The rules of efficient packaging





European Corrugated Industry



1. Rely on the N°1 in transport packaging	Page 3
2. Improve your Supply Chain Management	. Page 4
3. Show responsibility, think sustainability	Page 6
4. Be part of the eco trend	Page 8
5. Use fresh packaging for fresh produce	. Page 9
6. Increase sales	. Page 10
7. Stay in control	Page 11

I only travel corrugated class.

What makes you look so fresh?

Rely on the N°1 in transport packaging

More popular than ever

Corrugated board is the N°1 transport packaging material for fruit and vegetable logistics in Europe. More than 70% of all transported produce uses crates made from corrugated board. Each year Europeans consume more than 100 million tons of fresh fruit and vegetables, and experts predict this trend will continue to increase. As a result, the market outlook for corrugated board is good. Demand continues to grow. In the last ten years, the sales of corrugated board manufactured in Europe increased by over 25%, from 29 billion square meters in 1996 to over 40 billion square meters in 2006. This is an impressive figure especially when you consider the sluggish European economy during a good part of this period.

Corrugated board, a success story

The amazing success story of corrugated board began more than 130 years ago. In 1871 the American inventor Albert Jones patented the first corrugated board. It consisted of a curled paper glued to a web of flat paper. Thus arose a low-cost, lightweight, and stable packaging material that would soon conquer the world of logistics. Why? Corrugated board uses only a minimum amount of material to provide a maximum amount of protection. It is also lightweight and features excellent machine processing capabilities, but flexibility is its most decisive advantage. Fruit and vegetable boxes made of corrugated board can be tailored to suit your individual requirements or be delivered in standard, easy-to-stack sizes.



European total shipments of corrugated board in billions of m²

In Europe, the sales of corrugated board increased by more than 25% between 1996 and 2006.

Hello sweetheart, where in the world did you come from?

> Just look at the specs on the rear of my box, sunny boy.



Multitalented corrugated board

The requirements for transport packaging are indeed many: it should effectively protect the fruit and vegetables it carries; it should be lightweight in order to keep material costs low and handling easy; and it should meet the specific requirements of each fruit, but also be standardised as this is the best way to transport different kinds of produce on pallets in a space saving and safe manner. Finally, it should be inexpensive and attractive.

The versatility that sensitive goods require

Versatility is a "natural" benefit of corrugated board. Whether it's designed for apples from Germany, tomatoes from The Netherlands, or oranges from Spain, corrugated board can be easily manufactured to satisfy individual requirements. Unique stacking heights and dimensions, air vents, or embossed handles can also be supplied using special materials that provide added strength and protection. Finally, because fruit and vegetables are especially sensitive, they must be packed and transported so as to avoid any damage or loss of value at the point of sale.

Logistic advantages of corrugated board – at a glance

- ✓ Stacking capability: saves space and money
- Modularity: efficient solutions based on standards
- / Flexibility: solutions for all requirements
- Modern Supply Chain Management (SCM): perfect integration of Radio Frequency Identification (RFID) technology



Common footprint (CF) standard ensures efficient logistics

CF boxes that comply with FEFCO standard dimensions: 600 x 400mm and 400 x 300mm are packaging solutions which ensure a high degree of logistical efficiency: they support both the stacking characteristics of large and small shipments, and the stability of the loaded pallets. Sizes are based on Europallet dimensions in order to avoid loads that are either too large or have unnecessary gaps. This enables fruit and vegetables to be transported at a highly cost efficient way throughout the EU. Corrugated board boxes that meet CF standards can reduce supply chain costs by as much as 28 %.

Corrugated board in the supply chain

Modern Supply Chain Management (SCM) calls for RFID (Radio Frequency Identification) capable packaging. Thus it must be easy for the materials to carry the tags that are now used for identifying transported goods. This is no problem for corrugated board. RFID tags can be glued easily to the material and quickly identified at any time or place.

It certainly is. After all we have the same natural roots.

Corrugated is our first choice, isn't it?

Show responsibility, think sustainability

Sustainable by nature

Thanks to its organic materials, paper and starch glue, corrugated board is a genuinely natural product with many environmental benefits. While the packaging material consists of pulp, it is usually manufactured using wood obtained from forests, which by necessity must be carefully cleared and managed.

The forests in Europe have never been as extensive as they are today. They continue to grow in size, as only 55 % of newly replanted forests are set aside each year for industrial use. The ever increasing number of trees helps bind CO_2 , thus countering against the harmful effects of climate change in a completely natural way.

Completely biodegradable

When, after multiple runs, the recycled paper fibers used in the production processes have been mechanically removed, they can still be fired to generate energy or decomposed to create compost. After all, corrugated board is completely biodegradable. Best of all, the fibers only give off the CO₂ that was removed from the atmosphere during their growth cycle. As a result, the entire process is, climatically speaking, absolutely neutral.

Ecological advantages of corrugated board – at a glance

- 100% natural: raw materials consist of paper and starch glue
- / Renewable resources: scrub wood and forest underbrush
- CO₂ control: reforestation counters climate change
- Zeasy disposal
- No empty truck runs, no wasted energy on cleaning applications



Corrugated board is completely recyclable. In Europe, approximately 70% of it is reused to manufacture new paper products. Corrugated paper packaging consists of up to 80% of recycled paper – this is just as true for fruit and vegetable boxes as it is for corrugated paper packaging in all of the other categories. As a result, this unique material easily meets the requirements of a self-sustaining system.

Easy disposal

Because corrugated board is a one-material package, it can be quickly and easily disposed of. It is either pressed into an old-paper bale at the point of sale or folded for space-saving storage until being hauled away. Another advantage of corrugated board packaging is its trays, boxes and cartons. They do not have to be separated and sorted. Thus, businesses and consumers save valuable time and money.

The negative aspects of long haul truck journeys for reusable packaging materials (e.g. the CO₂ emissions they cause and the energy consumption they require) along will the expensive cleaning costs these materials generate – make corrugated board the obvious choice for both users and the environment.



Bio-products are setting the trend. No wonder demand for them continues to grow. When it comes to fruit and vegetables, consumers take a particularly closer look at the produce they purchase. In supermarkets and discount centers, the packaging itself conveys a sense of confidence in the products' origin and quality. Corrugated board is the natural choice for packaging fruit and vegetables. Why? It is made of natural materials and is 100 % biodegradable.

Corrugated board exceeds quota standards

The European corrugated board industry fully endorses the European Declaration on Paper Recovery. This voluntary standard commits the industry to a recycling rate of 60 % – a target which corrugated board manufacturers are easily able to achieve. In Europe, about two-thirds of packaging materials made from paper and corrugated board are recycled. Corrugated board is one of the few packaging materials that, up until now, have met the goals set by the European Directive on Packaging and Packaging Waste.

An exemplary material cycle

Consumers want to be sure that the products they purchase have no negative effects for the environment. This is why they instinctively appreciate corrugated board. It is a perfect material for recycling. It is also a popular raw material for paper production. The packaging used at the point of sale is sent to the waste paper recycler, who then delivers the raw materials back to corrugated board manufacturers. It's a quick and easy approach. After all, corrugated board products are made of only one material – wood pulp. There is no need to invest time, energy, and money on separating and sorting procedures. In addition to this, customers can increase earnings by reselling their used corrugated board. I'm glad that my packaging is as fresh as I am.

Me too. Everything else would leave me shell shocked!

Use fresh packaging for fresh produce

Corrugated board is the cleanest solution for packaging foodstuffs. This is true for fruit and vegetables, as well as bread, eggs, meat products, and other foods. Why? The material is used once and once only. With corrugated board, consumers and customers can be sure that every box, tray, and carton is being used for the first time. Guaranteed. This eliminates the headaches associated with costly washing and drying applications, as well as the need for chemical cleaning products.

Good Manufacturing Practice

Since 2003 the 'International Good Manufacturing Practice' (GMP) Standard has confirmed that corrugated board products satisfy all requirements of the food industry pertaining to quality, safety, and hygiene. On the whole, there is no need to implement costly audits to verify this fact. This standard, the only one needed in the corrugated board industry, can be easily integrated into existing certification systems such as ISO 9000, and it meets the criteria of other standards, such as those set by the Biological Records Centre (BRC).

Hygiene advantages of corrugated board – at a glance

- / Corrugated board is always new each package is used only once
- Corrugated board is also the natural partner for foods, such as meat, bread and eggs
- No cleaning, no drying, no residues
- / Consumer security is guaranteed by Good Manufacturing Practice



How can I be? My own packaging won't even advertise me!

Increase sales

You haven't been sold yet?

70% of all purchasing decisions are made at the point of sale. Because consumers at the supermarket are often confronted with an enormous amount of fresh fruit and vegetables, they require product information to assist them in the purchasing process. Corrugated board packaging can provide this support because it is ideal for high-quality, multicoloured printing. Corrugated board can convey consumer information and brand messages precisely where they are needed – on the display shelves.

Packaging should attract customers

Most supermarkets have drastically reduced their sales staff and discounters only provide an absolute minimum of assistance. What does this mean for your apples, melons and tomatoes? Simply this: the packaging you use must now be your best selling tool. Without a little marketing finesse, it is simply impossible to attract and keep the consumer's attention. Today, you have to get your products noticed – whatever the price. Fortunately, corrugated board packaging is an ideal marketing medium. Its use of striking colours and shapes, for example, can attract and keep buyers' attention long enough for them to make the proper decision – in your favour! In addition to this, corrugated board offers a distinctive appearance to products without primary packaging. It is an ideal "showcase" for displaying fruit and vegetables – one that is as functional as it is attractive.

Marketing advantages of corrugated board – at a glance

- / It sells! Market suitable packaging is part of every marketing strategy
- Colours arouse attention
- / Printed messages enhance the brand profile
- / Corrugated board allows high-quality printing
- / Consumers are attracted to the packaging's form and colour

Availability advantages of corrugated board – at a glance

- A consistent supply system ensures reliable delivery
- 460 companies and 730 manufactures throughout Europe
- / Corrugated board is always available
- No risk of supply shortages
- $\checkmark\,$ No added stress for the environment or crowded roads

Stay in control

Corrugated board is Europe's best-selling transport packaging. In addition to the benefits already mentioned, fast and reliable availability is yet another reason for the product's success. In Europe, 460 corrugated board manufacturers – with more than 730 manufacturing facilities – ensure a steady and ample supply for the packaging industry. In 2006 these businesses produced more than 40 billion square meters of corrugated board, or almost 22 million tons. And in the past few years, the number of companies and plants has remained at virtually the same level. Thus, corrugated board customers can continue to rely on a well-functioning and stable market.

Close to the customer

It is very likely that the next corrugated board manufacturer is only a few kilometers away from your business. Central collection points are not required; neither is the complex, hard-to-understand transport management system which is used by multiple-use pool systems. Thus, the origin and cost structures of corrugated board packaging are easy to understand and follow. And, last but not least, using corrugated board means no ecological qualms about empty trucks burdening Europe's heavily congested roads.

European Federation of Corrugated Board Manufacturers FEFCO AIBSL Avenue Louise 250 B-1050 Brussels Phone: + 32 2 646 40 70 Fax: + 32 2 646 64 60 E-mail: information@fefco.org www.fefco.org





European Corrugated Industry