

Our leading international position is chiefly ascribed to one factor: your trust in the excellence of our global team – a team that stands out by thinking and acting holistically in pharmaceutical dimensions. Strong, open-minded, and reliable.



UHLMANN. PARTNER FOR 360° PHARMA PACKAGING.

WE HONOR THIS PLEDGE ALL OVER THE WORLD AND COMPLEMENT IT WITH SPECIAL ADDED VALUE DAY AFTER DAY. WITH TAILORED MACHINES, COMPREHENSIVE SERVICES, AND FUTURE-ORIENTED DIGITALIZATION SOLUTIONS.

CAN A CARTONER BE AS SPECIFIC AS YOUR APPLICATION?

High productivity in pharmaceutical packaging is the result of a number of specific details. This is because the spectrum of pharmaceutical packaging tasks is broad and, for the most part, decidedly challenging. This creates a demand for cartoners that can deliver perfection under any circumstances: Uhlmann cartoners. They effortlessly pack blisters, leaflets, and many other extras in one cartoning process. Many hundreds of times per minute, simply and reliably. Uhlmann cartoners can also load bottles, vials, pillow packs, or application aids into cartons with millimeter-accuracy.



INTERMITTENT-MOTION CARTONERS.

OUR INTERMITTENT-MOTION CARTONERS ARE CHARACTERIZED BY HIGH EFFICIENCY AND PERFORMANCE. THEY WORK QUICKLY TO PACKAGE A WIDE RANGE OF PRODUCTS.

If a cartoner reliably provides excellent packaging performance, chances are that it is an Uhlmann system. Cartoner C 2155 and Cartoner C 130 combine two key qualities to this end. Firstly, they are able to process cartons with particular efficiency and, secondly, they offer a broad range of formats. At the same time, investments are kept to a minimum.

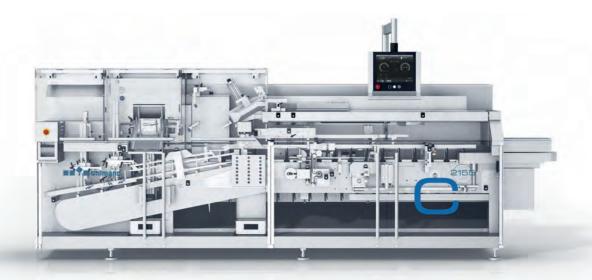
The C 2155 is a latest-generation, intermittent-motion carton that provides excellent cartoning quality both under ideal production conditions and when carton qualities are critical. It is ideally suited to packaging solid and liquid dose pharmaceutical products. If bottle processing is required, it excels as a standalone cartoner with a buffer table for filling, or it can be integrated into an Uhlmann bottle line.



C 130: intermittent-motion cartoner with proven quality

- Compact machine design for very easy operation and pharmaceutical reliability
- Continuous-motion product chain
- Reliable production, even with a variety of carton qualities
- · Tuck-in and hot-melt closure possible

- Excellent accessibility for easy maintenance and cleaning, fast product and format changeovers
- New guard concept for reduced noise emission
- Easy to operate
- Central, intuitive operating system



C 2155: intermittent-motion cartoner of the latest machine generation

- GMP-compliant, cantilever design, ideal ergonomics for easy operation
- Servo-regulated leaflet index and product loading from the front
- Carton magazine for approx. 1,500 cartons
- · Rotary carton pick-up with mechanical pre-break function
- Interchangeable closing station: easy changeover from tuck-in to hot-melt closure
- Excellent accessibility for ease of maintenance and cleaning
- Fast format changeovers due to few easily exchangeable format parts
- · Central, intuitive operating system

CONTINUOUS-MOTION CARTONERS.

ADDED PRODUCTIVITY AND INTEGRATION OPTIONS FOR THE CARTONING OF SMALL AND MEDIUM-SIZED BATCHES, AS WELL AS FOR HIGH-SPEED PACKAGING.

Intelligent cartoning technology can boost the competitiveness of pharmaceutical companies - especially when it can be easily integrated into continuous-motion lines and quickly changed to different pack formats. Uhlmann continuous-motion cartons are the ideal choice when flexibility, variety, and speed are important. They process a broad spectrum of formats, filling cartons with a wide range of products, such as blisters, bottles, inserts, etc.

Automated adjustments allow particulary short changeover times. All Uhlmann continuous-motion cartoners are also equipped with a maintenance-free magazine for approximately 1,600 cartons and patented carton feeders. Practically all carton qualities can be processed.



C 2305/C 2504: continuous-motion cartoners for high-speed, bulk packaging

- · GMP-compliant machine design
- Intelligent product loading with automatic adjustment to different stack heights
- Enclosed leaflet folder for reduced sound emission
- Height-adjustable carton magazine for convenient operation and cleaning
- Tuck-in and hot-melt closure upgrades
- · Innovative protective door concept for optimum accessibility
- Automated adjustment of all format-related stations for changeovers within 15 minutes
- Central, intuitive operating system



C 2156 / C 2206: continuous-motion cartoners for small and medium-sized batches

- For bottles, vials, pillow packs, pens, large blisters, etc.
 with a horizontal product conveyor
- Patented rotary carton pick-up with mechanical pre-break function
- · Cantilever design, interior stainless steel cladding

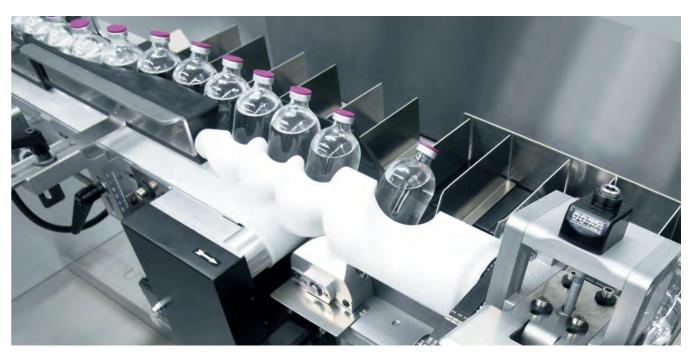
- Reliable processing of all carton qualities
- Tuck-in and hot-melt closure upgrades
- · Central adjustment and clamping systems
- Fast format changeovers due to few easily exchangeable format parts
- · Excellent accessibility for ease of maintenance and cleaning
- Central, intuitive operating system

PRODUCT HANDLING AS INDIVIDUAL AS THE GOODS YOU PACKAGE.

PERFECT CARTONING DEMANDS PRECISION.
UHLMANN ENSURES SEAMLESS PROCESSES
WITH TAILOR-MADE SOLUTIONS.

Regardless of which item is placed in the product chain, the process is carried out with uncompromising accuracy using the most suitable tools for the job. Uhlmann offers a correspondingly wide range of efficient feeding and robot systems for the handling of supplementary inserts such as spoons, pipettes, or pillow packs. Also in the case of special applications, cartoning is of the highest precison.





Bottle transport and feeder

Bottles reach the cartoner on an infeed conveyor or via an accumulation table. Here they are first separated and then placed in the product chain using a feed screw. Each stage ensures a high level of process reliability and particulary gentle product handling. Among other things, product congestion is avoided throughout the packaging process. The servo-regulated feeding allows reproduction of all settings, and double or triple bottle infeeds are optionally available. The system can process stable, round, plastic or glass bottles that can be accuumulated, as well as special forms.

High-performance blister transfer

Uhlmann solutions for tablet blisters and blisters with vials or syringes ensure reliable insertion into the product chain.



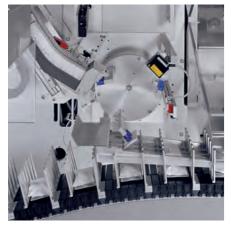


- Complete blister stacks are transferred to the product chain of Cartoners C 2305 / 2504. This transfer is particularly gently with low fall heights. In the process, the cartoner continually monitors the integrity of the product. Only correct stacks, including all supplementary inserts, are loaded into the carton.
- The blister transfer from the BLU 400 to Cartoners C 2305 / 2504 uses a rotary table.
 The blisters are turned to the correct position and stacked. Only perfect blisters and complete stacks reach the product chain of the cartoner.

PRODUCT HANDLING: RELIABLE AND GENTLE.

UHLMANN CARTONERS ARE BUILT WITH FINESSE.
THEY BRING PRODUCTS AND CARTONS TOGETHER
WITH UTMOST CARE.

High-quality products deserve precision technology. When it comes to cartoning blisters, leaflets, spoons, and much more, Uhlmann attends to the integrity of materials and surfaces while maintaining continuously high productivity. Every item leaves the cartoner in top condition. Everything to be packaged in the carton is fed automatically and systematically: from blisters and leaflets, to spoons, pipettes, and brochures. Different systems, tailored to the respective output and line setup, meet all product specifications.





The specialist in handling booklets

Uhlmann cartoners can be tailored to your requirements on the basis of a wide range of accessories for specific packaging tasks. A rotary booklet feeder is available, for example, for the handling of folded or glued booklets, as well as storage systems for booklet provision.



Leaflet folder and booklet feeder

All common types of stack- or roll-fed folders can be integrated into the cartoners for leaflet folding. The leaflet folder on the C 2305 and C 2504 models can be pulled forward. This noticeably reduces the time needed for maintenance and changeovers.



Gentle product loading

Intermittent-motion cartoners use a servo-regulated product slide and leaflet preload to carefully bring the products into position. The freely programmable system can be adapted by means of two quick-change format parts.



Continuous-motion cartoners

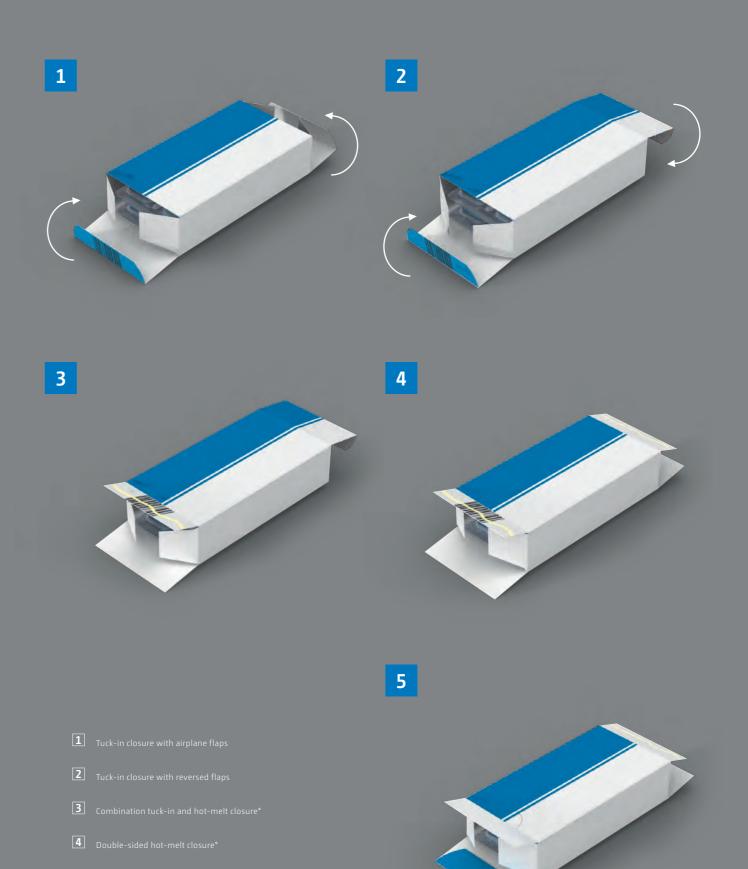
These have a patented, enclosed module that ensures accurate and reliable product insertion in the carton.

EVERYTHING SAFE AND SECURE. WHICHEVER WAY.

AS NO SINGLE TYPE OF CLOSURE SUITS EVERY APPLICATION, UHLMANN CARTONERS MASTER THEM ALL.

Also flexible in carton closure

Tuck-in only? Hot-melt only? A combination of both? With flaps on opposite sides or the same side? There is no no right or wrong as far as carton closure is concerned. The specifications vary depending on the market and brand. Fortunately, Uhlmann cartoners master all forms. You always have the ideal solution to hand and keep your options open should requirements change.



MASTER CARTONS IN ANY FORMAT – AND EVERY QUALITY.

UHLMANN HAS THE TECHNOLOGY FOR ALL PACKAGING TASKS AND PRODUCTION CONDITIONS — ALLOWING YOU TO ACHIEVE EXCELLENT RESULTS AT ALL TIMES.

As maximizing your productivity is our goal, we take factors into account that could challenge smooth cartoning: special carton formats, poor carton quality, high humidity, or other difficult production circumstances. Even under adverse conditions, Uhlmann cartoners reliably attain top packaging quality.



The patented, rotary carton feeder with mechanical pre-break function allows the handling of practically any quality of carton material.

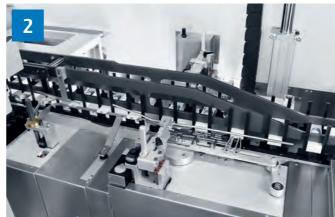
Closing station

Leaflet preloading and product loading are servo-regulated for reliable handling. The carton is gently closed, avoiding damage to the surface.

Interchangeable closing station

Depending on the type of closure required, the station can easily be changed from tuck-in to hot-melt













Excellent whatever the format

Whether intermittent- or continuous-motion, Uhlmann cartoners reliably process a wide range of formats and qualities. The rotary carton feeder can handle carton material that has been stored for a long time, is poorly scored, glued by hand, or recycled.

Gentle for flawless results

Throughout all stages of the packaging process, Uhlmann cartoners keep the packs free of dirt and dust, and avoid scuffing. Only correctly filled packs of top-quality appearance leave the machine at the end of the cartoning process.

TOUCH & TEACH.

KEEP THE LINE FIRMLY IN HAND WITH SMARTCONTROL.

Uhlmann has radically simplified the operation of packaging systems with SmartControl. Convenient and functional, SmartControl confidently guides the operator through the necessary processes using a series of wizards. Step by step, they ensure standardized processes, e.g., when changing products, so the machine is quickly ready for use again. The pivoting panel allows the control of all stations from different positions. The distances are shorter and the whole process is more transparent.

Smart right down to the detail

- · Web-based for the full integration of third-party machines and assemblies
- Uhlmann apps for the integration of supporting operating functions
- Automatic generation of production and parameter records in compliance with FDA regulation 21 CFR Part 11



3D Visualization

SmartControl visualizes the stations in 3D. Operating elements are directly assigned to their function. Consequently, variously qualified personnel only require a short familiarization period to acquaint themselves with the machine.

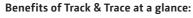




TRACK & TRACE.

SEAMLESSLY TRACK PHARMACEUTICALS.

Uhlmann has a comprehensive portfolio for the seamless tracking of pharmaceuticals and medical devices to combat forfeiting, and ensure product safety and process reliablity. Whether serialization, labeling, or aggregation, the key feature of every application — be it a standalone or integrated solution — is tailored software connected to the existing system landscapes, as well as higher-ranking internal and external systems.



- Track & Trace software for use across all production levels up to direct connection to ERP, serialization, and government servers
- Integration of various printing technologies and labeling applications into new machines as well as the upgrading of existing systems – including those from other manufacturers
- Intelligent OCR/OCV inspection systems as well as printing/marking systems suited to the application
- Solutions for primary, secondary, and tertiary packaging, as well as inventory and distribution processes
- Consistent marking and serialization solutions from the packaging line to the corporate IT system
- Pharma-compliant documentation of production data in compliance with 21 CFR Part 11
- Full turnkey project management by Uhlmann





- Using a hand-held scanner, individual items can be inspected during production or booked out of/into the batch, e.g., for an in-process control.
- Uhlmann Serialization Platform: compact unit with inkjet or laser printer, and VisioRead inspection system
- For maximum pharmaceutical reliability: carton serialization



The Uhlmann Serialization Platform (USP)

is a modular, compact standalone unit – ideal as a first step into the field of serialization and for quickly responding to changing requirements.

Advantages of serialization:

- **Flexible:** Retrofit solution for use on various packaging machines or lines
- Customized: Modular design for project-specific units
- Simple: Control of all components via the user-friendly operating system; fully automatic format adjustment
- Secure: Transfer of all data to higher-ranking systems and the line serialization database



Member of Open-SCS

Uhlmann is a member of the Open Serialization Communication Standard (Open-SCS) Working Group. This means that we support the definition and implementation of standardized, open-communication interfaces between the various providers of tracking and tracing solutions offered to meet global serialization solution demands.



Learn more about Track & Trace by Uhlmann. www.track-trace-by-uhlmann.com



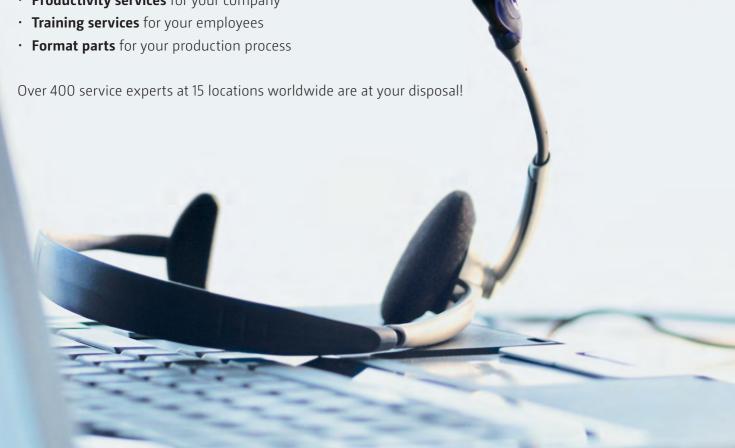
UHLMANN CUSTOMER SERVICES.

AROUND THE CLOCK, AROUND THE WORLD, ALL-AROUND SUPPORT.

It makes no difference which cartoner you have in operation: top machine quality is just one factor governing a successful production process.

Uncompromisingly good, perfectly coordinated human-machine interaction is just as important. Our Uhlmann Customer Services division exists for this reason. Five areas offer you all-around support:

- **Support services** for your operations
- · Maintenance services for your machines
- **Productivity services** for your company





Always at your disposal: Support services

You require a spare part? A software performance upgrade? Assistance when understaffed? Whatever the case may be, our services offer a clever solution to meet every need. Support that is prompt, straightforward, and personal. Via telephone, online, or on site. Modular service packages provide the right amount of assistance needed for your production process. And should you wish to relocate a machine or validation is required, we can take the pressure off you.



Always a good idea: Training services

You wish to enhance the motivation and competence of personnel operating your machines? We offer effective training and qualification options covering all areas of work. Suitably instructed, your employees are able to carry out maintenance jobs independently or perform format change-overs professionally. Whether in the form of open training courses or as part of an on-going training program, whether at your premises or at our training center – we tailor the courses to your individual needs.



Always in top form: Maintenance services

You want flawlessly maintained equipment to ensure long-term operational reliability? You can keep the mechanics, electrics, and software in perfect condition with our maintenance services, and the know-how of your machine personnel is always up to date. Our range of options is as varied as your requirements: in addition to inspection and maintenance packages, these services include preventive measures on the basis of FMECA, repairs, and calibration.



Always efficient: Productivity services

Are you faced with ever-increasing productivity and flexibility demands? You regularly need to respond to new standards and legislation? Rest assured that our productivity services can help. You are updated at all times. In addition to mechanical and electrical upgrades, we offer a modular package of options to increase your production efficiency.



Always OEM quality: Tools and format parts

You expect top quality down to the last detail? We also offer best-in-class quality tools and format parts for your cartoner. Such parts are much more than mere machine components: they are productivity factors. Their performance impacts on your operational success. That is why we tailor them to the product you wish to package, the materials you use, your packaging process, and your ongoing operation. Testing takes place on Uhlmann machines. All in all, an unmatched, all-inclusive package.



Uhlmann Customer Service

Your Benefits:

- You save time and money
- Your cartoner retains its value and is reliable
- You benefit from up to 20 percent added productivity
- You are assured of maximum machine availability and efficiency
- You receive format parts and tools in unique. OEM quality

CLEAR FACTS. OBVIOUS BENEFITS.

THE TECHNICAL DATA OF THE CARTONERS.

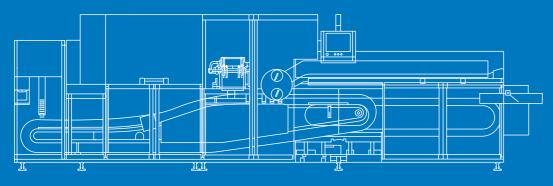


Illustration Cartoner C 2305

Cartoner C 130

Output	max. 150 cartons/min.
Mode of operation	intermittent
Carton size [A x B x H]	max. 100 x 85 x 150 mm
Pitch	5''
Number of blisters	max. 10
Blister stack height	max. 80 mm
Types of closure	tuck-in and hot-melt

Cartoner C 2155

Output	max. 150 cartons/min.
Mode of operation	intermittent
Carton size [A x B x H]	max. 115 x 100 x 170 mm
Pitch	140 mm
Number of blisters	max. 14
Blister stack height	max. 95 mm
Types of closure	tuck-in and hot-melt

Cartoner C 2305

Output	max. 300 cartons/min.
Mode of operation	continuous
Carton size [A x B x H]	max. 105 x 105 x 155 mm
Pitch	5"
Number of blisters	max. 14
Blister stack height	max. 100 mm
Types of closure	tuck-in and hot-melt

Cartoner C 2504

Output	max. 500 cartons/min.
Mode of operation	continuous
Carton size [A × B × H]	max. 80 x 90 x 155 mm
Pitch	4''
Number of blisters	max. 14
Blister stack height	max. 85 mm
Types of closure	tuck-in and hot-melt

Cartoner C 2156

Dutput	max. 150 cartons/min.
Mode of operation	continuous
Carton size [A x B x H]	max. 130 x 100 x 250 mm
Pitch	6''
Number of blisters	max. 10
Blister stack height	max. 95 mm
Types of closure	tuck-in and hot-melt

Cartoner C 2206

Output	max. 200 cartons/min.
Mode of operation	continuous
Carton size [A × B × H]	max. 130 x 100 x 200 mm
Pitch	6''
Number of blisters	max. 10
Blister stack height	max. 95 mm
Types of closure	tuck-in and hot-melt



To find your personal contact person and our locations worldwide please visit **www.uhlmann.de**



THE HEARTBEAT OF PHARMA PACKAGING

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