manual calibration system is going to consume. Automating data collection and all of the calculations significantly reduces the time required for the calibration process.

The benefits of regular pipette calibration are crystal clear...

Reduce Administration Costs

Add it all up and maintaining a manual pipette calibration system can be an expensive proposition in terms of the time and resources required to maintain and to administer the system.

However, the benefits of regular pipette calibration are crystal clear. Regular performance testing and calibration of these devices is essential to ensure that they are performing to specification. Potential problems must be identified and corrected before they impact the integrity of laboratory data.

An automated pipette calibration system can more efficiently manage and document the calibration process while dramatically reducing the day to day costs of maintaining the system.

A Power Tool for Pipette Calibration

Remember the people trying to build the house without power tools? Unfortunately, that is the stage that many of today's labs are at when it comes to their pipette calibrations. Fortunately, power tools are now available in the form of software that can automate the scheduling, documenting and performing of pipette calibrations. Using these tools the job will get done better and faster and it will take less laboratory time and resources.

Pipette Tracker Pro is the top of the line power tool for pipette calibrations. A full security implementation, extensive scheduling and documentation options, support for Oracle and SQL Server databases and complete automation of data collection and calculations make it the number one choice to renovate your manual pipette calibration system.

Want to introduce a new power tool into your lab? Ask for your free Pipette Tracker Pro brochure...

Published Article
Title: Power Tools and Pipettes
Published: June 2003 issue of Labtronics
Connections Newsletter