

STARTING AN ISTA CERTIFIED TEST LAB

The International Safe Transit Association is a global alliance of businesses across the supply chain with a mission to empower organizations and their people to minimize product damage throughout distribution and optimize resource usage through effective package design. One of the most important tools we at our disposal in pursuit of this mission is pre-shipment performance testing. Therefore transit testing laboratories are an essential part of the packaging industry.

There are many benefits of starting an ISTA Certified Testing Laboratory:

- **Value** Helping brands gain confidence in design performance and ultimately enabling them to improve their bottom line by identifying damages prior to going to market.
- Sustainability Product damage in distribution is the least sustainable option confronting
 packaged-products. As such, validating performance through testing remains the single
 most effective step towards reducing waste.
- **Credibility** ISTA Certification provides 3rd party verification that your laboratory is capable of performing the most relevant transit testing standards in the industry today.
- **Visibility** Presence on most the viewed ISTA webpage and the industry's only distribution dynamics package lab directory
- Access ISTA labs have access to resources that enhance lab effectiveness such as report templates, personnel training, ISTA staff
- **Increased Productivity** ISTA lab membership comes with access to PackSight, the industry's only online test planning and report writing platform for ISTA testing

Starting an ISTA Certified Testing Laboratory is a straight-forward process.



You do not need to have equipment for all tests, but you do need all equipment for at least one test i.e. 1A – fixed displacement vibration and free-fall drop tester in order to become certified.

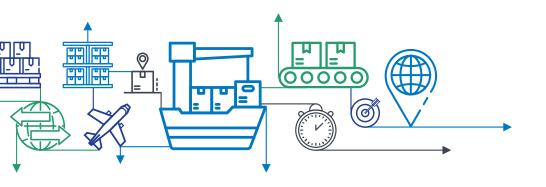
The minimum equipment required for each of the ISTA test protocols can be found here.

A more in-depth understanding of the **lab certification process** can be found on the **ISTA website**.

Below are answers to other frequently asked questions we get about starting an ISTA Certified Testing Laboratory.

FAQs

What is the purpose of ISTA lab certification?	4	
Who can become an ISTA certified lab?	4	
What are the requirements for ISTA lab certification?	4	
What equipment is required?	4	
Do I need equipment for every ISTA test?	4	
Where do I find equipment suppliers?	5	
Prior to purchase, how do I know if the equipment I'm considering will be certified by ISTA?	5	
How are test protocols assigned to my lab?	5	
Can I achieve ISTA lab certification with just a drop tester?	5	
What specific equipment is needed to conduct some of ISTA's most common tests such as 3A or 6-Amazon. com-SIOC?	t5	
What is the certification process?	6	
How long does it take to complete ISTA lab certification?	6	
How do I submit information to ISTA about my lab?	6	
Is there a requirement for lab staff to be trained?	6	
Is there an onsite audit during the lab certification process? How long does it take to have a technician come to our facility and certify our lab once it is set up?		
What are the ongoing expectations of an ISTA certified laboratory?	6	
Is there a recertification requirement and if so, what is the process?	7	
What if the equipment hasn't changed, do I still need to complete the recertification process?	7	
What should be done if equipment is moved, either within the lab or to a new lab location?	7	
If we don't have all equipment in-house can we utilize another labs equipment to conduct testing?	7	



What is the purpose of ISTA Lab certification?

The purpose of the Laboratory Certification from ISTA® is to confirm all facilities are properly equipped to perform pre-shipment testing of packaged-products in accordance with ISTA® Pre-shipment Test Projects and Procedures, and the generated outputs and results are within the same range as other ISTA Certified Laboratories.

Laboratory Certification is designed to help standardize test results between package testing laboratories. The certification of any testing laboratory is dependent upon its possession of the necessary equipment to perform the specified test procedures, and to ensure equipment is properly installed and maintained.

Who can become an ISTA certified lab?

Any laboratory engaged in pre-shipment testing of packaged-products in accordance with ISTA standards.

What are the requirements for ISTA lab certification?

- 1. ISTA Testing Laboratory membership
- Review of equipment performance and maintenance by ISTA

What equipment is required?

The minimum equipment required for each of the ISTA test protocols can be found **here**. You do not need to have equipment for all tests but you do need all equipment for at least one test i.e. 1A - fixed displacement vibration and free-fall drop tester.

Getting Started with Design & Testing: This <u>link</u> provides an overview of all ISTA tests, what they are intended to represent, etc.

Certify your Lab: This <u>link</u> provides you an understanding of the lab certification process as well as you can find a list of minimum equipment needed for each of ISTA's tests.

Do I need equipment for every ISTA test?

You do not need to have equipment for all tests but you do need all equipment for at least one test i.e. 1A – fixed displacement vibration and free-fall drop tester. The minimum equipment needed for each of the ISTA test protocols can be found **here**.



Where do I find equipment suppliers?

A list of ISTA members who offer testing equipment can be found **here** on the ISTA Services search tool.

ISTA does not sell lab supplies such as consolidation bags, hazard blocks, dunnage materials, top load trays, forklift handling course, etc.

Prior to purchase, how do I know if the equipment I'm considering will be certified by ISTA?

ISTA is happy to offer a preliminary review any equipment brochures or specifications prior to purchase.

How are test protocols assigned to my lab?

Based upon your equipment's performance and capabilities, ISTA will certify your lab as capable of conducting those tests that the equipment can perform.

Can I achieve ISTA lab certification with just a drop tester?

ISTA lab certification requires more equipment than just a free-fall drop tester. As a reminder, this **link** shows the minimum equipment needed for ISTA test protocols. Minimum equipment list for each ISTA test protocol addition to your drop tester, at a minimum, you would need some sort of vibration machine - either a fixed displacement such as a rotary or vertical linear - OR - a random vibration machine.

More information on ISTA's full lab certification process can be found $\underline{\text{here}}$.

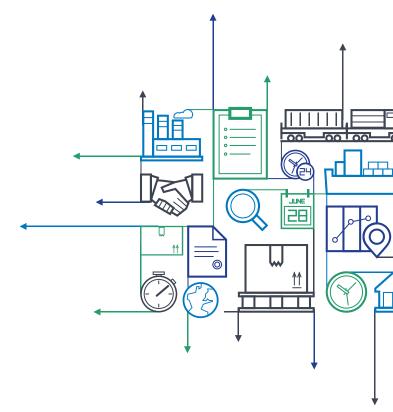
What specific equipment is needed to conduct some of ISTA's most common tests such as 3A or 6-AMAZON.COM-SIOC?

The minimum equipment requirements for ISTA 3A are:

- 1. Free fall drop tester
- 2. Random vibration machine that has a peak-to-peak displacement (stroke) of 2.312 in (58.72 mm) or greater and an operational frequency range of 1-200Hz.

The minimum equipment requirements for ISTA 6-AMAZON.COM-SIOC are:

- Random vibration table with capability of a 2.312 in (58.72 mm) peak-to-peak displacement (stroke) & an operational frequency range of 1-200 Hz
- 2. Free-fall Drop Tester
- 3. Incline Impact Tester if you are looking to do heavier, larger packages (greater than ~70 lb (32 kg)
- 4. Compression Machine this can accomplish Vertical Compression (warehouse stacking) & Horizontal Compression (clamping).



What is the certification process?

ISTA lab certification is a self-certify process. You can find more information about the process **here**.

The process for ISTA lab certification is pretty straightforwardin short it is as follows,

- ISTA Lab Membership established <u>link to</u> <u>membership application</u>.
- Let us know about the equipment and it's capabilities by filling out the equipment forms via <u>ISTA's Lab</u> <u>Certification Portal</u>.
- Capture some short videos (~ less than 1 min each) showing the equipment in use & functioning properly.
 Full process is at this <u>link</u>.
- 4. Submit all information to ISTA for review (~10-15 days for response). Based upon the equipment you have, ISTA will certify your lab for the test protocols that your equipment can run. This <u>link</u> is a list of the minimum equipment needed for each of ISTA's test protocols.

How long does it take to complete ISTA lab certification?

Once all documents have been entered into the Lab Certification Portal, it will take approximately 10-15 business days to process the request and update your ISTA membership account with the test protocols you are certified to conducted. More information on the lab certification process can be found here.

In short, it typically takes a lab one or less days to prepare all information and then 10-15 days for ISTA review.

How do I submit information to ISTA about my lab?

The process for certifying and recertifying your laboratory is easier than ever with our online lab certification portal found **here**. The portal enables equipment capability information and accompanying videos showing the equipment in use to be entered, reside, and reaffirmed for recertification in one central location.

Members can access the portal by logging into the Member Area (use delegate's company login) and click on the Resources folder.

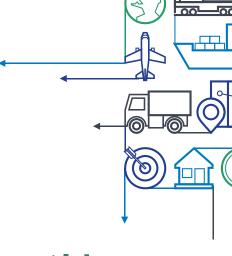
Watch this **tutorial video** to learn more about using the Certification Portal.

Is there a requirement for lab staff to be trained?

While ISTA highly recommends lab staff to take ISTA's training, it currently is not a requirement for ISTA Lab Certification.

Is there an onsite audit during the lab certification process? How long does it take to have a technician come to our facility and certify our lab once it is set up?

ISTA lab certification is a self-certify process and therefore, an ISTA representative will not conduct an onsite audit. You can find more information about the process **here**.



What are the ongoing expectations of an ISTA certified laboratory?

- 1. Annual calibration of equipment
- 2. Recertification every two years

Alternative Sub- mission Methods (Select One)	Method	Expectation
ISO 17025 Certificate	Third party accreditation	Submit current (most recent) ISO 17025 Certificate of Accreditation
		Must Demonstrate Technical competence in Testing
Calibration Documents/ Records	OEM or Third- Party Vendor	OEM (NIST traceable)
		3rd party ISO 17025 accredited
		Self-calibrate (equipment being used for calibration Traceable)
		Provide two (2) years of calibration documentation for each piece of equipment
		Documents must be in English
Current New Lab Certification Process	Self-Certifying	Equipment forms filled out on www.ISTA.org
		Capture & upload videos of equipment in operations as required in ISTA Lab Certification Procedure

Is there a recertification requirement and if so, what is the process?

Lab recertification is required every two years and helps ensure that labs are activity maintaining equipment. As a means of verifying equipment maintenance and annual calibration, a lab may elect one of the options below to complete the biannual recertification process. These alternative documents providing labs a more efficient process while maintaining the information needed to ensure the lab is within the working standards of ISTA. It should be noted that the initial certification process remains as an option for recertification.

What if the equipment hasn't changed, do I still need to complete the recertification process?

Yes, ISTA Lab Certification helps ensure that equipment is being maintained and is in good working order. ISTA requires equipment and instrument calibration on an annual basis. If there is the possibility that an instrumentation component has been damaged (e.g. if an accelerometer is accidentally dropped or impacted), it should be checked and/or re-calibrated before being put back into use.

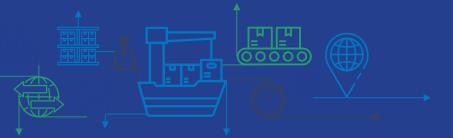
What should be done if equipment is moved, either within the lab or to a new lab location?

To ensure that that the equipment is still functioning properly, ISTA requires equipment and instrument calibration after any move. There is the possibility that an instrumentation component has been damaged (e.g. if an accelerometer is accidentally dropped or impacted), and should be checked and/or re-calibrated before being put back into use.

If we don't have all equipment inhouse can we utilize another labs equipment to conduct testing?

Unfortunately, ISTA doesn't allow for two locations to share or utilize another locations equipment for their own capabilities. There is a concern that this would lead to inconsistencies in testing results between this lab and other ISTA labs. Some of the inconsistencies could come from testing not being conducted in the sequence outlined in the protocol i.e. saving a test sequence that should be conducted in the middle of the test, such as random vibration in 3A, till the end because that capability doesn't exist in that location. Another is that moving the test sample from one lab to another introduces additional hazards and stresses to the packaged-product that wouldn't exist if tested at one location for the entire test sequence.







INTERNATIONAL SAFE TRANSIT ASSOCIATION

1400 ABBOT ROAD, SUITE 380, EAST LANSING, MI 48823 ISTA@ISTA.ORG | WWW.ISTA.ORG