WESTPAK

*EXCELLENCE IN TESTING*

# Package Performance Testing Services

### What Is A Protective Package System?

The Distribution Supply Chain is one of the final opportunities for significant cost reduction. An optimized package system is a balance between the ruggedness of the product and just enough packaging to provide protection from the point of manufacture to the point of end-use. A synergy between the product and the package exists when a package system is properly designed. However, this synergy can only be achieved by testing and optimizing both the package and the product.

### Why test a package?

Every package is tested when it moves through the distribution environment. Unless you have damage, the opportunities to collect the results and draw conclusions about the packaging are few. Products often have too much packaging which increases expenses and reduces profits. The single biggest advantage to conducting a package test in a laboratory is to see how the package system performs and to make changes based on the results. The main objectives of the package test are to:

- Optimize the performance of the entire package system
- Find a balance between the package costs and product protection
- Ensure the product is free from damage
- Make decisions about the best materials or vendors to use
- Reduce packaging waste
- Reduce overall supply chain costs
- Environmental benefits – an optimized package has a smaller carbon footprint

## Package Tests

- Conditioning
- Distribution
- Vibration
- Drop
- Compression
- Shock

*Westpak's ISO 17025 accreditation assures you of the highest quality testing and data provided by any testing laboratory.*

**ISO 17025 Accredited**

**ISTA Certified**

# Package Performance

## Why test my product?

At a minimum, the product response to vibration and shock should be determined to characterize the ruggedness of a product. Other areas of interest may include sensitivity to moisture, temperature, or altitude. Oncethe product testing is completed the results can be used to:

- Select an appropriate material to protect the product
- Identify the failure mode of the product
- Ensure a functional product to the end-user
- Gain the confidence of the consumer
- Design a sustainable package
- Help determine product reliability
- Help evaluate different materials, designs, or vendors

**Testing Standards Include:**

ASTM D4332
ASTM D4169
ASTM D7386
ASTM D642
ASTM D4728
ASTM D6653
ASTM D999
ETS 300 019-2-1, 2-2
IEC 60068-2-13
IEC 60068-2-14
IEC 60068-2-41
IEC 60068-2-1 &2
IEC 60068-2-38
ISO 11607
ISO 2233
ISTA 6-Amazon
ISTA 2 & 3 SERIES
MIL STD 810G

## Package Testing Process

Ideally, package design should be integrated with the product design function. By identifying potential failure modes in the product and actively incorporating changes in the design phase, less packaging may be required. Ultimately the end user would also receive a higher quality product which would result in greater customer satisfaction.

The following steps will help achieve an optimized package system.

- Determine the fragility of the product
- Evaluate the performance of the proposed or current package system
- Review the test results and determine if any package or product design changes are necessary
- Retest to evaluate the validity of the new design

## Protocol Development

Westpak understands the specifications of a variety of industries. We can offer suggestions or develop an entire test protocol to fit your needs. ASTM, ISTA, ISO, ETSI, and IEC are just some of the standards bodies we use on a regular basis.

**Note from Aaron Suarez, Director of Engineering**

"Our services here at Westpak go beyond simply providing testing. We pride ourselves with providing timely, high-quality and detailed test reports that offer the value added feature to which our customers are accustomed. We always go the extra mile to ensure that our customers receive the best service possible."

**For more information or a quote, please contact one of our offices below or go to: www.westpak.com/contactus.aspx**


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