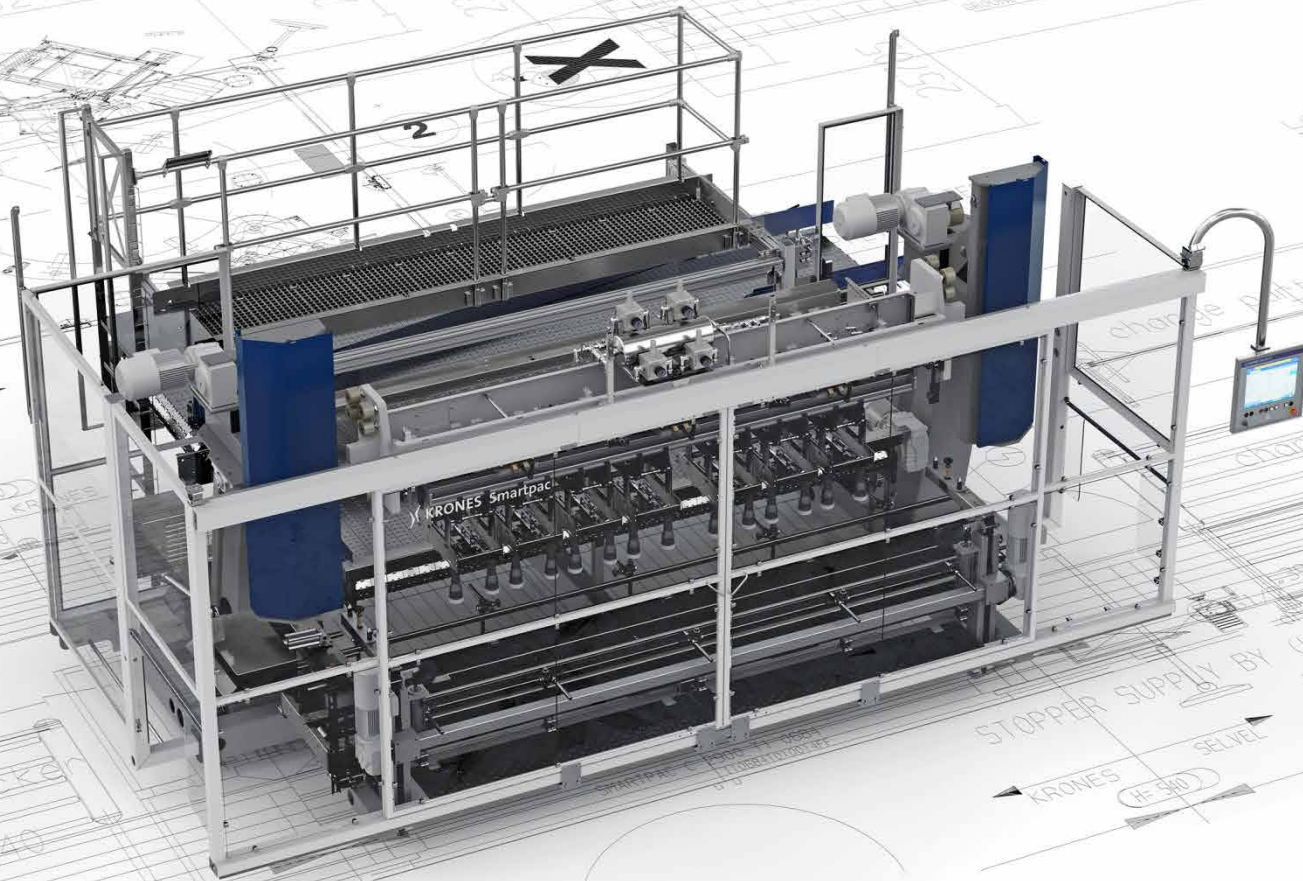




Smartpac

Remaining flexible during packing
and unpacking





Keeping a firm grip on container diversity

Nowadays, it is normal to have a wide variety of containers and packs. 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 packer 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 2,900 millimetres possible



*Single-column
machine "1400"*



*Two-column machine
"1800-2900"*



Method of operation

Packing

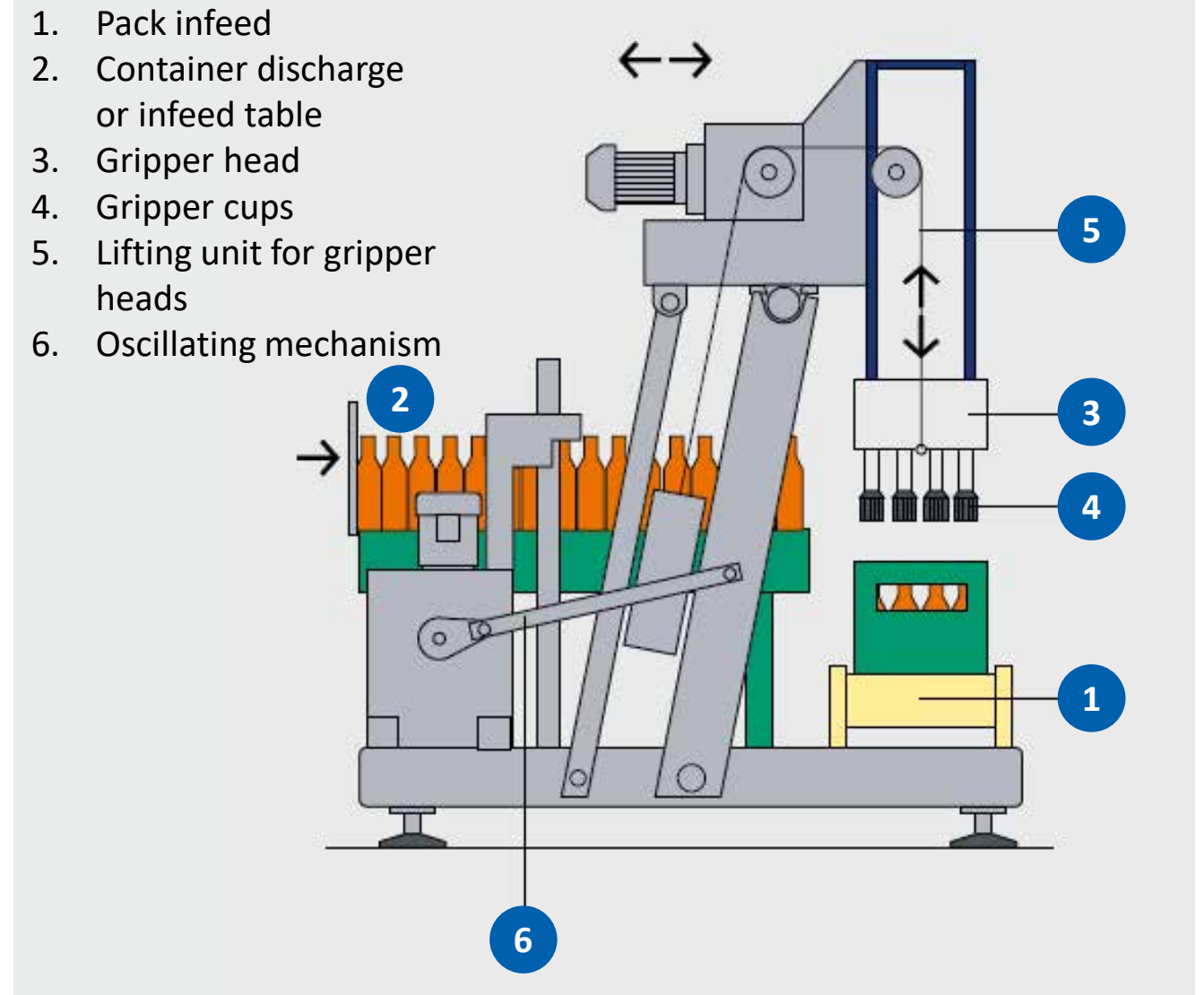
- The bottles on the container table are divided up onto lanes
- The pre-positioned containers are picked up using gripper heads and set into the fed packs
- The bottle formation is set down reliably with the integrated insertion frame

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





Technical details

Design features

- Container table 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 storage 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 column for machines in the low to medium output range (size: 1400)
 - Two columns for machines in the medium to high output range (size: 1800 to 2900)

Output range for the T variant

* The values for the unpacker are 40 cycles higher.

Size	Pack block length (mm)	Speed (cycles per hour) single lane		Speed (cycles per hour) two lanes	
		Plastic crates*	Cartons	Plastic crates*	Cartons
1400	1,420	520	450		
1800	1,850	510	440		
2200	2,100	490	420	410	360
2500	2,450	460	400		
2900	2,900	430	380	370	340

Layout variants

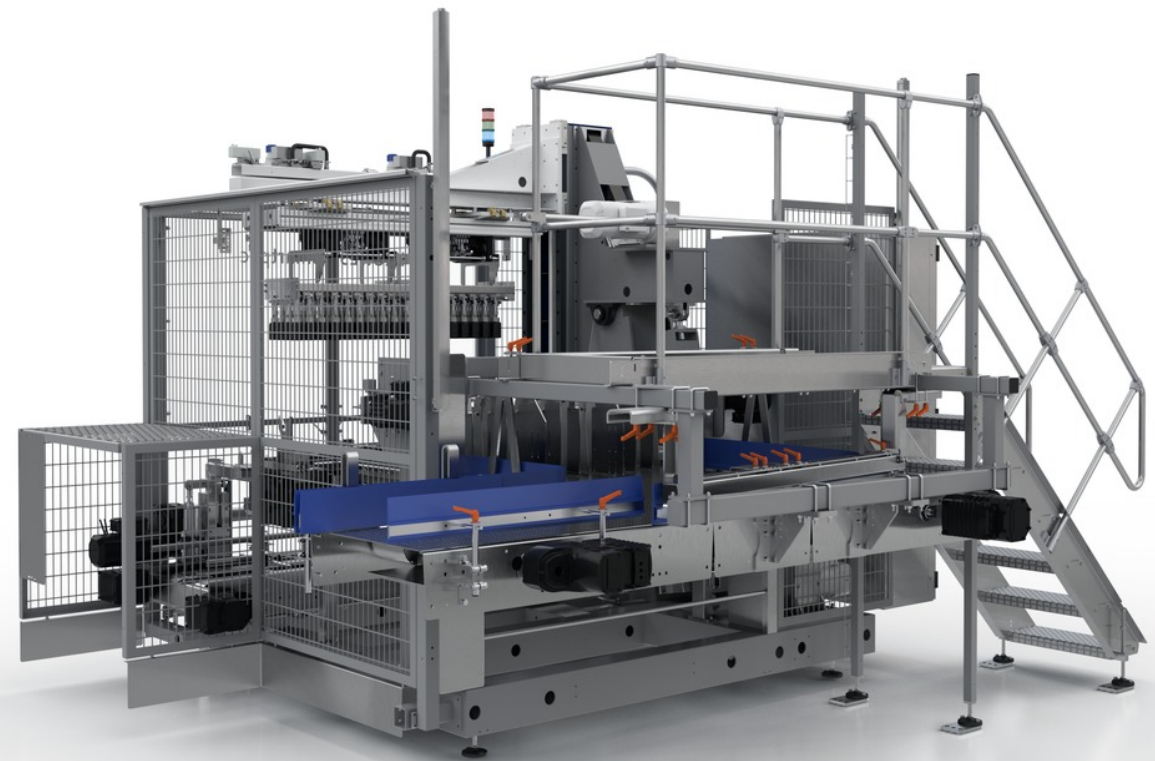
- T design
 - for all sizes
- H design
 - For size 1400
 - Variant which is gentle on the product for cylindrical containers without label guard, e.g. wine bottles



Assemblies – gripping devices

Gripper heads and grippers

- Full range of task-specific grippers:
 - Rigid gripper heads and heads which can be moved in one or two directions
- Gripper cups custom-fitted to the container shape:
 - Standard cups
 - Splinter-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
- Centralised adjustment of guide plates
- Hoist for vibrator bar
- Central lubrication system
- Quick handling parts change-over with quick-change equipment
 - Handling parts trolley for handling parts storage
 - Flat magazine for handling parts storage
- Freeflow crossover bridge at the packer table



Spindle-adjustable gripper head for handling different container diameters

Carriage for the safe storage of manually adjustable handling parts



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.

Clearly structured for the operator

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

Compact and easily accessible

The logical, easily understandable machine construction allows the operator to continually operate the Smartpac at a high output.



Everything from a single source

Training sessions at the KRONES Academy – trained personnel increases your line efficiency

The versatile training offer ranges from operation, servicing and maintenance to management training. We will gladly also establish your individual training programme.

KRONES Lifecycle Service – partner for performance

Also after having purchased a new machine, KRONES will take care of your line; the LCS experts are always ready to consult you and translate your goals and 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.

Lubricants from KIC KRONES for every production step

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



Digitalisation



Process
technology



Bottling and
packaging equipment



Intralogistics



Lifecycle
Service

We do more.

 **KRONES**