

HOW CAN YOU TELL IF A LABORATORY IS NVLAP-ACCREDITED?

Accredited laboratories usually issue test or calibration reports bearing a logo or endorsement indicating their NVLAP accreditation. Each laboratory accredited by NVLAP is formally recognized through the issuance of a *Certificate of Accreditation* and a *Scope of Accreditation*. You should check with the laboratory as to what specific tests or measurements they are accredited for, and for what ranges or uncertainties. This is specified in their *Scope of Accreditation*, which may be supplied by the laboratory upon request.

NVLAP publishes an updated directory list of accredited laboratories on its web site: <http://www.nist.gov/nvlap>.

You can also contact NVLAP and find out whether there are any accredited laboratories who can perform the tests or calibrations you require.

Contact NVLAP at:

National Voluntary Laboratory Accreditation Program
National Institute of Standards and Technology
100 Bureau Drive, Stop 2140
Gaithersburg, Maryland 20899-2140

Phone: 301-975-4016
Fax: 301-926-2884
E-mail: nvlap@nist.gov

NVLAP Accreditation is Available in the Following Areas:

- Asbestos Fiber Analysis
 - PLM and TEM
- Calibration
 - Dimensional, DC/Low, RF/Microwave, Ionizing Radiation, Mechanical, Optical Radiation, Thermodynamic, Time & Frequency
- Chemical Calibration
- Electromagnetic Compatibility & Telecommunications
- Fasteners and Metals
- Homeland Security Applications
 - Personal Body Armor
 - Radiation Detection Instruments
- Information and Technology Security Testing
 - Common Criteria Testing
 - Cryptographic Security Testing
- Ionizing Radiation Dosimetry
- Product Testing
 - Acoustical Testing
 - Carpet and Carpet Cushion
 - Commercial Products Testing
 - Construction Materials
 - Electric Motors
 - Energy Efficient Lighting
 - Thermal Insulation
 - Wood-Based Products
- Voting System Testing

NVLAP[®]



National Voluntary Laboratory Accreditation Program

NIST

National Institute of Standards and Technology
Technology Administration, U.S. Department of Commerce



◀ ◀ Why Use An Accredited Laboratory? ▶ ▶

WHAT SHOULD YOU CONSIDER WHEN CHOOSING A LABORATORY?

When selecting a laboratory to fulfill your testing or calibration needs, you need to be sure that it can supply you with accurate and reliable results. The technical competence of a laboratory depends on a number of factors including:

- the qualifications, training and experience of the staff
- the right equipment - properly calibrated and maintained
- adequate quality assurance procedures
- proper sampling practices
- appropriate testing procedures
- valid test methods
- traceability of measurements to national standards
- accurate recording and reporting procedures
- suitable testing facilities

All these factors contribute to a laboratory being technically competent to do your testing and/or calibration.

WHY IS A LABORATORY'S TECHNICAL COMPETENCE SO CRITICAL TO YOU?

Minimize Risk

Throughout the world today, customers seek reassurance that the products, materials or services they produce or purchase meet their expectations or conform to specific requirements. This often means that the product is sent to a laboratory to determine its characteristics against a standard or a specification. For the manufacturer or supplier, choosing a technically competent laboratory minimizes the risk of producing or supplying a faulty product.

Avoid Expensive Retesting

Testing of products and materials can be expensive and time consuming, even when they are done correctly the first time. If not done correctly, then the cost and time involved in retesting can be even higher if the product has failed to meet specifications or expectations. Choosing a technically competent laboratory minimizes the chance of retesting being required.

Enhance Your Customer's Confidence

Confidence in your product is enhanced if customers know it has been thoroughly evaluated by an independent, competent testing facility. This is particularly so if you can demonstrate to them that the laboratory itself has been evaluated by a third party.

Reduce Costs and Improve Acceptance of Your Goods Overseas

Through a system of international agreements, technically competent, accredited laboratories receive a form of international recognition, which allows their data to be more readily accepted on 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 the importing country.

HOW THEN CAN YOU BE SURE THAT A LABORATORY IS TECHNICALLY COMPETENT?

Throughout the world, many countries now rely on a process called *Laboratory Accreditation* as a means of determining technical competence. 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 an international standard called ISO/IEC 17025, which is used for evaluating laboratories throughout the world. Laboratory accreditation bodies use this standard specifically to assess factors relevant to a laboratory's ability to produce precise, accurate test and calibration data, including the:

- technical competence of staff
- validity and appropriateness of test methods
- traceability of measurements and calibration 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.

To ensure continued compliance, accredited laboratories are regularly reassessed to check that they are maintaining their standards of technical expertise. These laboratories may also be required to participate in regular proficiency testing programs as an ongoing demonstration of their competence.

Laboratory accreditation thus provides a means of evaluating the competence of laboratories to perform specific types of testing, measurement and calibration. It also allows a laboratory to determine whether it is performing its work correctly and to appropriate standards. Manufacturing organizations may also use laboratory accreditation to ensure the testing of their products by their own in-house laboratories is being done correctly.

Most importantly, laboratory accreditation provides formal recognition to competent laboratories, thus providing a ready means for customers to find reliable testing and calibration services able to meet their needs.