



White Paper

How to avoid common mistakes when selecting packaging

About this White Paper

CurTec International develops, manufactures and distributes high performance packaging for pharmaceuticals, speciality chemicals and food ingredients.

Packaging is more than just a protective casing or a means to identify content. Choosing the right packaging for your product will enhance your brand image, boost your ROI, and ultimately increase your customers' satisfaction.

The best packaging choice can only be made by reviewing your entire packaging chain and involving all its disciplines.

This White paper will help you discover the added value of packaging in other aspects than just the tangible product.

The CurTec team

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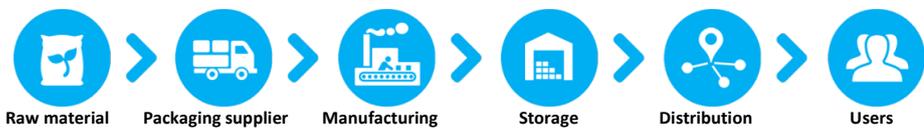
Introduction

Product packaging fulfils several important roles in a packaging chain. It protects items during shipping, simplifies handling and storage and, preferably, makes your product stand apart from the competition. Truly effective product packaging combines quality, functionality, user-friendliness and design to create a unique brand that promotes sales and fits seamlessly into a product's life cycle.

Many manufacturers underestimate the negative effect that a poor packaging choice can have on the success of a product. Defining packaging requirements is crucial and a major challenge to select the ideal solution. But how do you go about it?

Single vs multi focus

Packaging has impact on various disciplines inside and outside your organization. It affects production employees, logistic staff, suppliers, authorities and of course customers. When selecting packaging, companies typically focus on only one or at best a few of the disciplines involved.



Widening your scope to the total packaging chain will enable you to make a better choice and avoid disappointing results and unexpected costs:

Single focus

Maximize added value for one specific discipline in the packaging chain

Multi-focus

Deal with dilemmas and maximize added value throughout the packaging chain

Applying a multi-focus view and investing time and effort in discussing the requirements with all parties involved will lead to cost savings and added value. The following pages contain some valuable tips.

Applying a multi-focus



1. Optimize the protection of your product

All available definitions of packaging refer to the basic function of protection. To protect a product you need to understand the vulnerability of that product. There are 5 categories to consider:



Some packages are more prone to damage than others.

- Biological: the impact of micro-organisms such as bacteria, yeasts and fungi
- Biochemical: the activity of enzymes being active
- Chemical: reactions with oxygen or other agents
- Physical: drying, wetting, UV-light, tainting, melting, static charge, etc.
- Mechanical: shocks, vibrations

“Specialists claim that the cost of damages and loss of quality far exceeds the total amount spent on packaging!”

Roland ten Klooster
Dutch Professor Packaging Design & Management



2. Distinguish your product from the competition



Emotive features play a role in purchasing decisions more often than is thought, even in the case of industrial packaging. Powerful package design that leverages joy, satisfaction, interest or another positive emotion leads to higher perceived quality and user adoption.

As ‘a silent salesman’, your packaging should reinforce your company image.

The Coca-Cola bottle: one of the most iconic and recognized packaging designs in the world

“Things do not pass for what they are, but for what they seem. Most things are judged by their jackets.”

Baltasar Gracián
Spanish Jesuit & Philosopher



3. Match quality with legal requirements

These days, packaging must conform to many legal requirements, depending on industry, product type and even country of trade. Hazardous materials require containers that have been tested according to UN regulation, food (related)



UN marking on a plastic drum

products require food safety compliance and the pharmaceutical industry has high standards where hygiene is concerned.

Implementing new packaging often results in additional certification, tests and control procedures related to quality systems such as cGMP, FSSC and ISO or international standards like pharmacopoeia or regulatory bodies such as FDA and DOT. Defining optimal quality requirements from a legal point of view opens opportunities to lower costs, improve quality and sharpen your competitive edge.

“If you can't describe what you are doing as a process, you don't know what you're doing.”

W. Edwards Deming
American Engineer & Statistician



4. Get a clear view on the total packaging chain

Packaging runs through a chain with several links. Analyzing that chain is no easy task. When using returnable packaging the chain becomes even longer.

Look at every step in the chain: receipt of empty packaging > shipping to and within your production facility > fit with infrastructure (filling equipment, conveyor belts, ...) > shipping to storage > actual storage > loading transport > unloading.

Include your customers operations: receipt of product > storage > usage (complete or partial which require closing and storing) > disposal/ re-use (return transport, cleaning, ...)

You will encounter dilemmas in the packaging chain. Specifically check dimensions, storage and shipping requirements (temperature, moisture, hygiene) and duration. The shape and size of your packaging might be the perfect match for your filling equipment but could lack user-friendliness. Make sure you involve your customer in this step. It might even lead to competitive advantages.

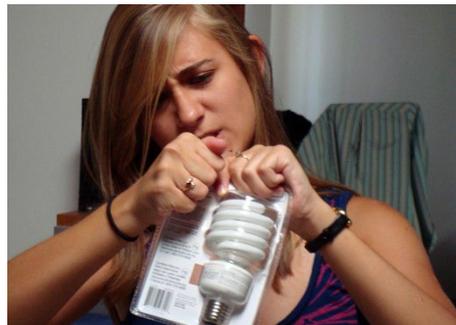
*“Amateurs discuss tactics,
professionals discuss logistics.”*

Napoléon
French General & Dictator



5. Enable uncomplicated and user-friendly handling

Picking up, holding, opening, pouring, resealing, putting away, identifying the contents... Just a few of the functions related to the handling of your packaging. Looking at this in detail, you will find hidden opportunities for cost savings in handling. Imagine, for example, the effects of reducing the time needed for filling or sealing by 50%.



Getting the approval of your work force for a certain form of packaging will be easier if there are advantages in handling, especially when it comes to ergonomics! It is a fact that easy-to-use packaging exudes a feeling of reliability and satisfaction and can even have a positive impact on sales.

Wrap rage negatively impacts consumer experiences

*“Save ten steps a day
for each of twelve thousand employees
and you will have saved fifty miles of wasted motion
and misspent energy.”*

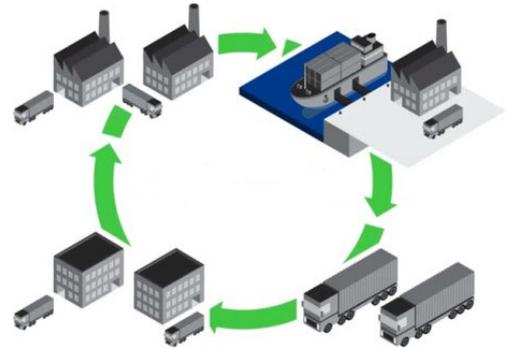
Henry Ford
American Industrialist



6. Reduce environmental impact

Being aware of current and future environmental requirements is a necessity. Many companies today aim to reduce their environmental impact by reducing their packaging materials, a trend we can only fully support. However, measures taken to reduce environmental strain sometimes seem to ignore basic packaging function like providing protection and preventing damage or spoilage.

Creating a sustainable supply chain with returnable/ reusable packaging is less complicated than it seems and not only helps the environment but reduces costs at the same time. CurTec offers a simple tool which helps to compare the cost of supply chains with one-way and reusable packages.



And if packaging reuse is not an option, because of legal restrictions for instance, consider that packages made of mono-material are easier to discard/ recycle and that there is a difference in

“Despite what one might think, disposable coffee cups are better for the environment than washable porcelain coffee cups.”

Roland ten Klooster
Dutch Professor Packaging Design & Management



7. Boost your ROI

Business management is all about turnover and profits. All the above steps affect the total cost of your operations. How much is packaging allowed to cost? The bottom line of a detailed analysis may surprise you.



Applying a lid with integrated gasket instead of heat-sealing the top reduces operational cost and extends the shelf life of the powders inside this pack

Optimized packaging can:

- Reduce the cost of transport, damages and customer complaints
- Extend the shelf life of your products Increase the efficiency of your operations
- Prevent physical strain
- Limit space and cost in storage and transport
- Minimize implementation costs
- Reduce quality risks and costs

There is no standard summary. The full list of opportunities depends on your specific situation. Reviewing all the above steps with a view to possible savings or improvements will help generate a total picture.

“There are always opportunities through which businessmen can profit handsomely if they will only recognize and seize them.”

Jean Paul Getty
American Industrialist



8. Look to innovate

Companies are too often conservative in their packaging choices. They remain with a certain packaging standard which often originates from a time in which packaging requirements were different than today's.

Be aware that innovative packaging solutions may better fit your user's needs and thus increase their satisfaction, reduce costs and create a competitive advantage.

Things you may consider are:

- Using secondary as primary package
- Changing raw material
- Adjusting capacities
- Making shape subject to functionality
- Optimizing closure and handling

“Innovation distinguishes between a leader and a follower”

Steve Jobs
Inventor & Entrepreneur



9. Choose the ideal solution

The decision process for a product-packaging combination can be very complex and often includes such tools as Quality Function Deployment (QFD), Failure Mode Effect Analysis (FMEA), Six Sigma, Kaizen, etc. These are all very valuable tools but far too complex to describe in this paper.

The common denominator, however, is the reduction of costs and adding value to your product. As we have explained, there are many factors that influence both costs and added value. A simple analysis will provide a reliable first indication or short list of suitable solutions. Start by ranking the requirements from the first six steps and give them a weighting of 1 to 5 (1 being least important, 5 being most important). Filter out the dilemmas in the chain and evaluate the alternatives you listed in step 7 by rating them 1 to 5 vs. the requirements (1 being poorest performance, 5 being best). Now count and weigh the score per packaging alternative and a short list will soon appear.

There are of course many more factors that will influence your decision. The main advantage here relates to identifying all the relevant packaging issues for discussion.

*“It’s not hard to make decisions
when you know what your values are”*

Walt Disney

American Entrepreneur, Animator & Film Producer

Packaging Scan

Selecting the best possible packaging for your product is a real challenge. You need to find packaging that offers the right protection, with safe and easy handling, smooth integration in your operations, while boosting your product's image and satisfying the quality requirements of your entire supply chain.

Quite a task. Despite all the tips and tricks in this White Paper, it may seem difficult to accomplish applying a multi-focus approach and getting the right information from your stakeholders.

Fear not! CurTec has created a method based on the above and our vast experience with supply and packaging chains in various industries, which can help you define a proper set of requirements and guide you toward the most ideal packaging solution.

A Packaging Scan is free of charge. It will take about 1-2 hours and results in a comprehensive, fair and unbiased packaging recommendation. All you need to do is get the right people to the meeting table.

Contact our Inside Sales Department in case you have questions about this White Paper or

[Apply online for a Packaging Scan](#)

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