
# ISO/IEC 17025 Quality Control & Conformity Declaration

BTS
Training & Consultancy

Website: www.btsconsultant.com

Email: info@btsconsultant.com

Telephone: 00971-2-6452630

# ISO/IEC 17025 Quality Control & Conformity Declaration

## Introduction:

Measurement in testing laboratory is needed by quality control services. Testing is made using measurement equipment based validated methods and standards. It is usually used some known parameters characterizing the product properties such chemical composition and physical properties. The obtained results are used for conformity declaration, generally equipment are calibrated by accredited laboratories i.e. existing traceability of measurement. This, is not sufficient, because uncertainties given by the testing process are large than that given by simple calibration of measurement equipment, the uncertainty budget of testing measurement includes the effect of all influencing factors. This course is designed to provide necessary information and practice for a good evaluation of uncertainties of measured parameters. The conformity declaration is very accurate using such approach.

ISO/IEC 17025:2005 specifies the general requirements for the competence to carry out tests and/or calibrations, including sampling. It covers testing and calibration performed using standard methods, non-standard methods, and laboratory-developed methods. It is applicable to all organizations performing tests and/or calibrations. These include, for example, first-, second- and third-party laboratories, and laboratories where testing and/or calibration forms part of inspection and product certification. ISO/IEC 17025:2005 is applicable to all laboratories regardless of the number of personnel or the extent of the scope of testing and/or calibration activities. When a laboratory does not undertake one or more of the activities covered by ISO/IEC 17025:2005, such as sampling and the design/development of new methods, the requirements of those clauses do not apply. ISO/IEC 17025:2005 is for use by laboratories in developing their management system for quality, administrative and technical operations. Laboratory customers, regulatory

authorities and accreditation bodies may also use it in confirming or recognizing the competence of laboratories. ISO/IEC 17025:2005 is not intended to be used as the basis for certification of laboratories.

This course enables participants to be familiar with the basic concepts of implementation and management of a laboratory management system (LMS) as specified in ISO/IEC 17025. The participant will learn the different components of a LMS, including the quality manual, policy, required procedures, management review, internal audit and all the factors that can influence test and/or calibration results performed by a laboratory. This course enables participants to learn about the best practices for implementing and managing a laboratory management system (LMS) as specified in ISO/IEC 17025, as well as best practices for implementing quality controls. The participant will learn the different component of this standard, including the quality manual, policy, required procedures, management review, internal audit and all the factors that can influence test and/or calibration results performed by a laboratory.

## Who Should Attend?

Managers, Team Leaders, Line Managers, Superintendents, OE Champions, Quality and Project Managers, Supervisors, Executives, Internal and External Auditors, Members of IT Team, Health & Safety Managers, Risk Managers, Business Process Owners, Business Finance Managers, Business Risk Managers, Regulatory Compliance Managers, Project Managers, Continuity, Risk, Quality, IT and Environmental Managers, Anyone involved in the system development, implementation and maintenance, Regulatory Affairs Managers, Consultants, Anyone who is involved in ISO standards, Laboratory professionals , Quality (assurance) department personal, Production Process Managers, Engineering staff, Those involved in the laboratory, production and quality control

## Course Objectives:

**By the end of this course delegates will be able to:**

- Understand the fundamentals of laboratory management
- Know the key components of a laboratory management system in accordance with ISO/IEC 17025
- Introduce the concepts, approaches, methods and techniques allowing to effectively manage a LMS
- Understand the relationship between a laboratory management system, including quality management, controls and compliance with the requirements of different stakeholders of the organization
- Understand the management and technical requirements of ISO/IEC 17025
- Explain the principle of quality control and conformity declaration using testing and measurement equipment
- Describe the requirements of ISO/IEC 17025 about the uncertainty estimation
- Explain the relationship between the uncertainty and conformity assessment
- Implement the uncertainty computing procedure for conformity declaration using typical samples
- Understand the implementation of a Laboratory Managements System in accordance with ISO/IEC 17025
- Understand the requirements of ISO/IEC 17025
- Know the concepts, approaches, methods and techniques allowing to effectively manage a Laboratory Management System
- Acquire the necessary knowledge to contribute in implementing a Laboratory Management System (LMS) as specified in ISO/IEC 17025

## Course Outline:

- Understand the fundamentals of laboratory management
- Know the key components of a laboratory management system in accordance with ISO/IEC 17025
- Introduce the concepts, approaches, methods and techniques allowing to effectively manage a LMS
- Understand the relationship between a laboratory management system, including quality management, controls and compliance with the requirements of different stakeholders of the organization
- Understand the management and technical requirements of ISO/IEC 17025
- Explain the principle of quality control and conformity declaration using testing and measurement equipment
- Describe the requirements of ISO/IEC 17025 about the uncertainty estimation
- Explain the relationship between the uncertainty and conformity assessment
- Implement the uncertainty computing procedure for conformity declaration using typical samples
- Understand the implementation of a Laboratory Managements System in accordance with ISO/IEC 17025
- Understand the requirements of ISO/IEC 17025
- Know the concepts, approaches, methods and techniques allowing to effectively manage a Laboratory Management System
- Acquire the necessary knowledge to contribute in implementing a Laboratory Management System (LMS) as specified in ISO/IEC 17025
- Setting SMART Objectives for continuous improvement