



LinaFlex Compact

Tunnel pasteuriser in compact design



Effective pasteurisation in just a small space



Product safety is a key issue when it comes to marketing beverages. Pasteurisation is very often procedure number one when it comes to preservation of the just filled products. The LinaFlex tunnel pasteuriser offers a pasteurisation process with precise PU control and efficient use of resources – in what is now an even more compact design.

At a glance

- Compact machine design with precise PU control
- Main conveyors are exactly adjusted to suit the container characteristics and production conditions
- Installed, cabled and tested in the Flensburg plant
- Quick installation
- Integration of long-lasting components



LinaFlex Compact tunnel pasteuriser

The concept



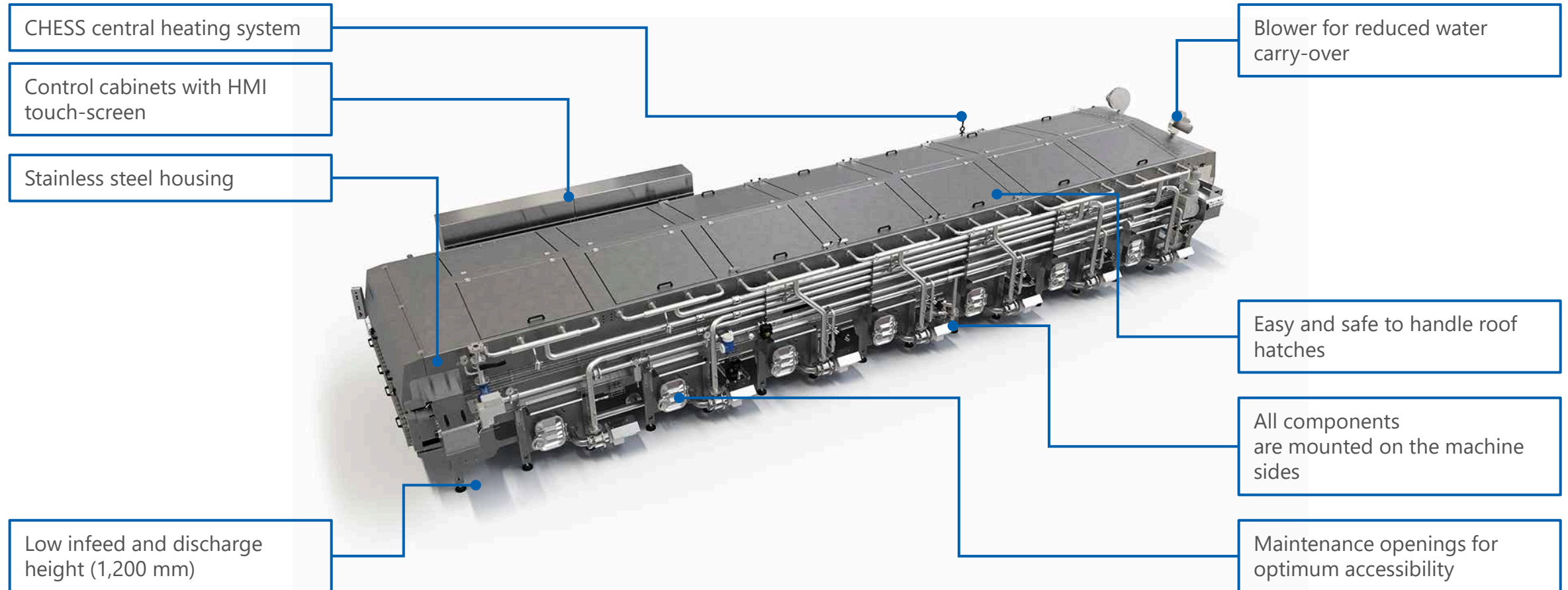
- Compact machine – delivered in one piece
- Installed, cabled and tested in the Krones plant
- PUC³ real-time control of PU values
- "Plug and Play" principle
 - Quick installation
 - Simple start-up
- Central heat supply to the individual zones with the CHES^S* heating system
- Even the small variant provides the highest level of quality
- Long-lasting Marathon Belt and Ironman Belt main conveyors
- Two machine sizes:
 - Treatment area measuring 9.6 metres
 - Treatment area measuring 11.2 metres



* Central heat exchange supply system

LinaFlex Compact with integrated CHES^S heating system and control cabinets

The design



Technical details



- Two possible treatment areas:
 - 23 m² with a length of 9.6 m and width of 2.4 m
 - 27 m² with a length of 11.2 m and width of 2.4 m
- Low infeed and discharge height (1.2 m each)

Compact machine design

- Total length: 13.1 m
- Total width: 3.55 m
- Overall height: 2.1 m
- Empty weight: 8,500 kg

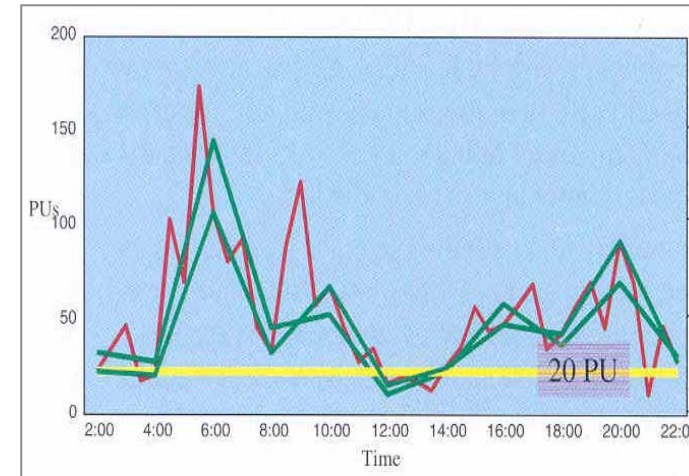


Technical details

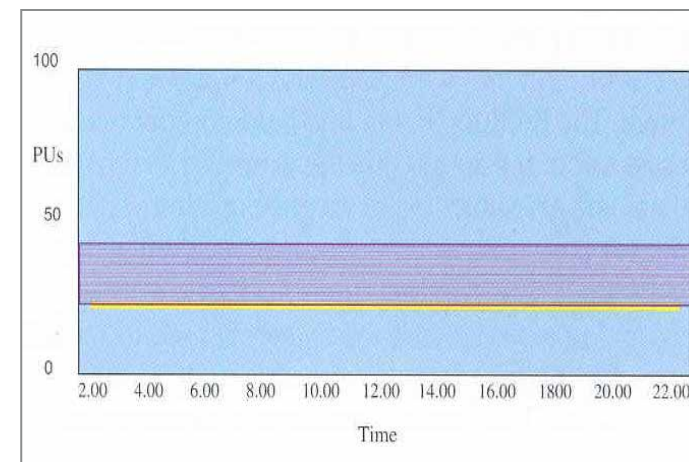


PU controller PUC³

- All product, treatment and operating parameters are precisely acquired and controlled which ensures a high product quality
- Exact calculation of the product temperature and the resulting PUs for each container series
- Dynamic adjustment of the spraying temperature based on the PUs requested and those already reached
- No underpasteurisation and only a low deviation from the set-point value thanks to provident algorithms and intelligent control throughout the complete process
- Uniform PU intake is ensured even during interruptions and stops
- Minimum energy requirement as the controller optimally reacts to changes in the line operating conditions



Pasteurisation result without PUC³ ...



... and with PUC³

Technical details



Conveyors with long service life

- Minimum friction through powerful plastic rollers on the underside of the conveyor: Reduced load for gears and shafts
- Maintenance-free conveyor substructure without centre bearings and wear strips
- No elongation of the conveyor thanks to a four times increased tensile strength
- Service life of 20 years and more

Marathon Belt

- For glass, cans and PET
- Stable and robust structure provided by its stainless steel frame
- Plastic body for optimum stability and transfer properties

Ironman Belt

- Developed especially for processing glass bottles
- Used in areas where glass is more likely to break
- Completely made of stainless steel



Underside of the Marathon Belt



Ironman Belt with transfer

Technical details



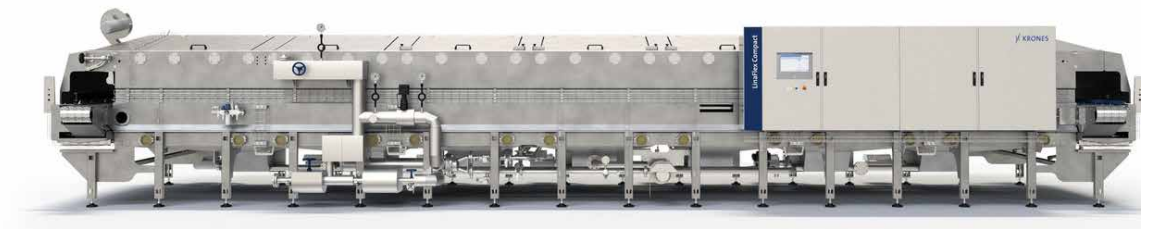
Compact machine design

- Self-contained housing structure
- No columns, straight side walls
- Machine in stainless steel design (AISI 304), 316L alloy optional
- Free of any residual water after emptying – thanks to sloping collecting pans



Quick installation

- "Plug and Play" principle
- Installed, cabled and electrically tested in the Krones plant
- Optimised for a quick production start



Technical details



Easy maintenance and service

- Optimum accessibility
- Detachable double sieves for pump protection
- Manholes in each zone tank
- Spray pipes with cleaning openings



User-friendly design

- Easy opening of the roof cover, supported by a gas pressure cylinder
- Optimum accessibility

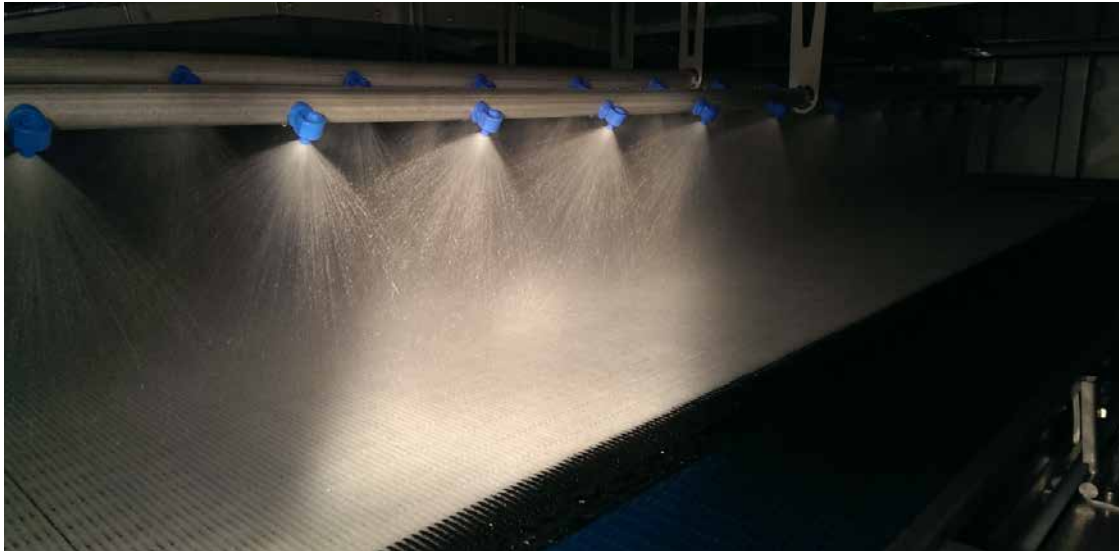


Technical details



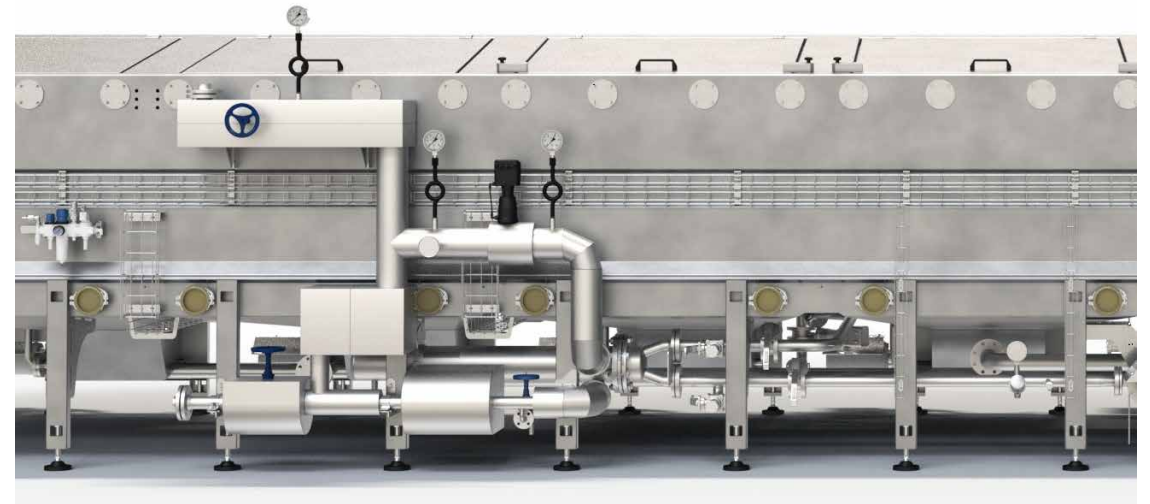
High energy efficiency

- Spraying system with low pressure
- Low energy consumption of approx. 12 kW
- Optional: Insulation of the hot zones



Highly efficient heating system – CHESS

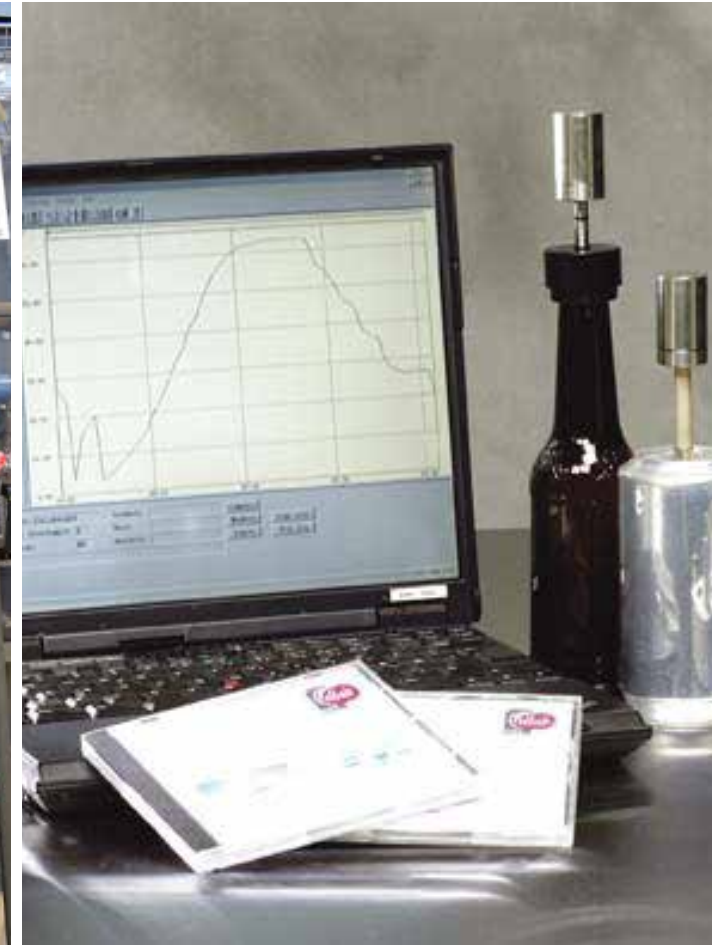
- Integrated in the machine design
- Heating in under 15 minutes
- Insulation of the steam and hot water piping



Additional equipment



- Airknife above the entire machine width
- Insulation of the hot zones (at side panels and roof)
- Housing in stainless steel, AISI 316L
- Consumption measurements and displays:
 - Water
 - Heat
 - Electricity
 - Compressed air
- Time-controlled dosing for the disinfection of the treatment water
- Quantity-controlled dosing for treatment of the fresh water (scale inhibitor)
- ClO₂ dosing system
- Water pressure reducer
- PU recorder
- PU editor for manual changes in PU and output



Benefits to you



Maximum product safety

The third-generation PU control system ensures maximum product safety and a constant product quality dynamically and in real time.

Fully automatic product change-over

The product change-over with sweeper is performed automatically and includes an automatically adjustable blower as an option. Thereby, the machine can be changed over to handle new types in less than 10 minutes*.

High resource efficiency

The LinaFlex excels thanks to numerous energy-saving benefits:

- Optimised water volumes thanks to integrated zone tanks
- Up to 20 % reduced energy consumption during heating
- Low consumption of chemicals and energy
- Insulation as an option for a reduction in radiation losses by up to 60 %

* Depending on the zone configuration

Best hygiene conditions

The unit is designed in accordance with Clean Design principles to achieve the best possible cleaning results with minimal personnel effort and time.

Conveyors with long service life

The conveyors have an efficiency of at least 98 % and a service life of up to 20 years. Thanks to a four times increased service life, up to 25,000 euros a year can be saved.

Low maintenance required

Maintenance and service costs are reduced as readjusting the tension and replacement of wear strips are no longer required.

Requesting a 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.

KIC Krones cleaning agents and disinfectants make your machine shine

In addition to separation and shutting off, one thing is particularly important for a plant: the reliable feeding of your product. This is why Evoguard also offers innovative centrifugal pumps in addition to high-quality valves.

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.

Evoguard – excellent valve technology all along the line

The Evoguard valve series comprises a modular system with hygienic and aseptic components which contributes to an increased performance at every point of the production line and has the perfect solution for every process step.

**SOLUTIONS
BEYOND
TOMORROW**

