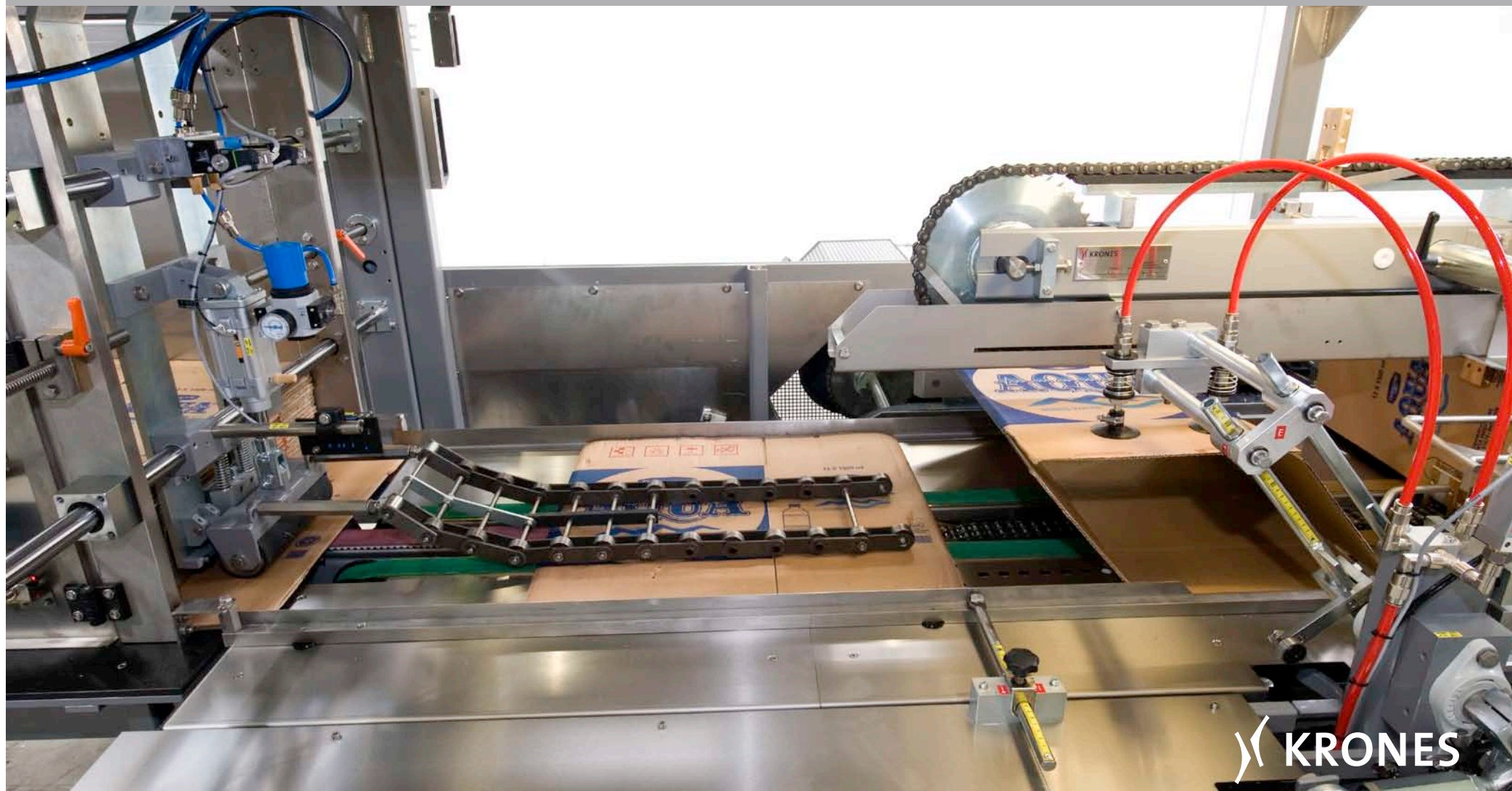


KRONES Variocart and Variocol Professionals in carton processing



 **KRONES**

Origami for the advanced

KRONES Variocart and Variocol

At best, packaging must be stable and look good. Cartons fulfil these requirements - if they are folded precisely and closed securely. With the machines from the Variocart and Variocol series, you have reliable specialists at your side to perform both tasks. The former uses preglued blanks to “build” functional packaging with an attractive shape; the latter seals the cartons’ top flap so that nothing can happen to the products inside. Both machine types are available in a range of output variants. However, regardless of which speed you choose, precisely folded and stable cartons will always emerge at the end. A pretty impressive result!



Variocart C 40 – carton erector for the medium output range

KRONES Variocart

Principle of operation

The preglued blanks are inserted vertically into the magazine. A vacuum gripper removes the first blank and transfers it to the pusher bar, which brings the blank to the folding station. There, vacuum cups erect the carton and fold in the side flaps. For an optimum result, the cups tightly hold the underside of the blank during folding. The cartons are then conveyed to the closing station, during which time hotmelt is applied. In the closing station, the base is glued and the finished carton is then pushed out of the machine.



Application

For folding cartons with the following dimensions

- Length: 200 – 525 mm
- Width: 120 – 400 mm
- Height: 180 – 550* mm

* Applies for vertical top flaps

Output

Up to 2,400 cartons per hour

Variocart C 40

Figures, data, facts

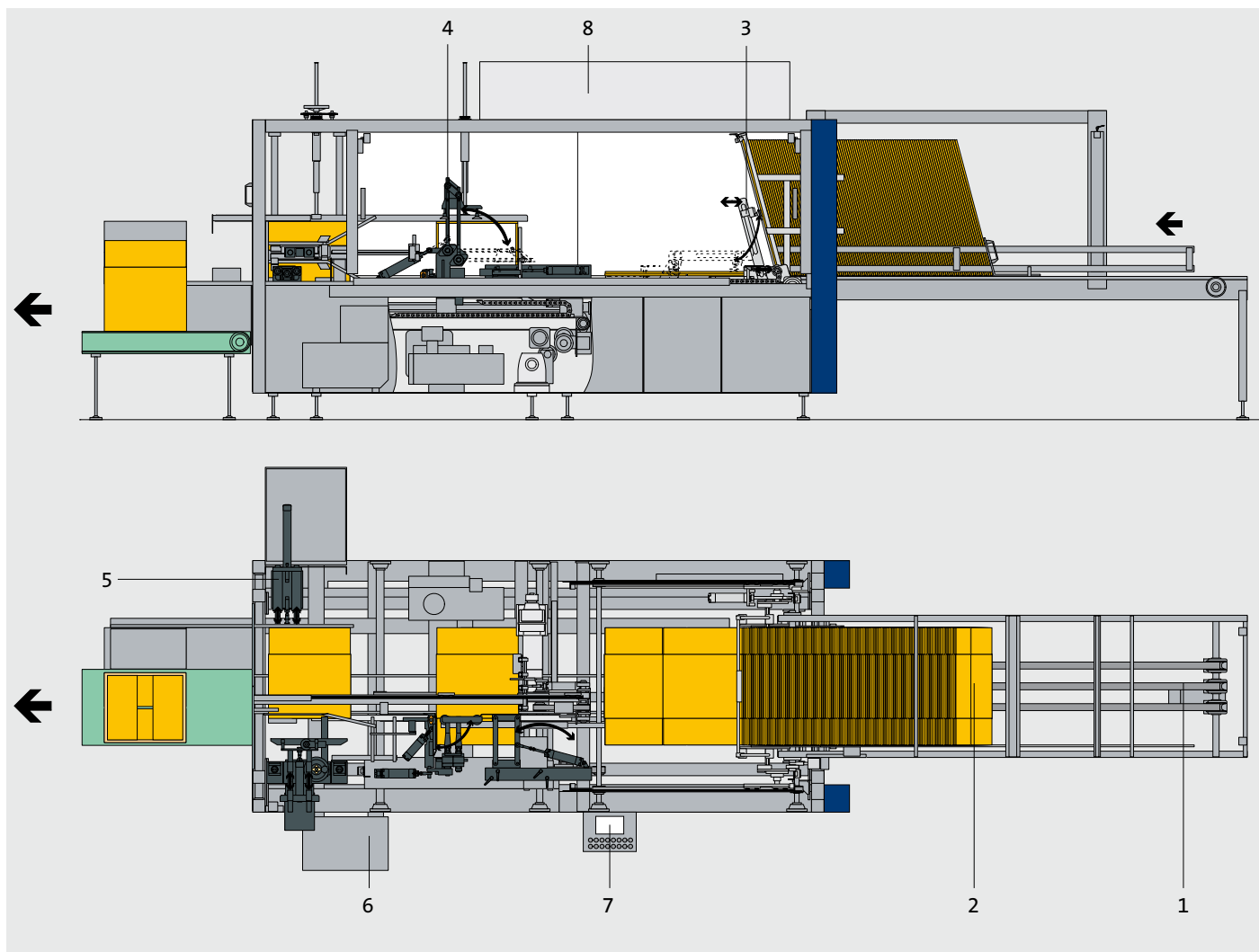
KRONES Variocart

Design features

- Main drive with servo motor
- Hotmelt unit
- Intelligent frequency inverter with operator panel
- B&R ACOPOS axis controller
- Built-on control cabinet
- Guarding with sliding doors
- Linear blanks magazine with direct infeed
- Bearings with life-long lubrication

Additional equipment

- Inline magazine for horizontal blanks
- 90° stack preparation for the blanks magazine
- PLC with touch-screen control panel
- Central lubrication system



- 1 Blanks feed unit
- 2 Blanks magazine
- 3 Linear separator
- 4 Unfolding unit
- 5 Closing station
- 6 Hotmelt unit
- 7 Control panel
- 8 Control cabinet

Variocart C 40

Your benefits

KRONES Variocart

■ Broad processing spectrum

The Variocart C 40 can process the widest range of carton qualities and is also suitable for carton blanks with glued dividers, for cartons with oversized cross lids, or half cartons and display cartons.

■ Simple change-over

With its clamping levers and crank adjustment system, the erector can be adjusted to suit other blank sizes in just a few minutes. All of the settings are 100% reproducible - for maximum repetition accuracy.

■ Ergonomic magazine

Thanks to its ergonomic height and large storage capacity, the blanks magazine can be refilled simply and comfortably.

■ High functional reliability

Well designed machine elements, such as a coated transport chain, back-up pressure monitoring system and controlled feed all ensure that the blanks are processed smoothly.

■ Good accessibility

Large-surface sliding doors provide easy access to the Variocart C 40. The open design of the entire machine also makes all operations and maintenance work easier to perform.

■ Minimised maintenance work

The use of toothed belts and lifetime-lubricated bearings provides a considerable reduction in the maintenance work to be performed.



Folding in the side flaps on the closing station

Variocart C 50 – the “record-breaking folder”

KRONES Variocart

Principle of operation

A pusher removes the blanks from the magazine at intervals and transfers them to a drag chain which conveys the blank to the folding station. There, vacuum cups erect the carton and fold in the side flaps. For an optimum result, the cups tightly hold the underside of the blank during folding. Pneumatic folding rods fold in the inside base flaps. The carton base is then sealed in a continuous process.



Application

For folding cartons with the following dimensions

- Length: 200 – 525 mm
- Width: 120 – 400 mm
- Height: 180 – 550* mm

* Applies for vertical top flaps

Output

Up to 3,000 cartons per hour; for single blank sizes, up to 4,500 cartons per hour

Variocart C 50

Figures, data, facts

KRONES Variocart

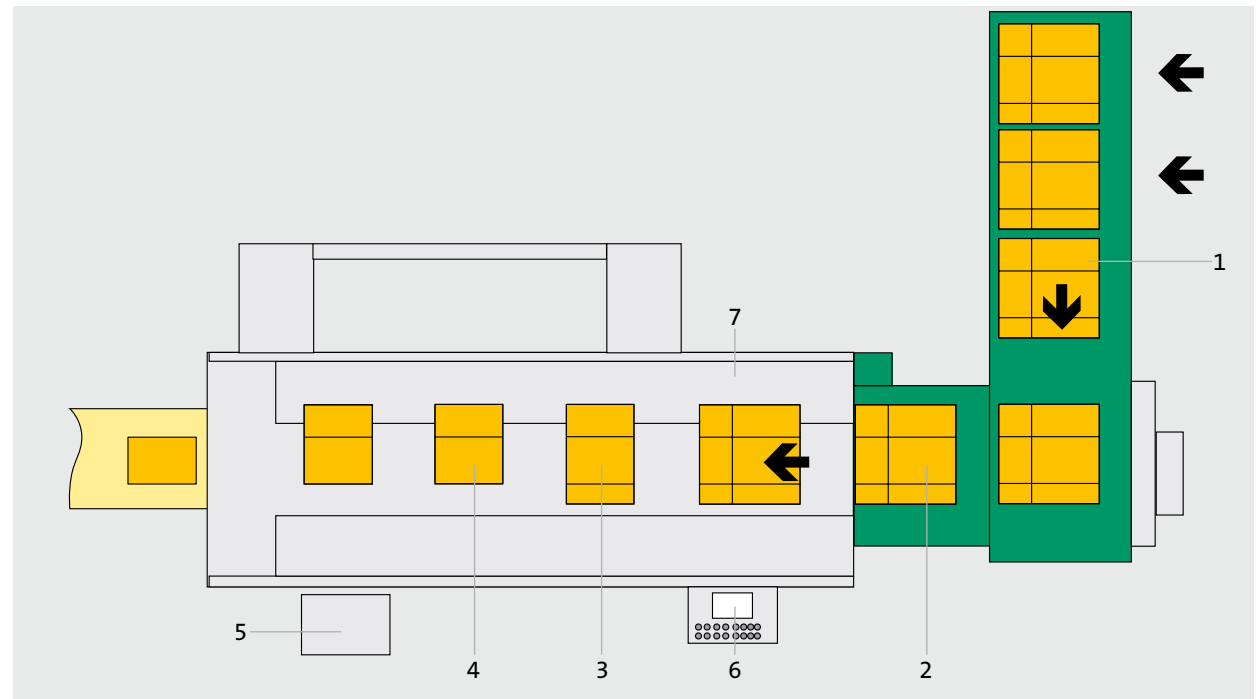
Design features

- Main drive with servo motor
- Lifting magazine with stack preparation
- 90° stack preparation for the blanks magazine
- Pusher magazine
- Extended stack preparation with automatic infeed
- Hotmelt unit
- Intelligent frequency inverter with operator panel
- B&R ACOPOS axis controller
- Built-on control cabinet
- Guarding with sliding doors

Additional equipment

- Extended stack preparation with automatic infeed
- Automatic change-over to another carton
- PLC with touch-screen control panel
- Central lubrication system

- 1 90° stack preparation
- 2 Pusher magazine
- 3 Unfolding unit
- 4 Closing station
- 5 Hotmelt unit
- 6 Control panel
- 7 Control cabinet



Variocart C 50

Your benefits

KRONES Variocart

■ Record output

The Variocart C 50 reaches an output of up to 3,000, for single carton sizes even up to 4,500, cartons per hour.

■ Broad processing spectrum

The Variocart C 50 can process a wide range of carton qualities and is also suitable for carton blanks with glued dividers, for cartons with oversized cross lids, or half cartons and display cartons.

■ Ergonomic magazine

Thanks to its ergonomic height and large storage capacity, the blanks magazine can be refilled simply and comfortably.

■ Simple change-over

With its clamping levers and crank adjustment system, the erector can be adjusted to suit other blank sizes in just a few minutes. All of the settings are 100% reproducible - for maximum repetition accuracy.

■ Good accessibility

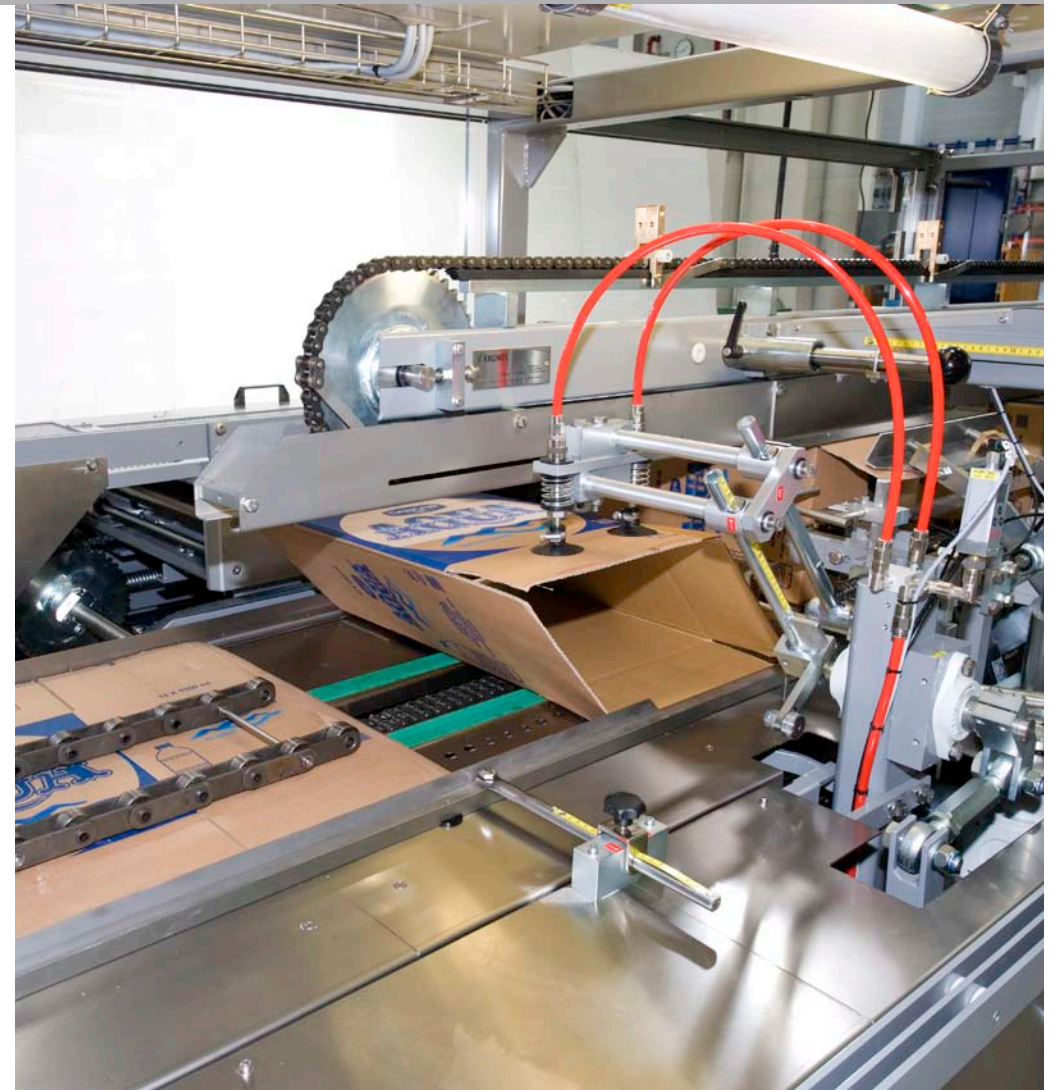
Large-surface sliding doors provide easy access to the Variocart. The open design of the entire machine also makes all operations and maintenance work easier to perform.

■ Minimised maintenance work

The use of toothed belts and lifetime-lubricated bearings provides a considerable reduction in the maintenance work to be performed.

■ High functional reliability

Well designed machine elements, such as a coated transport chain, back-up pressure monitoring system and controlled feed all ensure that the blanks are processed smoothly.



*Carton
unfolding with
vacuum cups*

Variocol – carton lid sealer

KRONES Variocol

Principle of operation

The cartons which are open at the top are accumulated in front of the machine infeed by a belt conveyor. Then, they pass through the machine on a roller conveyor. They are moved by lateral belts which are, in turn, driven by frequency-regulated drives. A fixed holder folds the front and a pneumatic system folds the rear stop-end flap. Both flaps are then sprayed with glue and glued down with the side flaps. At the pressing-on area, a belt conveyor presses against the carton from above, thus ensuring reliable sealing.



Application

For sealing cartons with the following dimensions

- Length: 200 – 500 mm
- Width: 120 – 300/400* mm
- Height: 100 – 380 mm

* Applies for single-lane processing

Output

- Single-lane: Up to 3,600 cartons per hour
- Double-lane: Up to 7,200 cartons per hour

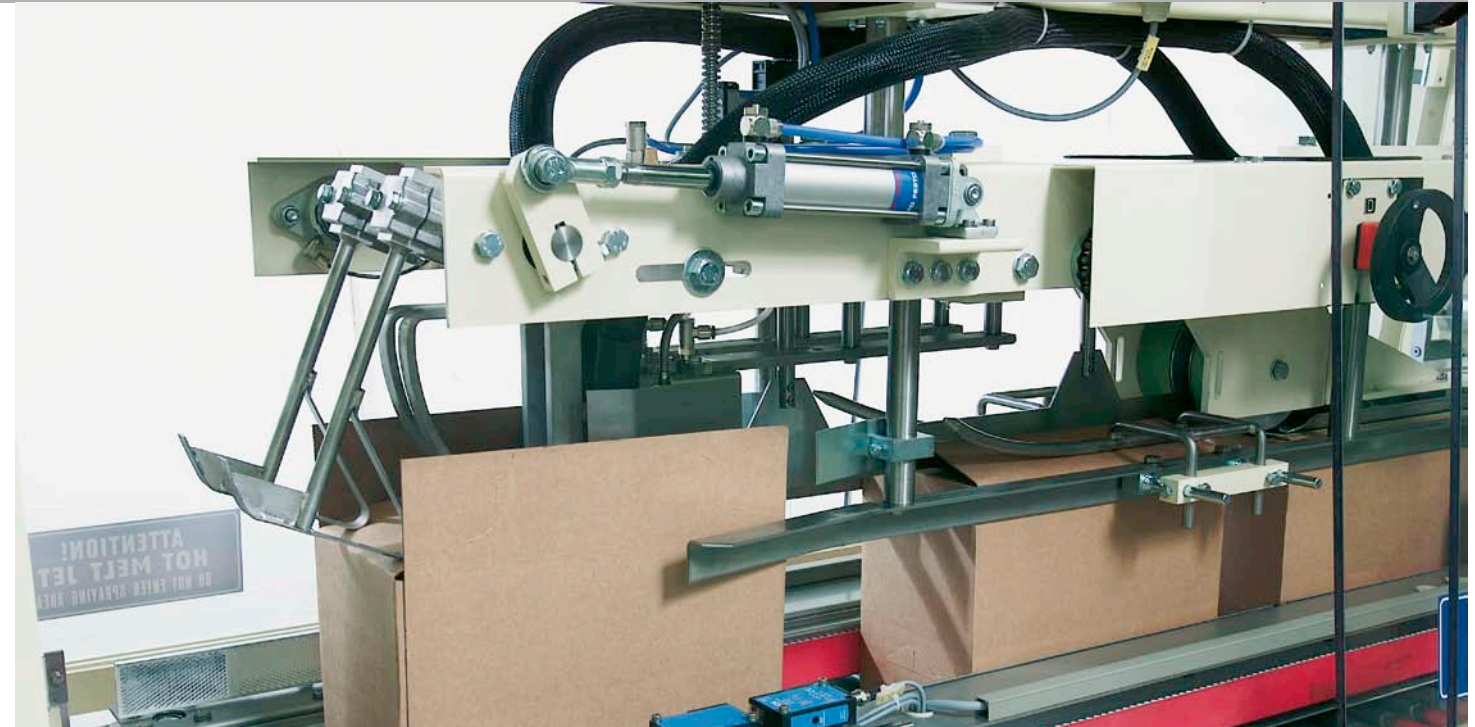
Variocol

Figures, data, facts

KRONES Variocol

Design features

- Continuously operating machine
- Single-lane or double-lane design
- Guarding with sliding doors on both sides
- Free passage of plastic crates and trays
- Sealing head for long flaps
- Pressing-on plate with spring-supported suspension for compensating different carton height tolerances
- Carton conveyance on rollers with particularly smooth, lateral belt guidance
- Built-on control cabinet
- B&R ACOPOS axis controller
- Bearings with life-long lubrication



The Variocol firstly folds in the front stop-end flaps and then the side flaps

Additional equipment

- KRONES iPanel touch-screen
- Automatic change-over to different carton

Variocol Your benefits

KRONES Variocol

- **Good accessibility**

The clearly arranged machine is easily accessible from all sides through sliding doors.

- **Gentle carton handling**

The combination of roller conveyor and lateral belt guidance provides a particularly gentle carton conveyance.

- **Compensation of height tolerances**

The spring-mounted suspension for the pressing-on belt ensures that all cartons, even those with different heights, are reliably sealed.

- **Short change-over times**

The machine can be changed over to another carton type with mechanical cranks. When doing so, the counter guarantees a 100% repetition accuracy.

