



A 10% PACKAGING COST SAVING Could End Up Costing Much More



BEFORE YOU APPROVE THE CHANGE

Reducing packaging costs often sounds like an easy win — a thinner carton, less cushioning, a new supplier, a sustainability upgrade. On paper, everything looks positive.

“Can you demonstrate that product protection has not been compromised?”

Many packaging changes look fine in production — the real test only happens once the product leaves the factory.

PASSING INSPECTION ISN'T THE SAME AS SURVIVING THE JOURNEY



Many packaging changes look successful in production. Inspections pass and shipments leave the factory without issue — then the product enters the real world:



Warehouse
stacking



Transportation
vibration



Repeated
handling



Temperature &
humidity swings

*The packaging may still look intact.
The product inside may not.*

WHAT A PACKAGING FAILURE REALLY COSTS



A failure rarely costs only the price of a damaged carton:

- ✕ Customer complaints
- ✕ Product returns
- ✕ Warranty claims
- ✕ Failure investigations
- ✕ Delayed shipments
- ✕ Regulatory concerns
- ✕ Loss of customer confidence

In some cases, a single field failure can cost significantly more than the entire packaging optimization project saved.

DIFFERENT INDUSTRIES, SIMILAR RISKS



Electronics

Less cushioning or a redesign can raise the risk of vibration damage, connector loosening, solder fatigue and hidden functional failures.



Medical Devices

Material, sealing or supplier changes can affect seal integrity and sterile barrier performance — even when the pack passes routine inspection.



Consumer & E-Commerce

Cost-optimized packaging may no longer resist drops, impacts, vibration or stacking loads, raising the risk of transit damage.

Across every industry, the same principle applies: change the packaging, and you alter the protection.



THE CHALLENGE

**Many organizations validate the product.
Far fewer validate the packaging system.**

...even after changes such as:

-  Packaging cost reduction initiatives
-  Sustainability projects
-  Supplier changes
-  Packaging redesigns
-  New packaging materials
-  New distribution routes
-  Medical device packaging updates



QUESTIONS WORTH ASKING



Will the package still protect the product after transportation vibration?

Can it withstand warehouse stacking loads?

Has the new material been evaluated under temperature and humidity exposure?

Will performance remain unchanged after a supplier change?

For medical devices, can seal integrity and sterile barrier performance still be maintained?

If the answer is “we don’t know” — testing should happen before implementation.



HOW SETSCO CAN HELP

Packaging & Environmental Testing

Objective test data helps engineering, quality, procurement and supply chain teams make packaging decisions with confidence — reducing the risk of damage, complaints, field failures and costly corrective actions.



Seal strength testing



Package integrity testing



Accelerated ageing studies



Environmental conditioning



Transportation-related testing



PLANNING A PACKAGING CHANGE?

Before approving your next cost reduction, supplier change, sustainability initiative or redesign — ask:

“Can you demonstrate that product protection has not been compromised?”



What packaging changes is your organization planning in the next 12 months?

Contact our team to discuss your packaging validation requirements.

Contact Us: electrical@setsco.com