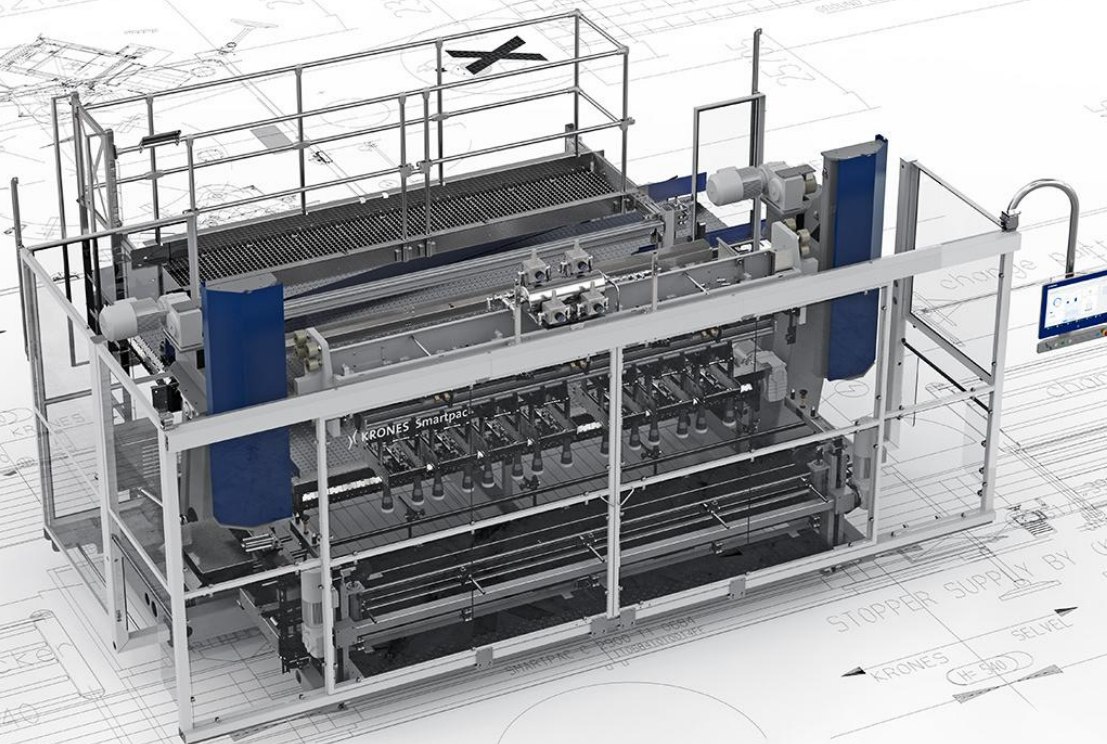




Smartpac

Remaining flexible during packing and unpacking



 **KRONES**

Well-proven know-how for packing and unpacking



A wide variety of containers and packs is not uncommon these days. It is the job of the Smartpac to process different container formats in secondary packaging. With its modular design and large range of gripper heads, this intermittent packer is prepared for a wide spectrum of variants. Precisely tuned movement sequences ensure the gentle treatment of your products. With the Smartpac, your containers are in the best of hands.

At a glance

- Secondary packaging machine for cylindrical or specially-shaped glass or plastic containers
- Use for packing and unpacking crates, trays and cartons
- Pack block lengths ranging from 1,420 to 2,975 millimetres possible

All illustrations are with optional accessories

**Single-column machine,
size 1400**



**Two-column machine for
sizes 1800 and 2900**



Method of operation



Packing

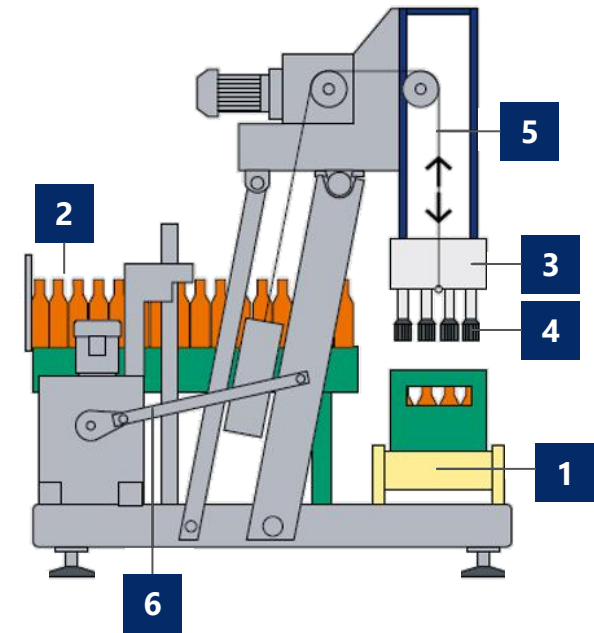
- The bottles on the container table are divided up onto lanes
- The pre-positioned containers are picked up using gripper heads and set into the fed packs
- The bottle formation is set down reliably with the integrated insertion frame

Unpacking

- The fed packs are stopped at the removal position
- The gripper head is lowered and the containers picked up and removed from the packs
- The containers are set down onto the container table

Packing curve

- Combined from the horizontal and vertical movement of the lifting unit
- Different programming of the trajectories for loaded and empty gripper heads
- Horizontal movement: pivoting column with crank drive for gentle approaching and braking characteristics
- Vertical movement: lifting unit with frequency-controlled motors



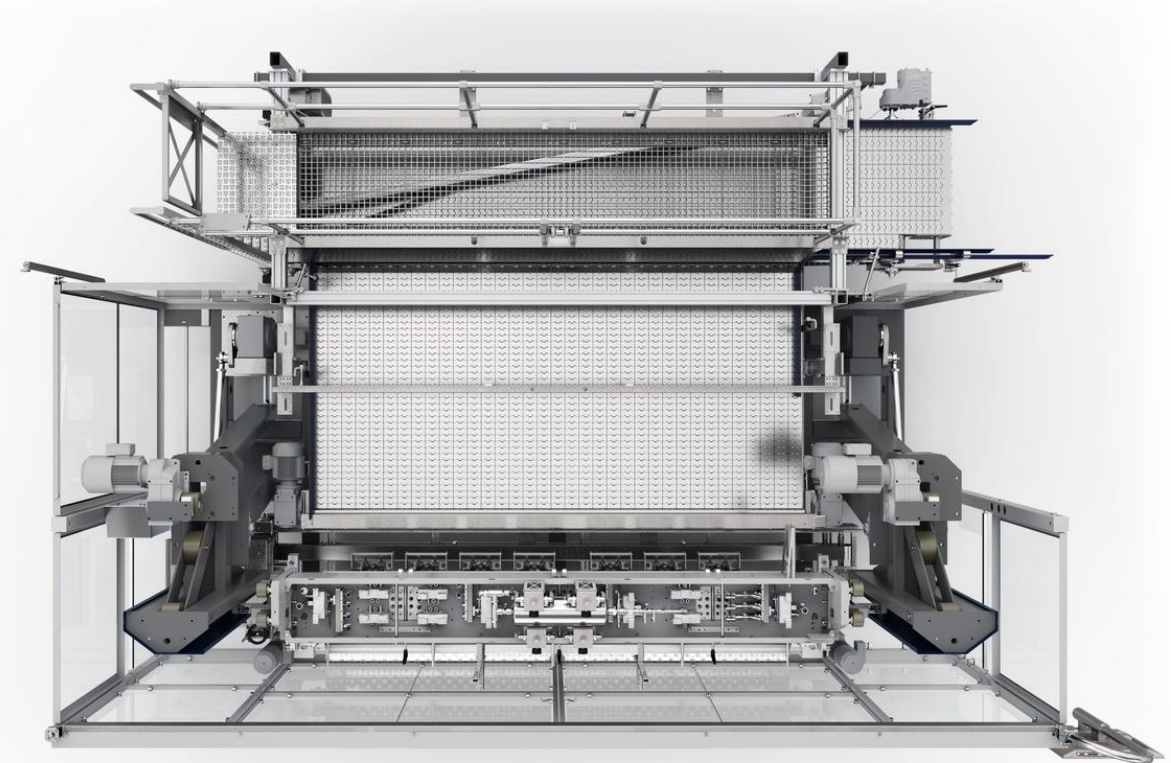
- | | |
|---|---|
| 1 Pack infeed | 4 Gripper cups |
| 2 Container discharge and infeed table | 5 Lifting unit for gripper heads |
| 3 Gripper head | 6 Oscillating mechanism |

Technical details



Design features

- Container table depending on the customer object with stainless steel flat-top chains or plastic flush-grid belts
- Stainless steel pack conveyor with infeed and pack stopper
- Single-lane or double-lane conveyor
- Gripper heads and layer systems with quick-change function
- Lifting unit with maintenance-free toothed belt drive
- Integrated safety stop feature
- Pneumatic or motorised drive for the insertion frame
- Oscillating mechanism supports – depending on the machine size
- Control cabinet integrated directly on the machine
- Machine guards with sliding or double-wing doors
- Structure comprising:
 - One oscillating mechanism support for machines in the low to medium output range (size: 1400)
 - Two oscillating mechanism supports for machines in the medium to high output range (size: 1800 to 2900)



Technical details



Layout variants

- T design
 - for all sizes
- H design
 - For size 1400
 - Variant which is gentle on the product for cylindrical containers without label guard, e.g. wine bottles

Output range for the T variant*

Size	Pack block length (mm)	Speed on one lane (max. cycles per hour)		Speed on two lanes (max. cycles per hour)	
		Plastic crates*	Cartons	Plastic crates*	Cartons
1400	1,420	520	450		
1800	1,870	510	440		
2200	2,210	490	420	410	360
2500	2,550	460	400		
2900	2,975	430	380	370	340

* Values for the unpacker are approx. 40 cycles higher.

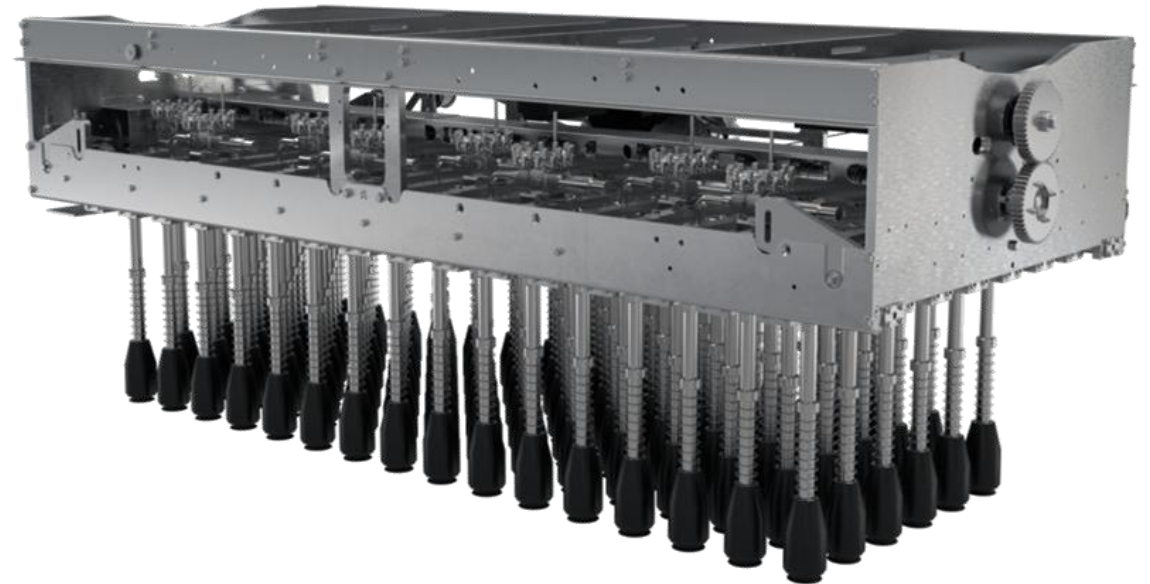
Assemblies

Gripping devices



Gripper heads and grippers

- Full range of task-specific grippers:
Rigid gripper units and units that can be moved one or two-dimensionally
- Gripper cups custom-fitted to the container shape:
 - Standard cups
 - Glass-fragment-resistant long-life grippers
 - Gripper cups with mechanical hooks for PET containers
 - Grippers with gripper cups
 - Mechanical gripping devices for multipacks and specially shaped bottles
- Special unscrewable gripping devices for swing-stopper bottles



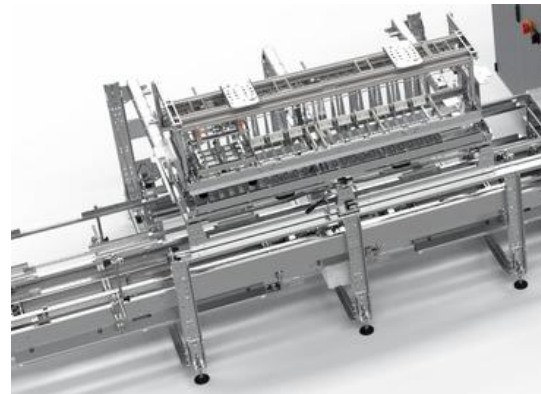
Additional equipment



- Parallel infeed or discharge table
- Gripper heads and insertion guide springs for handling cartons with dividers
- Spindle-adjustable gripper head for handling different container diameters
- Centralised adjustment of guide plates
- Central lubrication system
- Quick handling parts change-over with quick-change equipment
- Freeflow crossover bridge at the packer table
- Different options for handling parts storage:



Handling parts trolley for safe storing all handling parts



Flat magazine for quick change-over and storing handling parts close to the machine



Handling parts trolley for quick change-over and mobile storing of handling parts



Lifting magazine for quick change-over and space-saving handling parts storage close to the machine

Benefits to you



Sturdy and reliable

The Smartpac can withstand tough treatment: Its sturdy construction comprising standardised elements keeps the amount of wear and maintenance to be performed at a low level.

Flexible application

The extremely diverse variants offer high flexibility when it comes to the gripping devices, meaning that the Smartpac can handle a large number of different container and pack types.

Quick conversion

The Smartpac is soon ready for action again after a product change-over. With its short change-over times and brief periods of inactivity, the packer is distinguished by its high productivity.

Compact and easily accessible

The optimised, easily understandable machine construction allows the Smartpac to be continually operated at a high output.

Clear operation

Production data, operating functions, status indicators, help texts and diagnostics tools in the respective native language make it possible to operate the equipment quickly and comfortably on the touch-screen.

Request new machine

You can easily send a request for a non-binding quotation in our [Krones.shop](#).



Everything from a single source



Training sessions at the Krones Academy – trained personnel for an increased efficiency of your line

The multifaceted offer by the Krones Academy ranges from operation, servicing and maintenance courses through to management training. We will gladly also create your individual training programme.

Krones Lifecycle Service – Partner for Performance

It goes without saying that also after the purchase of new machines, Krones takes care of your lines: The Krones LCS experts are always there to help you reaching your goals and turn your wishes into optimal LCS solutions.

KIC Krones cleaning agents make your machine shine

Only if the production environment is immaculate, can your product be brilliant. KIC Krones provides you with the optimum cleaning agents and disinfectants for each individual production step.

KIC Krones lubricants for each production step

Whether for gears, chains or central lubrication systems – our greases and oils are true all-rounders. They can reach every lubrication point, protect your line and ensure gentle treatment for your products thanks to their food-grade quality.

**SOLUTIONS
BEYOND
TOMORROW**

