Standard vs. Accredited Calibration


J.A. KING
PRECISION MEASUREMENT PROFESSIONALS
Certificate Of Calibration and Traceability

We frequently field questions about the difference between a standard calibration and an accredited calibration. For the laboratories at J.A. King, an accredited calibration follows a process that has been accredited by A2LA and conforms to the standards set by ISO 17025. Although all customers benefit from J.A. King's stringent quality system and ISO 17025 accreditation, all accredited calibrations must meet additional, specific requirements identified by A2LA (our accrediting body).

Some of these additional requirements involve additional information on the calibration certificate. These include the presence of the accreditation logo and our lab's certificate number as well as measurement uncertainties listed for each test point. This evaluates the repeatability of the specific device under test and gives our customers more useful information for determining their measurement accuracies than a stated measurement accuracy ratio.

However, a few of the differences between a standard and accredited calibration have to do with what happens "behind the certificate". For example, during an accredited calibration the technician evaluates the repeatability of the specific device under test by calculating the actual uncertainty for each test point. Also, for an accredited calibration the J.A. King technician must follow the exact calibration procedure listed on our scope, such as ASTM D2240 for durometers, even when other procedures exist. Finally, in order to maintain our accreditation we participate in blind, inter-laboratory proficiency testing to verify our measurement capabilities and stated uncertainties.