



®

Kern PackOnTime® MI750

Multiformat

Packaging system

Custom packages – quickly and easily



Kern PackOnTime® MI750

Multi Format Packaging System

For an efficient distribution of the most diverse items, distribution itself must also be logistically optimised and automated. This requires clever packaging concepts and systems, which provide packaging at the required time. Our goal is: Smart Pack – Made On Time.

Online trade is booming. An increasing number of people are conveniently ordering items over the internet, with straightforward delivery of their items to their homes. The number of packages to be packed and transported daily to recipients by logistics service providers faces a yearly double-digit percentage increase.

Customer purchasing behaviour and expectations are changing because of the increasing number of online offerings. More and more crucial for the buying decisions are, in addition to the price, factors such as availability and delivery time. Customers order an item when they need it.

Shorter delivery times, right up to same-day-delivery, the reduction of delivery costs and minimum order quantities are also reducing the average number of items per order. With the reduction of the articles per package, more and more air is transported in the commonly used standard shipping cartons.



The size leads to problems in the entire value-added chain from storage, sorting, transport and distribution throughout the whole delivery chain. This leads to increased costs because of storage space requirements and to more ground transport-units.

Over-night deliveries for accessories, spare parts, industry consumables, household items, or home electronics, are becoming popular. Required items need to be ready for dispatch, ex-stock, in a very short time.

Optimise your logistics

Here is where the PackOnTime® concept can help you optimise your production or shipping processes and increase productivity; all while ensuring environmentally friendly usage of resources:

Smart Pack – Made On Time

- Package created on demand; created when required.
- Carton box produced in individually required dimensions.
- Package is formed in an inherently stable box; providing optimal protection.
- Content fed and packed automatically.
- Significant simplification of logistics and warehousing.



Facts at a glance

- Processing capacity: up to 750 packages/hour
- Easy to operate by 1 person
- Package size (inner dimensions):
min. 100 × 150 × 30 mm
max. 600 × 400 × 300 mm
- Sheets: 3 mm corrugated cardboard with B-wave:
min. 390 × 280 mm
max. 1430 × 1320 mm
- Pallet- or bulk-feeder, depending on format
- Stack capacity: max. 1.5 m pallet stack height (500 sheets approx.)
- Closure: with hot glue
- System dimensions: approximately 8.5 × 18 × 2 m (depending on configuration)
- Reduced waste/offcuts
- Designed for multi-shift operation
- Low maintenance costs

The clever multi-item packaging

The patented shape of the corrugated cardboard box enables secure transport of content, space-saving storage, and simple handling during sorting and stacking.



The booming online market has resulted in increasing demand for paper and corrugated cardboard packaging. Corrugated cardboard is popular because it requires, when folded, little space, and despite its relatively low weight, provides good stability and protection of packaged goods. Corrugated cardboard is also environmentally meaningful because it is mainly manufactured from recycled paper.

Up to now, large quantities of identical boxes had to be produced to keep the cost of corrugated cardboard boxes low. Each change of the box size generates setup costs for box production, and time-consuming adjustments on the packaging machines.

The consequence is a high ratio of air, which unused but must be transported, stored, and transhipped. Very often this empty space is filled with auxiliary materials such as polystyrene chips or wood wool; making handling by the recipient inconvenient.

PackOnTime® enables production of boxes from corrugated cardboard in the optimal size for each type of content. The goods are well protected against damage on the dispatch route, without additional fill material. To produce the correct box size, the items to be packed are measured dynamically, then automatically packed and the box sealed. This significantly reduces box volume. A valuable contribution to environmental protection

The patented box is made from a flat corrugated cardboard sheet. All three dimensions are continuously adapted to the content. The box can be opened easily, without tools. Its inherently stable shape means that, as needed, the box can be used for storage or as return box.

The box shape gives an impression of high quality, as well as its practical functionality. The boxes can be personalised and customised to your brand, as desired by Marketing, applying pre-printed corrugated cardboard, or by integrating a digital printer. The use of flat corrugated cardboard sheets allows fast and simple changeover between different cardboard types and qualities.

Brief overview

The tailor-made box fulfils the most important criteria for secure packaging of your items:

- The dimensionally stable packaging provides optimal content protection during transport.
- The patented shape surrounds the content, with no additional fill material.
- Made from environmentally friendly material (cardboard).
- Allows package opening, stress-free and without tools.
- Inherently stable packaging can be reused for returns.
- Attractive presentation of content, due to high box value.



Sample of a box with content

1 Item placement and measurement

The items are placed on a conveyor belt and fed to the system. The volume of the items is measured to determine the required packaging dimensions.

2 Feed of flat corrugated cardboard sheet

The packaging is made out of flat corrugated cardboard sheets. The system selects the appropriate sheet size, depending on the dimensions of the content. Depending on the requirement, multiple and various sheet feeding stations can be configured.



3 Processing of Corrugated cardboard

The corrugated cardboard is tailor cut in a first step than perforated, and grooved. The package is partial tailored, glued, and transported to the insertion position.



4 Insertion of Items

The system conveys the items into the tailor made box. Before the closing step a dispatch document can be inserted into the package.



5 Closing and labelling

The package is now automatically closed and sealed. Before leaving the system, the package will be provided with the corresponding shipping label.





Kern Group

Innovative systems for document processing and packaging: Sophisticated solutions for smarter processes.

Kern AG, with its headquarters in Switzerland (in Konolfingen, Bern), is the world-leading manufacturer of products, solutions, and services in the fields of shipping systems, insertion technology, card processing solutions, digital printer pre- and post-processing technology, and ADF (automated document factory) software.

Since 1947, Kern stands for high innovation capability, quality, flexibility, and reliability. Factors that, above all, entitle for the highest attainable level of safety and service. Distinctive features of Kern systems are their exceptional user-friendliness, reliability, and flexible applications – combined with modern technologies.

Since its foundation and as a pioneer in the insertion technology field, Kern has established a profound wealth of experience. This experience was then applied to card processing systems. Finally, this knowledge and our technologies are now implemented in our packaging systems.

Highly qualified and motivated product developers, mechanical engineers, and specialists search for answers to the question: what should future systems offer? The new systems will be based on customer needs and latest technology.

The machines are developed and produced in Switzerland to the highest Swiss and European quality. All Kern system components are made in-house.

Kern AG is imprinting the machinery sector with its innovations and the use of state-of-the-art technologies.

Our global customer base includes printing service providers, lettershops, banks, authorities, postal services, telephone companies, energy suppliers, data centres, insurance companies, and other operators dispatching medium up to very high volumes

Continuity – through our customer-oriented approach and advanced technology

The motto of the owner-managed company is to create lasting and sustainable values, instead of focusing on short-term success. Quality, reliability, and fairness characterise all business-related thoughts and actions.

The results of this basic attitude are long-term customer relationships and a high level of performance, provided by technically competent employees.

The Group operates in around 60 countries worldwide, and employs about 900 people.

Kern Service is available, worldwide, 365 days a year, round the clock.

Kern Service

Trust as basis of good cooperation

The purchase of our products is a decision for continuous and trustful cooperation. Reliable service is one of the key pillar of our company. For an optimum system availability and productivity, Kern offers a comprehensive and reliable service programme.

- Personal consultancy on-site
- Requirements analysis and elaboration of optimal solution
- Kern systems installation
- System integration
- Onsite training of your employees
- Comprehensive support during operational phase
- Reliable service program: 24/7 customer service

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