"We aim to make goods handling more effective than ever," says the managing director of Transbox, Sampsa Varonen.

A life on the road
The plastic crate is going strong

Returnable plastic crates play a significant role in the distribution of food and drink in Finland and across Europe. Plastic crate pools, which are undergoing a period of drastic change, are united to a large extent by the idea that the distribution of perishables should be based on the utilization of returnable packaging which can be reused again and again, rather than disposable packaging. However, there are huge differences in the strategic plans of the pools across Europe.

Good ideas are often created in different places simultaneously. Therefore, it's no wonder that the development of the perishable goods trade has shunted like-minded distribution suppliers in the same direction: towards more standardized packaging. The advantages of standardization are also largely the same, whether processed food or fresh goods are in the package.

The manufacture of standardized packaging is for example more cost effective than the manufacture of product-specific packaging, and the lack of variations in packaging simplifies the handling of the product, sorting and warehousing.

Packages of identical weight also facilitate the weighing of the goods and appropriately dimensioned packages designed with large volumes in mind enable the optimization of consignments. Clean, standardized crates also serve to create a neat and tidy environment in the shops and a feeling of order. More often than not, they save time because many products today can be sold straight from the crate.

The idea of standardization is not however enough by itself to explain the plastic crate revolution that has happened in the past decade. The triumphal march of plastic crates in logistics is based not only on the idea of standardization but also the properties of the material itself. Plastic that can be shaped cost-effectively offers the packaging designers a multitude of solutions, for instance in questions of stackability and ergonomics in general. The plastic crates in use today are amazingly durable despite their light specific weight: a crate in use today may still be circulating five years from now. Other beneficial features of plastic are its lightness, hygiene and environment friendliness. A crate made of top quality plastic can probably last for its product lifespan and can live another "life", either as a new crate, or as in Finland, become the raw material of other plastic goods.

Common crates Common benefits

The Finnish plastic crate pool for perishables, under the ownership of retail logistics firms and meat-processing companies, is run and developed by Transbox Oy. Established in 1994, the non-profitmaking service provider has been a central player in the trend, which is making unnecessary company-specific ▶

The MultiPick system supplied by Cimcorp can handle Svenska Retursystem, Euro Pool System and Transbox crates. One end user of MultiPick, the ICA retail chain, uses the Swedish pool, while another, the Colruyt retail chain, uses the European one for their vegetable distribution. The Transbox pool is used by the Finnish food processing companies, Pouttu and Saarioinen.

packaging a thing of the past.

"Our objective has been largely congruent with other pools like us. We are striving to develop goods handling into a clear, straightforward system, the cornerstones of which are cost efficiency, data management and environment friendliness," explains **Sampsa Varonen**, managing director of Transbox.

Varonen, who is responsible for the development of plastic crates and pool operations, believes his own role above all is to coordinate network resources and to develop innovative and bold solutions:

"The strong commitment of the owners is a key prerequisite of our progress and we can only be grateful for that. It offers us the opportunity to develop comprehensive solutions which benefit the entire perishables sector."

The desire to improve logistic processes has led to the creation of an equivalent crate pool elsewhere. The perishables industry in Sweden joined ranks to create a common plastic crate and pallet return system on a deposit basis years ago. Like Transbox, the non-profit Svenska Retursystem Ab was created, owned, run and developed by the prominent players in the sector. The Swedish system is currently based on teamwork between five sizes of grey crate and a combination of plastic pallets moved by fork-lift truck.

The European market leader in the field of returnable packaging is Euro Pool System, headquartered in Holland. Trading under this name since 1992, the company has been running an international plastic crate pool for over 30 years. Its blue containers, familiar to most people and plagiarized many times, make over 350 million trips around the world every year. In particular the crates designed for fruit, vegetables and other fresh produce and the pallets that followed on from them have become popular over the years in other areas too. The pool,

consisting of four different crate models, differs from its Nordic competitors for example in that a foldable version of each crate type is available as well as the rigid version. These crates are well known all across Europe. The position of the oldest pool may nevertheless become a burden to Euro Pool System, unless they are able to develop in the direction required by present-day logistics.

At the interface between industry and the shop

Transbox's current packaging portfolio includes three established crate systems. The oldest of these, the green deposit crate for vegetables, managed by retail logistics companies, is also sometimes known colloquially as a potato crate. The "green traveller" that shuttles back and forth between farmers and shops may look like a humble vagrant, but it has brought back from its travels valuable information to form the basis of Transbox's product development.

"At the moment the focus of our development is our non-deposit crate systems: the processed food crate that has been in use for several years and the meat crate introduced on the market in the 1990s, which play a considerable role in our operations. Meat crates make about 30 million trips a year from the factory to the shop and back again."

The motive behind pool operations and development work on individual crates lies in the large number of trips: even a small saving in the crate cycle becomes significant with such big volumes.

"We are constantly looking for new ways to improve our services. Innovativeness, cost effectiveness and cooperation-mindedness are assets, which we believe will help us to offer the best material flow management solutions at the interface of shop and industry. In our vision we aim to be the preferred system at the food industry and shop interface. However, we can also foresee the future adaptation of the system for other sectors," says Varonen.

The stream of goods suppliers joining the pool tells its own tale of how effective the present system is. The multi-disciplinary development work that has taken into account the demands of industrial automation has done what the pool set out to achieve when it was founded: a family of reusable crates that can withstand hard wear, extreme conditions and continual washing, with features that bring added value to all players who use them along the way.

"The durability and reliability in this system are first-class."

The cycle management expert

Transbox is not content just to reuse crates. Unlike pools in other countries, Transbox also moves logistical information as well as crates. The precise management of the crate cycle is in fact becoming one of the most crucial customer benefits of the pool.

In each processed food and meat crate there is an individualized bar code identifier, which allows the crate to be monitored throughout the cycle. The number of the crate is first recorded in the monitoring system when it leaves for the customer. Thus the data on where the crate was read and where it was delivered remains in the system. The second time the crate number is recorded on the database is during the washing phase.

"Our monitoring system records all crate operations on a single database. The practical benefits are considerable: for instance the cycle length in our pool is very short, about seven days. If the cycle is prolonged for some reason or the crates are not returned as they should be, it is easy to trace the cause using this system. Monitoring also prevents losses and facilitates the division of costs within the pool," Varonen spells out.

Apart from the daily operations of the pool, the monitoring system also promotes the logistics development of all the pool's clients: "Investigating the nodal points of the common pool gives us valuable information about all the logistic processes in the perishables trade and their weak points. This helps us to locate the key development points in our field and develop our operations in a positive direction," says Varonen in conclusion.

TEXT | CARINA BERG **PHOTOS** | HARRI PÄLVIRANTA

WORD FOR WORD

Compatibility

The benefits of standardization in logistics are easily noticed even in the operations of a single company: packaging suitable for many different products and product families makes things much more straightforward.

The benefits are multiplied, when the standard extends to reach several players. In this way a common resource is formed – an important part of operations and their development for all the companies involved. At the same time it also becomes the basis of harmonizing services that support various logistics operations – for example warehouse and order picking systems. Widely shared packaging solutions therefore offer opportunities for truly significant cost savings in logistics.