

Are all calibrations the same?

Recently, someone came up to me and advised that some companies are doing weight calibrations improperly. He asked "How can we educate customers to make sure they are getting what they pay for?"

The first step is ensuring the calibration weights used are from a National Voluntary Accreditation Program (NVLAP) accredited laboratory. This accreditation allows customers to make an informed decision when selecting a laboratory, as it demonstrates competence, impartiality and capability.

Rice Lake Weighing Systems' NVLAP accreditation is more than a piece of paper. Rice Lake was the first industrial lab to achieve NVLAP accreditation. What does this accreditation signify? The NVLAP Policy Guide states that "Proficiency testing, along with document review and on-site assessment, is an integral part of the NVLAP accreditation process. NVLAP-accredited laboratories are assessed against the management and technical requirements published in the International Standard, ISO/IEC 17025:2005."

Rice Lake participates in proficiency testing annually, conducts on site document review and management review. All calibrations take place at Rice Lake in a controlled environment. Calibrations take place in an Echelon Class I, Class II or Class III laboratory. It is important that weights are calibrated on the correct balance. Lower class weights should not be calibrated on the highest class balances or vice-versa.



Calibrations for weights require documentation for environmental controls, equipment monitoring and training of all employees. Employees are trained on the proper weighing procedure for the weights to be calibrated.

One requirement for calibrations is to provide an uncertainty in the calibration. "ILAC-P14 guides the accredited laboratories to consider the inclusion of uncertainty contributions from repeatability and, when available, reproducibility." Some of the parameters include evaluations of the process over time. This is conducted by testing the process using the same balances and procedures with documentation. Once the uncertainty is calculated, it is required to be published on the Calibration Report.

Weight calibrations are important to maintain the traceability chain. Maintaining the traceability to the SI through NIST guarantees that weights calibrated in Wisconsin are as accurate as weights calibrated in another country.

Not all calibrations are the same.

Make sure customers know the importance of using an NVLAP accredited laboratory.