

# **Improve your packaging methods to increase your profitability**

**S**ignode's success relies on the ability to provide our customers with improved packaging methods that increase their profitability. Along with a full line of efficient and economical packaging products, we maintain our Application Development and Research laboratory, an in-house facility for developing and testing innovative packaging methods.

Signode Engineers utilize field and laboratory equipment to measure and duplicate the actual conditions your products experience in the shipping and handling process. Our engineers evaluate your current packaging method and design a solution that can reduce your costs and improve the arrival condition of your products.

**SIGNODE®**



## ***In the Field***

**Portable vibration/shock recorders  
with GPS tracking system**

## ***In the Laboratory***

**Random vibration simulation**

**Rotary motion vibration**

**Incline impact testing**

**Rough handling course**

**Drop testing**

**Compression testing**

**Environmental conditioning chamber**

**Strapping equipment/tools**

**Stretch packaging equipment**

**Corrugated sample table**

# Field-to-Lab Solutions

Packaging assessments range from on-site field testing of your current packaging and shipping methods to laboratory evaluations. All testing and evaluations are performed by Signode Packaging Research Engineers with the hands-on knowledge and expertise to identify and solve packaging challenges for any industry.

## Customer application reviews

An evaluation of your current packaging methods, followed by a comprehensive report of analyses and recommendations.



## Field engineering assignments



Thorough evaluation, development and testing of alternative packaging methods, followed by a complete report of testing results and recommendations. Signode packaging research engineers supervise and inspect trial shipments to customer sites to ensure packaging method effectiveness.

## Laboratory assignments



Laboratory testing of current packaging methods coupled with the design and testing of alternative recommendations. All testing is conducted at Signode's packaging research facility, in Glenview, Illinois, on state-of-the-art equipment certified by the International Safe Transit Association (ISTA).



### Portable GPS-based shock and vibration data loggers

Shipping and handling conditions of brick loads transported by railcar are recorded for duplication in our laboratory.



### Random vibration table

Utilizing data gathered from shock and vibration recorders, a beverage load is subjected to transportation conditions it experienced during transit.



### Incline impact unit

A Signode engineer measures the retained strap tension on a panel load after it has been subjected to the effects of railcar coupling.



### Rough handling test

A glass load is transported over the rough handling course to determine the relative stability of the packaging method.



### Environmental conditioning chamber

A brick load is placed into the environmental conditioning chamber for hot or cold temperature conditioning.



Signode Packaging Systems  
Application Development and Research  
3640 West Lake Avenue  
Glenview, Illinois 60026 USA  
www.signode.com