



Why use an accredited laboratory?



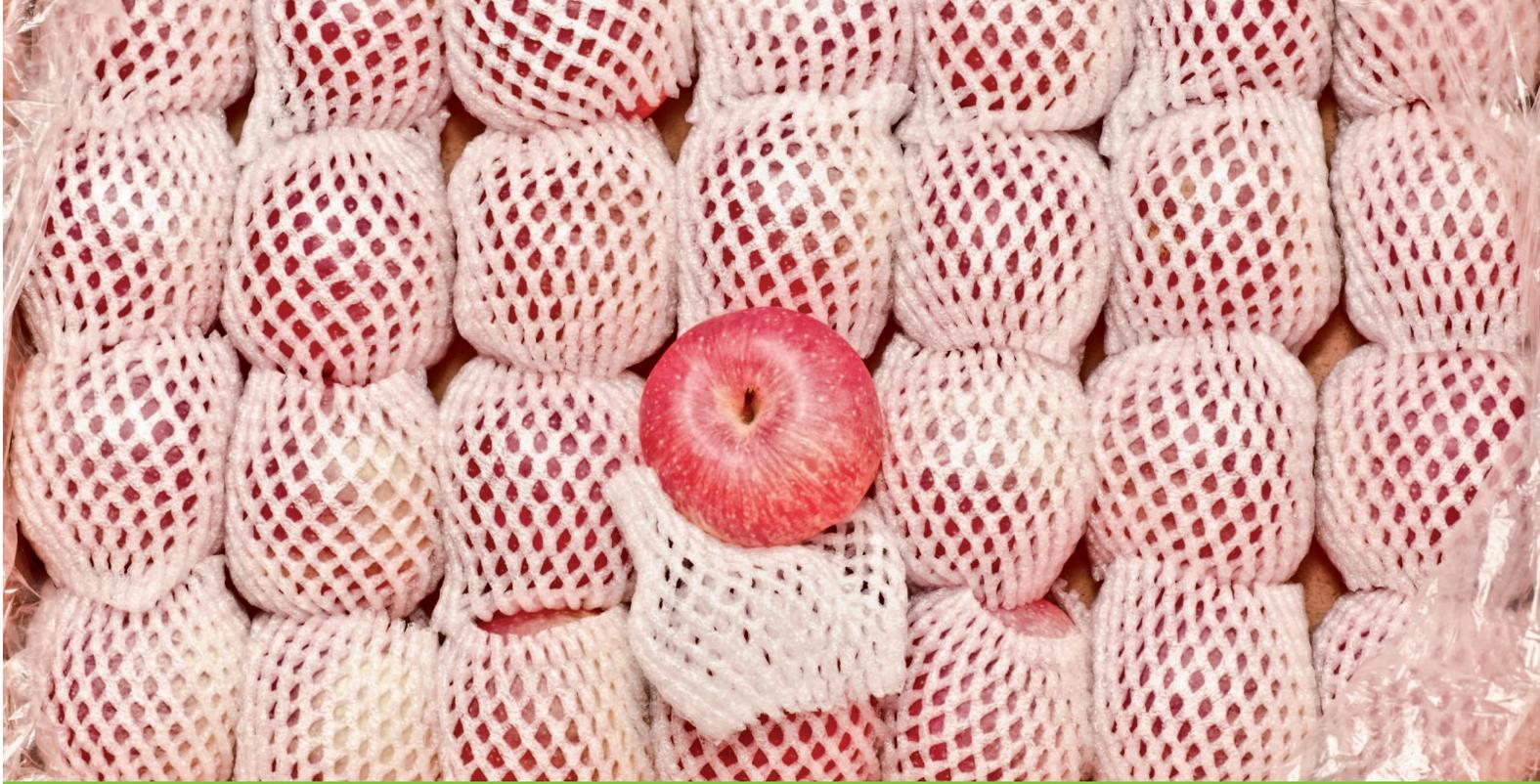
The benefits for industries and exporters of using NiNAS-accredited laboratories



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What should you consider when choosing a laboratory?

When selecting a supplier to fulfill your testing, calibration or measurement needs, you need to be sure that the laboratory is **technically competent**.

The technical competence of a laboratory relies on a number of factors, including:

- » Staff with the right qualifications.
- » The right equipment which is appropriately calibrated and maintained.
- » Appropriate testing environment.
- » Appropriate sampling, handling and transportation practices.
- » Sound testing/inspection procedures.
- » Accurate recording and reporting of data.
- » Adequate quality assurance and quality control procedures.

A laboratory may offer their own assurances that they have the above attributes, or you can attempt to evaluate the service yourself. But the way you can be confident in the results of the testing, measurement or calibration services that you pay for, is by securing these services from a laboratory that is **accredited by NiNAS** in accordance with ISO/IEC 17025 for the relevant services.

What is NiNAS accreditation and how does it work?

NiNAS accreditation is the result of a process by which the Nigeria National Accreditation Service (NiNAS) determines against recognized standards the impartiality and competence of an organization to carry out specific tasks.

When it comes to the accreditation of laboratory services, the international standard ISO/IEC 17025 defines what is required of a laboratory in order for it to produce **accurate** and **reliable** data and results.

The accreditation process involves specialist technical assessors conducting a thorough assessment of all factors in the facility that affect the production of technical data, including:

- » Technical competency of staff
- » Validity and appropriateness of methods used
- » Traceability of measurements and calibrations to national standards
- » Appropriate application of measurement uncertainty
- » Suitability, calibration and maintenance of test equipment
- » The testing environment.
- » Sampling, handling and transportation of test items
- » Quality assurance of test, inspection or calibration data

Technical competence and NiNAS accreditation are critical to you as a manufacturer, supplier, exporter or customer.



Certification and Accreditation are not the same thing

A laboratory may have chosen to be audited and certified to the international standard for quality management systems, ISO 9001.

Accredited certification to ISO 9001 and accreditation to ISO/IEC 17025 both provide confidence in the services of a laboratory, but **they are not the same**. There are crucial differences between them.

While ISO 9001 attests the quality management system of a laboratory, ISO/IEC 17025 attests the technical competence of a laboratory and guarantees reliability of the test and calibration results in addition to the quality management.

ISO/IEC 17025 also has a component to it that requires that the management systems of the facility meet the principles of ISO 9001. Therefore, a laboratory's fulfillment of the requirements of ISO/IEC 17025 means that the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations.

However, holding accredited certification to ISO 9001 does not, on its own, represent evidence that a laboratory is able to provide you with accurate and reliable testing or calibration. For this, the laboratory must itself be accredited to ISO/IEC 17025.

Make sure that the laboratories that test your products or calibrate your equipment are accredited to the ISO/IEC 17025 standard to carry on those activities.

Benefits of using NiNAS-accredited laboratories

More revenues

Your products more easily accepted overseas

As NiNAS accreditation will be recognized internationally, it can open doors overseas. The acceptance of products and services across national borders is made easier by removing the need for them to undergo additional tests in each country into which they are sold. Indeed, an increasing number of organizations are specifying accredited testing as a precondition to tendering for contracts.

Enhanced customer confidence

Turning to a NiNAS-accredited lab adds value to your product in terms of reliability and recognition. This fact enhances your customers' confidence and reinforces the good reputation of your company. Indeed, increasingly customers are relying on independent evidence, rather than simply accepting a supplier's word that the product is "fit for purpose".

Competitive advantage

Holding accredited conformity assessment results shows credible evidence of conformance with national and international standards and regulations, which can differentiate your business from the competition.

If you have easier access to international markets, your customers trust you, you hold a competitive edge over your competitors, and your business opportunities increase.

Lower costs

Avoid expensive retesting

Choosing a NiNAS-accredited laboratory minimizes the chance of retesting being required. Through a system of international agreements, NiNAS-accredited laboratories receive a form of international recognition, which allows their data to be more readily accepted on overseas markets. Manufacturers and exporters that have their products or materials tested or calibrated in NiNAS-accredited laboratories reduce or eliminate the need for retesting in the importing country.

Save time and money

Choosing a NiNAS-accredited laboratory effectively saves time and money for both the exporters and the importers, as it reduces bureaucracy and it reduces or eliminates the need for products to be retested in another country.



Fewer risks

Avoid re-works and rejections

Choosing a NiNAS-accredited laboratory minimizes the risk of producing or supplying a faulty product. This means no costly re-work and no rejections of entire consignments.

Peace of mind

Choosing a NiNAS-accredited laboratory is your guarantee of reliable and comparable test and calibration results. Accreditation increases the reliability of products.

Due diligence

Choosing a NiNAS-accredited laboratory to carry out an independent evaluation helps demonstrate due diligence in the event of legal action.

Informed choices

NiNAS accreditation provides a ready means for customers to identify and select reliable laboratories, suitable for their needs.

How can you tell if a laboratory is accredited by NiNAS?

You can check the NiNAS **Directory** of accredited laboratories. On this directory, you will find contact details for laboratories, as well as information on their testing and calibration capabilities.

If necessary, you can contact NiNAS to find out whether there are any accredited laboratories that can perform the tests or calibrations that you require.

In addition, accredited laboratories usually issue test or calibration reports bearing an **accreditation symbol** indicating their NiNAS accreditation.

You should also check with the laboratory which specific tests or measurements they have been accredited for, and with what ranges or uncertainties.



International recognition

Many countries around the world have one or more organizations responsible for the accreditation of their nation's laboratories. Most of these accreditation bodies use ISO/IEC 17025 as the basis for accrediting their country's testing and calibration laboratories. This, in turn, has encouraged more laboratories to adopt these internationally accepted testing and measurement practices.

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

Over 90 laboratory accreditation bodies have signed a multilateral recognition agreement, called the International Laboratory Accreditation Cooperation (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 system of international arrangements between accreditation bodies has allowed data accompanying exported goods to be more readily accepted in the global market. This reduces or eliminates the need for products to be retested in another country and reduces costs for both the manufacturer and the importers.



Low-cost lab?

Are you confident that the organization has the technical competence/the resources to do the work?

Have you considered the risks associated with not using NiNAS-accredited laboratories? For example:

- » Product failure (as result of relying on invalid test results).
- » Increased costs caused by inaccurate measurement (as a consequence of poorly calibrated equipment).
- » Rejected tenders because of inability to support product claims with a NiNAS-accredited certificate or test reports.

Do not run the risk of undermining your long term success by purchasing independent evaluations that are not NiNAS-accredited.

To remember

Remember if you are securing testing, measurement or calibration services:

- » Using the services of a laboratory accredited to ISO/IEC 17025 means that you are using a laboratory that has been independently assessed to have demonstrated technical competence underpinned by a quality system.
- » Check that the scope of the laboratory's accreditation is appropriate for the tests, calibrations or measurements that you require.
- » A laboratory accredited to ISO/IEC 17025 may also maintain a certified ISO 9001 management system, for example if its quality system covers non-testing functions such as accounting, marketing, information services or education. However, holding accredited ISO 9001 certification does not, on its own, represent evidence that a laboratory is able to provide you with accurate and reliable testing, measurement or calibration.
- » If you are unsure about what to look for in your laboratory or need more information about accreditation, please contact NiNAS.





NiNAS

Nigeria National Accreditation Service

www.ninas.ng

info@ninas.ng



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