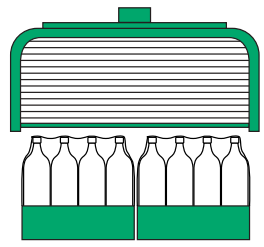
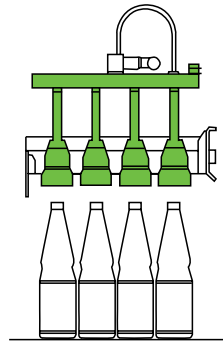


Innopack

Innopal

Carton Packaging –
A Program for Medium-Size Companies



KHS Carton Packaging – The New Modular Concept for Compact, Medium-Sized Solutions



_The New KHS Modular Concept – Future-Safe Packaging Technology Right Down the Line	4
_Innpack CA Carton Flap Opener – High Precision Even Under Full Load	6
_Innpack SP-1200 Packer – Flexible Thanks to Programmable Packing Cam	8
_Innpack SP-1800 Packer – The High-Performance Model	10
_Innpack DV Carton Closer – Flawless Glue Application and Perfect Sealing	12
_Innopal PBL Palletizer – The "Small" High-Performance Palletizer	14
_Robot PC-Based Control – Central Intelligence Ensures Maximum Line Efficiency	16
_PC-Based Robot Control – The New Generation	17
_Variant K Carton Labeller – The Ideal Addition to Carton Packing Lines	18

The New KHS Modular Concept – Future-Safe Packaging Technology Right Down the Line



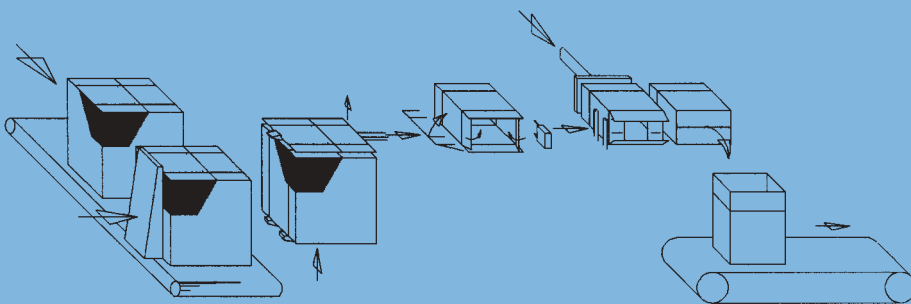
Innopack CA Carton Flap Opener

This machine uprights cardboard box blanks, folds in and glues the bottom flaps. The finished cartons leave the machine in an upright position ready for subsequent packing. These cyclic operations are performed automatically.

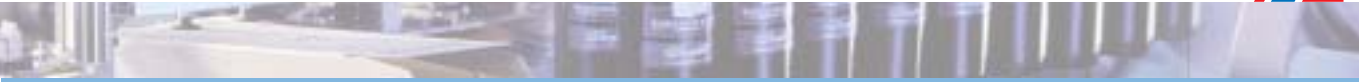


Innopack SP-1800 Packer

This machine packs a widest possible range of bottles, jars, and similar containers in cartons.



Carton Packaging Lines for Medium-Sized Business for Instance



Innopack DV Carton Closer

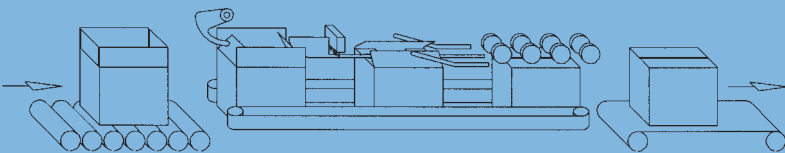
This machine folds in and glues the lid flaps of filled cardboard boxes.

Fully automatic, linear operations, driven by lateral conveyor belts.



PBL Palletizer

A palletizer designed to reliably solve all palletizing tasks in the medium performance range.



Innopack CA Carton Flap Opener – High Precision Even Under Full Load



— Pneumatic position fixing of each individual carton blank picked up by suction.
High precision carton positioning.

— Automatic simultaneous adjustment of blank lift forks for magazine sidewall changeover.
Less time required for changeover to other carton formats.

— Machine-mounted handwheel for adapting to various sized cartons.
Simple time-saving handling.





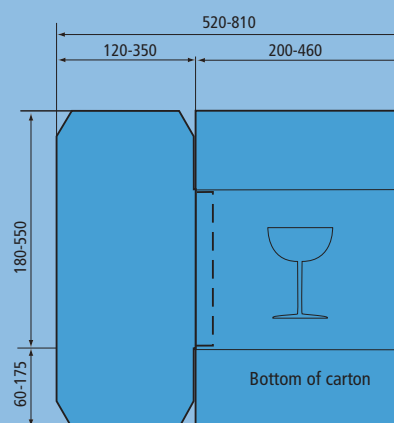
— Pusher with opposing gripping tongs. Side- as well as height-adjustable.
Optimum downforce.

— Only the plunger needs to be changed for changing over to other carton formats.
Effortless, time-saving conversion; increased machine availability.

Technical data:

Innopack CA	Output		
Carton heights mm	450	500	550
Cartons per hour	2,200	2,000	1,700

Processing sizes in mm

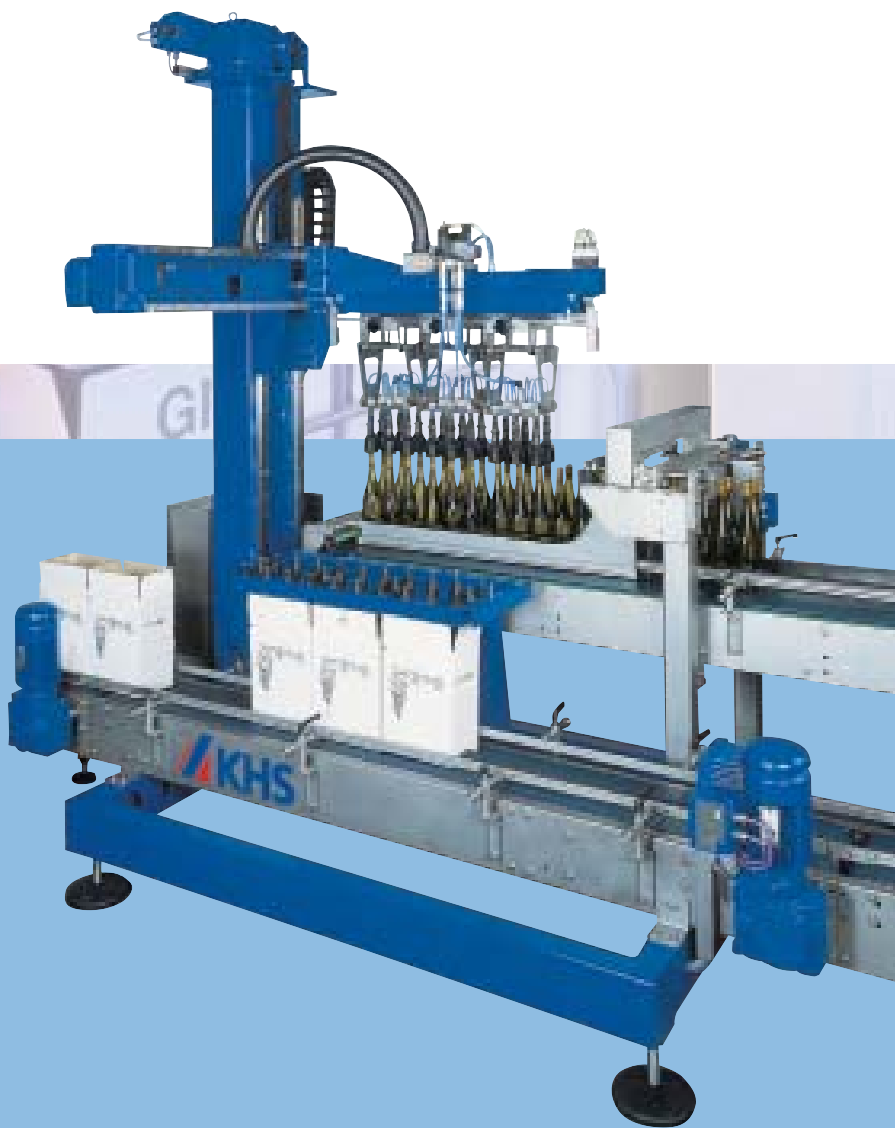


Innopack SP 1200 – Flexible Thanks to Programmable Packing Cam



- Single-column modular packer for 4,000 to 18,000 bottle-per-hour outputs. Tailored to the needs of medium-size companies.
- New compact modular design system. Requires considerably less space.
- Bottle pickup from table widths of up to 1,200 mm. Flexible packaging quantities.





_ Programmable packing cam.
 Two programmable axes of motion.
 Reliable processing capabilities for all
 standard-shaped items and pack styles.

_ The number of packing bell heads can be
 easily changed.
 Optimum adaptation to a widest possible
 variety of packaging tasks.

Single-column machines (low and medium
capacity range)

Technical data:

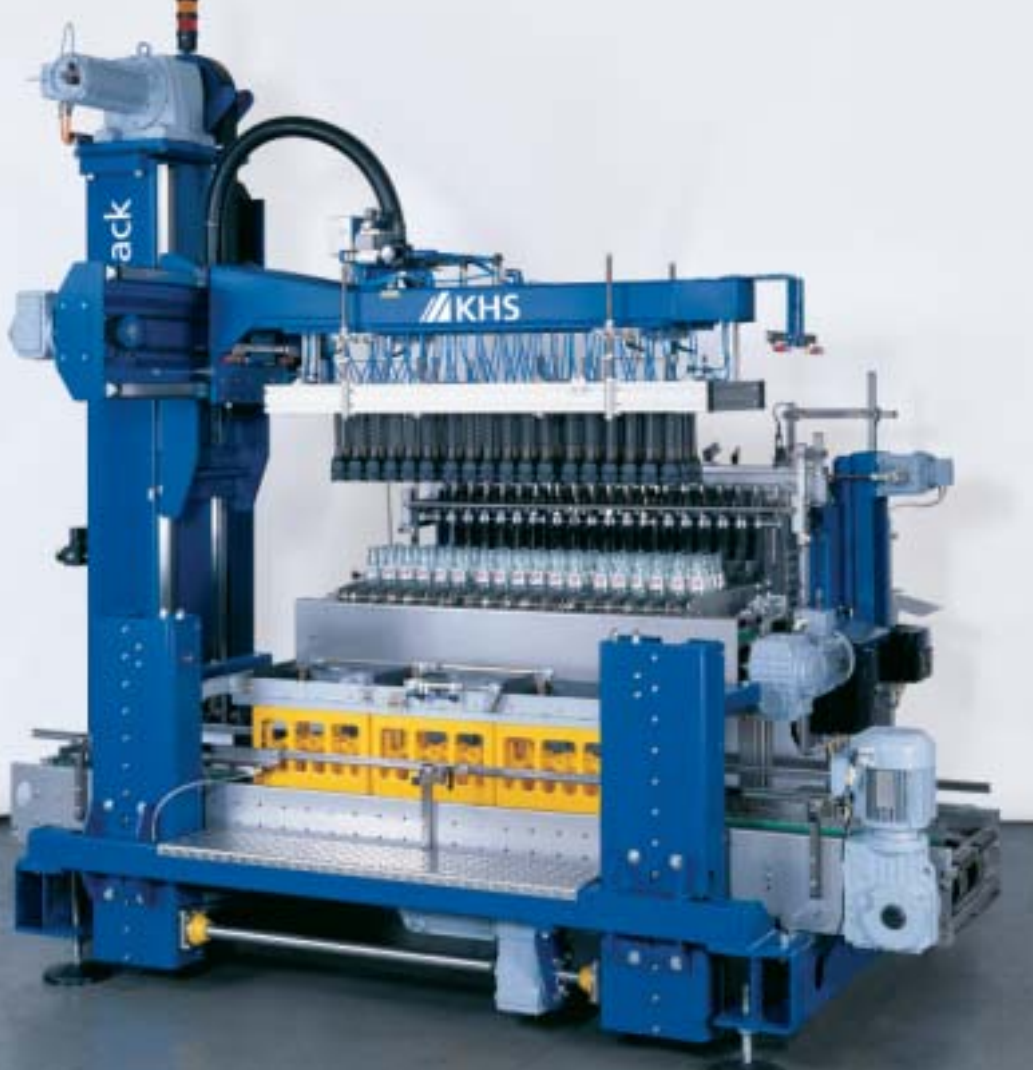
Innopack SP	Processing sizes up to 1,200 mm
SP-E1-1200 packer	580 cycles/hour
SP-A1-1200 decaser	600 cycles/hour

Innopack SP 1800 – The High-Capacity Model



- Single-column modular packer for 16,000 to 60,000 bottle-per-hour outputs. Tailored to the needs of medium-size companies.
- New compact modular design system. Requires considerably less space.
- Bottle pickup from table widths of up to 1,800 mm, single-lane of up to 1,400 mm, double-lane Flexible packaging quantities.





- Programmable packing cam.
- Two programmable axes of motion.
- Reliable processing capabilities for all standard-shaped items and pack styles.

- The number of packing bell heads can be easily changed.
- Optimum adaptation to a widest possible variety of packaging tasks.

Single-column machines (medium and high capacity range)

Technical data:

Innopack SP single-lane	Processing sizes up to 1,800 mm
SP-E1-1800 packer	580 cycles/hour
SP-A1-1800 decaser	600 cycles/hour
Innopack SP double-lane	Processing sizes up to 1,400 mm
SP-E2-1400 packer	480 cycles/hour
SP-A2-1400 decaser	500 cycles/hour

Innopack

Innopack DV Carton Closer – Flawless Glue Application and Perfect Sealing



- Flawless gluing and sealing by centrally driven carton conveying belts
Hotmelt (additional coldmelt option) for carton lid sealing.

- Central drive. A key prerequisite for perfect belt synchronization.
No carton deformation during the gluing process.
- Frequency-controlled main drive.
Reliable performance even at high machine speeds. Product-related, programmable speed settings.
- Handwheel format changeover.
Minimum changeover time.
- Adjustable front flap folder.
Optimum adaptation to all products to be processed.





Glas

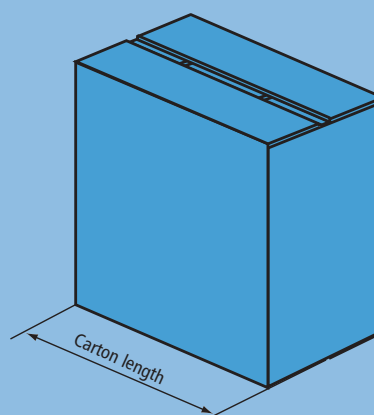
Further advantages of all three system modules:

- Only toothed belts are used as the drive elements.
The result: Gentle-to-product handling, low-wear and low-noise, reduced servicing effort.
- Control cabinets integrated in the machine paneling.
Simple machine installation, fewer sources of error, less wiring effort.

Performance data:

The maximum possible output depends on the carton length.

Carton lengths from
200 mm to 350 mm = 3,200 cartons/hour
350 mm to 500 mm = 2,000 cartons/hour



Innopal PBL Palletizer – The “Small” High-Performance Palletizer



— Innopal PBL – the inexpensive palletizing solution for the low and medium capacity range.

Tailored to the needs of medium-size companies.

— Combined layer pusher/row pusher.

No grouping station necessary.

— The packs are pushed from the infeed roller conveyor onto the loading plate and from there onto the pallet.

Simple, reliable processing technique.





Glas

— New compact modular design system.
Requires considerably less space.

— Programmable robot axes
Reliable processing capabilities for all
standard palletizing tasks.

Technical data:

Innopal PBL up to 1,800 packs/hour

Innopal

Robot PC-Based Control – Central Intelligence Ensures Maximum Line Efficiency

- __ Carton packaging line controlled by only one PC-based control computer. This control not only coordinates the servo-axes but also controls the peripheral components and provides facilities for VGA monitor machine visualization. A concentrated intelligence package for everything!
Interface problems are now a thing of the past.
- __ The production speed of the packaging line can gradually adjusted manually or automatically according to the line output. The result: Extremely high packaging line availability and efficiency.
- __ Clearly arranged graphical user interface. Facilitates system operating and diagnosis significantly.

Visualization with the KCP control panel.



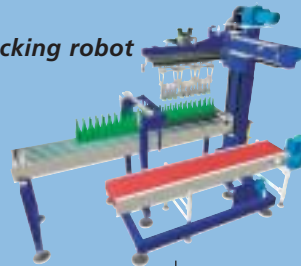
PC Robot Control – The New Generation



Articulated robot



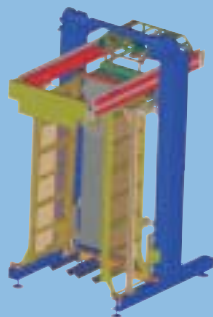
Packing robot



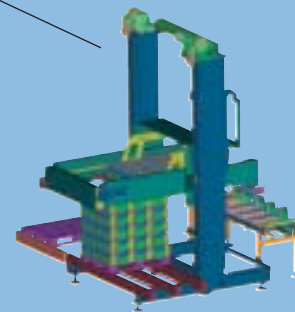
Column-type robot



Depalletizing robot



Palletizing robot



— Only one intelligence to control everything!
A typical characteristic of the KHS PC-based
robot control:
No more interface problems.

— Direct communication links and computer-
guided, real-time sequences of movement.
Maximum precision tracing the travel profile
and noticeably higher cycle intervals.

— Absolute path-measuring system, no
sensory equipment whatsoever.
Timesaving adaptation to new travel paths.
Changeover to other bottle sizes, for
example, possible at the push of a button.

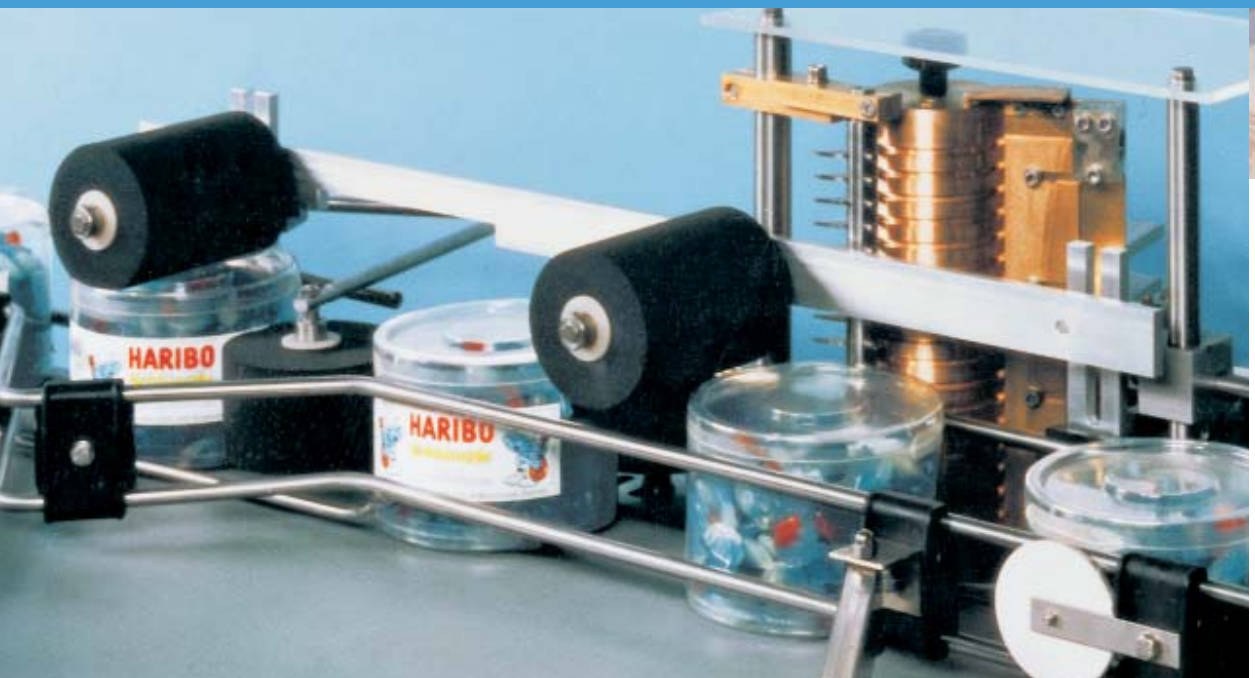
— The PC can be accessed via Teleservice on
customer request.
Supplier specialists provide customer staff
optimum support.

Innopack Innopack

Innocket Variant K Carton Labeller – The Ideal Addition to Carton Packing Lines



— Robust inline design for labelling cartons, cases, and other similarly sized packs. Exceptional reliability. The Variant K labels and labels and labels ...





Compact design

Space-saving addition to KHS carton packing lines.

Possible auxiliary equipment:

Turners, separators, dating facilities, overhead belts.

Flexibility for solving specific tasks.

Variant K Twin, equipped with two opposing labelling stations.

Capabilities for labelling carton fronts and backs simultaneously.

Variant K detached labelling unit for existing conveying system equipped with infinitely variable drive for speed control.

Outputs of up to 2800 cartons/hour

Technical data:

		Variant K and detached unit	Variant K Twin	Variant K II and (K II Twin)
Nominal output (packs/hour) depending on container size.	Up to:	2,800	2,800	4,000
Label widths (mm)	Min.	80	80	85
	Max.	450	450	440
Label heights (mm)	Min.	40	40	40
	Max.	340	340	340
Labelling area over pack bottom (mm)	From	5	5	25
	To	350	350	350
Pack diameters or widths (mm)	Min.	150	150	150
	Max.	450	450	600
Conveyor belt height ± 50 mm		600	600	600
Space requirements (mm)	Length	1,920 (800)	2,420	3,320
	Depth	990 (600)	1,450	1,375 (1,850)
	Height	800 (600)	800	1,715
Motor output (kW)		2 x 0.18	2 x 0.18	2 x 0.25 (3 x 0.25)



**KHS Maschinen- und
Anlagenbau Aktiengesellschaft**

Juchostrasse 20
D-44143 Dortmund
Germany
Phone +49 231 569-0
Fax +49 231 569-1541

Planiger Strasse 139-147
D-55543 Bad Kreuznach
Germany
Phone +49 671 852-0
Fax +49 671 852-556

Enzingerstrasse 139
D-67551 Worms
Germany
Phone +49 6247 97-0
Fax +49 6247 97-3300

www.khs-ag.com
Email: info@khs-ag.com

KHS Anker Maschinenbau GmbH
Ruwoldtweg 14
D-22309 Hamburg
Germany
Phone +49 40 89086-0
Fax +49 40 89086-37150
www.khs-anker.com
Email: info@khs-anker.com