



PalCo

The expert among pallet conveyors



Reliably passing pallets through the process



The pallet conveyor is the last link of the chain in a beverage packaging process, just before storing and loading the goods. Reliable operation and sturdy functions are indispensable in this operating area. The PalCo uses a sophisticated control concept for highly efficient pallet conveyance in lanes which -in turn - supports the high-performance continuous operation of the palletiser. With its low-noise and energy-saving operating mode and the individual modules specifically selected to suit the application, the pallet conveyor seamlessly fits into any line.

At a glance

- Pallet conveyor system with a standard speed of 0.25 to 0.5 metres per second
- Numerous variants for the change of direction and additional modules for pallet handling
- High output thanks to finely tuned and automatically and manually controlled functional units



Assemblies

Linear conveyor units



Design features

- Maximum working load:
 - 1,300 kg per individual storage location
 - Greater loads on request
- Conveying heights:
 - Standard: 550 mm and 650 mm
 - Other heights on request
- Conveyor speed:
 - 0.25 to 0.5 m per second
 - Other speeds on request
- Can be combined with:
 - fixed and variable rails
 - end stop
 - stoppers
 - centring unit (roller conveyor)
 - tread plates
- Easily accessible drive

Roller conveyors

- Section widths:
 - 1,000 mm for pallet widths up to 800 mm
 - 1,200 mm for pallet widths up to 1,000 mm
 - 1,450 mm for pallet widths up to 1,250 mm
- Roller pitch: 190.5 or 127 mm
- Lengths: between 127 and 4,060 mm
- Side panels low on both sides for lateral pallet infeed and discharge



Chain conveyor

- Chain pitches: 700 mm, 860 mm, 1,000 mm, 1,260 mm
- Variable conveyor chain lanes: from 2 to 5 lanes
- Lengths: between 762 and 4,060 mm
- Robust conveyor chains
- Redirection radius: 80 mm, meaning small crossovers
- Low-noise and low-wear chain guide



Assemblies

module for changing direction



Design features*

- Supported on low-wear ball bearing rim
- Up to 270° rotation
- Easily accessible drive
- Precise final position
- Intrinsic safety thanks to the integrated guards
- Can be combined with:
 - fixed and variable rails
 - end stop
 - stoppers
 - centring unit for empty pallets (roller pivoting table)
- Options for roller and chain pivoting table:
 - Separate protective fence with door
 - Integration in machine guards

* For all modules for changing direction

Roller pivoting table

- Section widths:
 - 1,000 mm for pallet widths up to 800 mm
 - 1,200 mm for pallet widths up to 1,000 mm
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- Roller pitch: 190.5 or 127 mm



Chain pivoting table

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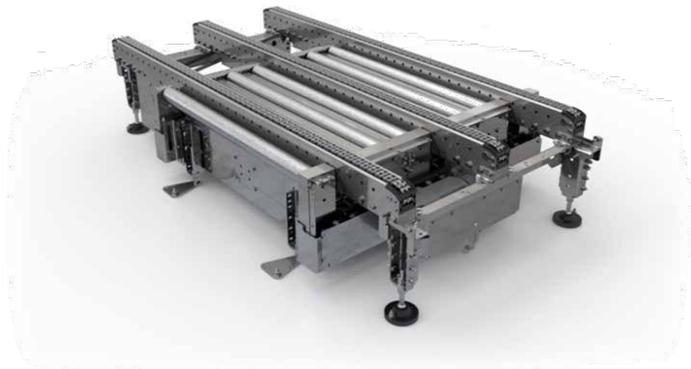
Assemblies

Modules for changing direction



Corner station

- Section widths:
 - 1,000 mm for pallet widths up to 800 mm
 - 1,200 mm for pallet widths up to 1,000 mm
 - 1,450 mm for pallet widths up to 1,250 mm
- Chain pitches: 700 mm, 860 mm, 1,000 mm, 1,260 mm
- 2 to 4 chain lanes
- Maintenance-free lifting mechanism
- Intrinsic safety thanks to the integrated guards



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Corner transfer unit with pivoting table

- Pivoting corner transfer unit with rollers and chain lift compensation for permanent or optional changing of the pallet direction from short-side leading to long-side leading or vice-versa
- Motorised drives
- Chain pitches, number of lanes and transfer rollers according to the chain conveyor configuration
- Can be combined with rails/end stops
- Intrinsic safety thanks to the integrated guards



Additional modules

Empty pallet magazines



Capacity

- 15 good pallets or 10 faulty pallets
- Maximum output for stacking and unstacking:
 - Standard: 120 pallets per hour
 - Higher outputs available on request

LPM-EE design

- Equipped with one-sided or complete pallet latching through forks of forklift
- Suitable for direct stack infeed
- Stacking of half-size pallets onto carrier pallets possible



LPM-ZE design

- Equipped with two-sided pallet latching
- Suitable for direct stack infeed
- For processing difficult pallets with high dimension tolerances and low slide-in forklift openings
- Easy change-over to other pallet formats



Additional modules

Empty pallet magazines



Empty pallet inspection unit

- With top press-on rollers for levelling out staples
- Can be combined with a pallet brushing unit
- Infinitely adjustable test pressure
- Standard tests:
 - Bottom boards and bottom crossboards
 - Lengthwise and crosswise mounted top boards
 - Indirect wedge inspection
- Optional tests: Dimension check, fork arm or area-clear monitoring, separate bottom board inspection of loaded pallet, direct wedge inspection



Add-on modules



Multiple infeed and discharge

- Robust infeed and discharge unit for compact pallet formations consisting of 4 GDB pallets, 6 Euro pallets or 12 Düsseldorf pallets
- Pallet infeed:
 - Row-by-row separation of the pallet formation using liftable and transversely moving lifting rakes
 - Passing on of pallets via integral roller conveyor
- Pallet discharge:
 - Pallet feed via integrated roller conveyor
 - Row-by-row grouping with a lifting rake
- Maximum throughput: 200 full size pallets per hour
- Comprehensive safety concept



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Single or double infeed and single or double discharge with small roller conveyor

- Simple and robust infeed and discharge of one or two pallets simultaneously
- Increased stability and robustness for a safe infeed and discharge by using rollers instead of chains
- Smooth pallet movements also in cross direction thanks to smaller roller pitch
- With bumper, positioning aid or stopper
- With enforced support construction
- Comprehensive safety concept



Travelling carriage

- Function: Transfer of pallets for distribution, collecting, and sorting
- For splitting up multi-lane conveyor sections, for instance before depalletising
- For forming multi-lane conveyor sections, for instance after palletising
- Fence guarding
- Can be combined with all roller and chain conveyors, and all pivoting tables
- Optional: Lengthwise travelling carriage to bridge longer conveyor sections with a low throughput and create throughpassages within the conveyor routes.



PalCo in every-day operation



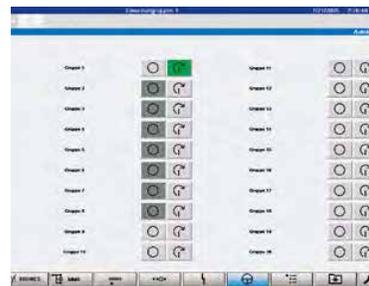
Operation

- Convenient operation by means of touch-screen with simple menu guidance and clear graphics
- Diagnostics system for fault localisation using a line overview as well as drawings, pictures and help texts
- Assistant for troubleshooting
- Remote maintenance available using the remote service system
- Control station function available as an option



Controller

- Optimum utilisation of the capacities by means of the control system
- Arrangement of the pallet storage areas and functional units to ensure highly efficient pallet handling and optimum operating conditions at the palletisers
- Setting up of the segments, also for control in manual mode



Drive technology

- Drive with spur gears
- Installation below the feed rollers and conveyor chains
- Reversible drives for all units
- Frequency inverter control via Profibus or Ethernet



Benefits to you



Quick installation and commissioning

The major part of the components is already pre-assembled at the factory. This ensures the conveyor is ready for operation quickly at the customer site in accordance with the "plug-and-play" principle.

High functional reliability

The sturdy design and use of functional units which have been tested over many years ensure an absolutely smooth PalCo operation.

Gentle on the product

Your products are in good hands on the PalCo: All the modules are designed to convey products gently.

Quiet and economic

All the PalCo components are designed to operate quietly while consuming little energy.

Benefits to you



Modular design

The conveyor sections can be adapted to precisely suit the needs and basic conditions of your production line.

Robust design

Its stainless steel construction gives the PalCo a long service life and protects it from corrosion. In addition, the sturdy conveyor proves to be extremely low-maintenance and easy-care in day-to-day operation.

Intelligent control system

The clever control concept with high proportion of sensors ensures optimum capacity utilisation.

Operator protection

The conveyor system is designed in a way to meet all requirements to a safe operation.

Requesting a new machine

You can easily send a request for a non-binding quotation in our Krones.shop.



Everything from a single source



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-round talents. They can reach every lubrication point, protect your line and ensure gentle treatment for your products thanks to their food-grade quality.

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.



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TOMORROW**

