



The Advantages of Being an Accredited Laboratory



A RECOGNITION OF TESTING COMPETENCE

Laboratory accreditation provides formal recognition to competent laboratories, thus providing a ready means for customers to identify and select reliable testing, measurement and calibration services. To maintain this recognition, laboratories are re-evaluated regularly by the accreditation body to ensure their continued compliance with requirements, and to check that their standard of operation is being maintained. The laboratory is also required to participate in relevant proficiency testing programs between reassessments, as a further demonstration of technical competence.

Accredited laboratories usually issue test or calibration reports bearing the accreditation body's symbol or endorsement, as an indication of their accreditation. Clients are encouraged to check with the laboratory as to what specific tests or measurements they are accredited for, and for what ranges or uncertainties. This information is specified in the laboratory's scope of accreditation, issued by the accreditation body. The description in the scope of accreditation also has advantages for the customers of laboratories in enabling them to find the appropriate laboratory or testing service.

A MARKETING ADVANTAGE

Accreditation is an effective marketing tool for testing, calibration and measurement organisations, and a passport to submit tenders to contractors that require independently verified laboratories.

Laboratory accreditation is highly regarded both nationally and internationally as a reliable indicator of technical competence. Many industries, such as the construction materials industry, routinely specify laboratory accreditation for suppliers of testing services.

Unlike certification to ISO 9001, laboratory accreditation uses criteria and procedures specifically developed to determine technical competence, thus assuring customers that the test, calibration or measurement data supplied by the laboratory or inspection service are accurate and reliable.

Many accreditation bodies also publish a directory of their accredited laboratories, which includes the laboratories' contact details plus information on their testing capabilities. This is another means of promoting a laboratory's accredited services to potential clients.

Finally, through a system of international agreements (see later in this brochure) accredited laboratories receive a form of international recognition, which allows their data to be more readily accepted in overseas markets. This recognition helps to reduce costs for manufacturers and exporters that have their products or materials tested in accredited laboratories, by reducing or eliminating the need for retesting in another country.

A BENCHMARK FOR PERFORMANCE

Laboratory accreditation benefits laboratories by allowing them to determine whether they are performing their work correctly and to appropriate standards, and provides them with a benchmark for maintaining that competence. Many such laboratories operate in isolation to their peers, and rarely, if ever, receive any independent technical evaluation as a measure of their performance. A regular assessment by an accreditation body checks all aspects of a facility's operations related to consistently producing accurate and dependable data. Areas for improvement are identified and discussed, and a detailed report provided at the end of each visit. Where necessary, follow-up action is monitored by the accreditation body so the facility is confident that it has taken the appropriate corrective action.

In addition to commercial testing and calibration services, manufacturing organisations may use laboratory accreditation to ensure the testing of their products by their own in-house laboratories is being done correctly.

THE CHOICE BETWEEN LABORATORY ACCREDITATION AND ISO 9001 CERTIFICATION

Laboratory accreditation uses criteria and procedures specifically developed to determine technical competence. Specialist technical assessors conduct a thorough evaluation of all factors in a laboratory that affect the production of test or calibration data. The criteria are based on the international standards called ISO/IEC 17025 or ISO 15189, which are used for evaluating laboratories throughout the world. Laboratory accreditation bodies use this standard specifically to assess factors relevant to the laboratory's technical competence, including the:

- ◆ technical competence of staff

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“Laboratory accreditation provides a benchmark for performance, a range of marketing advantages, and international recognition of technical competence”



- ◆ validity and appropriateness of test methods
- ◆ traceability of measurements and calibrations to national standards
- ◆ suitability, calibration and maintenance of test equipment
- ◆ testing environment
- ◆ sampling, handling and transportation of test items
- ◆ quality assurance of test and calibration data

By this process, laboratory accreditation aims at assuring you or your customers that your laboratory's test or calibration data are accurate and reliable.

The ISO 9001 standard is widely used in manufacturing and service organisations to evaluate their system for managing the quality of their product or service. Certification of an organisation's quality management system against ISO 9001 aims at confirming the compliance of the management system to this standard. Whilst laboratories may be certified to ISO 9001, such certification does not make any statement about the technical competence of a laboratory.

INTERNATIONAL RECOGNITION FOR YOUR LABORATORY

Many countries around the world have one or more organisations responsible for the accreditation of their nation's laboratories. Most of these accreditation bodies have adopted ISO/IEC 17025 as the basis for accrediting their country's testing and calibration laboratories, and ISO 15189 for medical laboratories. This has helped countries employ a uniform approach to determining laboratory competence. It has also encouraged laboratories to adopt internationally accepted testing and measurement practices, where possible.

This uniform approach allows countries to establish agreements among themselves, based on mutual evaluation and acceptance of each other's accreditation systems. Such international agreements, called mutual recognition arrangements (MRAs), are crucial in enabling test and calibration data to be accepted between these countries. In effect, each partner in such an MRA recognises the other partner's accredited laboratories as if they themselves had undertaken the accreditation of the other partner's laboratories.

Over 40 laboratory accreditation bodies have signed a multi-lateral

recognition agreement, called the ILAC Arrangement, which greatly enhances the acceptance of data across the national borders of the signatory countries. Full details for the ILAC Arrangement and the list of signatories can be found on the ILAC website at www.ilac.org.

This developing system of international MRAs among accreditation bodies has enabled accredited laboratories to achieve a form of international recognition, and allowed data accompanying exported goods to be more readily accepted on overseas markets. This effectively reduces costs for both the manufacturer and the importer, as it reduces or eliminates the need for products to be retested in another country.

MORE INFORMATION ABOUT ILAC

ILAC is the peak international authority on laboratory accreditation, with a membership consisting of accreditation bodies and affiliated organisations throughout the world. It is involved with the development of laboratory accreditation practices and procedures, the promotion of laboratory accreditation as a trade facilitation tool, the assistance of developing accreditation systems, and the recognition of competent test and calibration facilities around the globe. ILAC actively cooperates with other relevant international bodies in pursuing these aims.

ILAC also publishes a range of literature on topics covering accreditation, testing, trade facilitation and related subjects. Its internet site at www.ilac.org can provide a range of information on laboratory accreditation, as well as the location of its members world-wide. A brochure, entitled *What Is ILAC?*, provides detailed information on ILAC and its activities, and is available on request.

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