QuickStart Guide to ISO/IEC 17025:2017

ISO/IEC 17025 is an international standard that specifies the general requirements for the competence of testing and calibration laboratories. It provides guidelines for establishing and maintaining a quality management system to ensure the accuracy, reliability, and consistency of testing and calibration results.

Here are the key steps to get started:

1. **Understand the Standard:** Familiarize yourself with the requirements of ISO/IEC 17025. It's essential to know the key terms and general structure of the standard.

2. **Identify the Applicable Requirements:** Determine which sections of the standard are relevant to your laboratory's activities. ISO/IEC 17025 covers a broad range of activities, including testing, calibration, and sampling.

3. **Gap Analysis:** Conduct a gap analysis to identify the differences between your current laboratory practices and the requirements of ISO/IEC 17025. This will help you understand what needs to be addressed to meet the standard's criteria.

4. **Develop a Quality Management System (QMS):** Create and implement a comprehensive QMS that aligns with the requirements of ISO/IEC 17025. The QMS should cover areas such as document control, equipment maintenance, personnel competence, measurement traceability, and corrective actions. A few are clarified below:

   a. **Document Control:** Develop and implement procedures for document control, ensuring that all relevant documents, such as testing methods, procedures, and records, are controlled, and updated as necessary.

   b. **Training and Competence:** Ensure that all laboratory personnel are appropriately trained and competent to carry out their assigned tasks. Maintain records of their qualifications, training, and experience.

   c. **Equipment Calibration:** Establish a calibration program for all measuring and testing equipment used in the laboratory. This program should ensure that equipment is calibrated at regular intervals and that calibration records are well-maintained.

   d. **Measurement Uncertainty:** Assess and document the measurement uncertainty associated with testing and calibration activities. This helps to ensure that the reported results are reliable and accurate. Uncertainty budgets for calibration labs will need to be developed to support Calibration and Measurement Capabilities on proposed scope of accreditation.

5. **Proficiency Testing**: Participate in proficiency testing or inter-laboratory comparisons to assess the laboratory's performance and demonstrate competence.

6. **Internal Auditing**: Implement an internal audit program to regularly review the laboratory's activities, processes, and compliance with ISO/IEC 17025. Address any nonconformities found during the audit.

7. **Management Review**: Conduct regular management reviews to assess the effectiveness of the QMS, identify opportunities for improvement, and allocate necessary resources.

8. **Apply For Accreditation**: When you believe your laboratory is ready, contact a recognized accreditation agency, like Perry Johnson Laboratory Accreditation, Inc., to apply for accreditation. Their external assessment will determine if your laboratory meets the requirements of ISO/IEC 17025 and qualifies for accreditation.

Achieving ISO/IEC 17025 accreditation is an ongoing process. Once accredited, your laboratory must maintain and revise its QMS and undergo periodic reassessments to ensure continued compliance with the standard. For more information, please visit **www.pjlabs.com** or call **1-877-369-5227**.