



Contipure AseptBloc

Block for aseptic filling



 **KRONES**

A protected atmosphere for your product

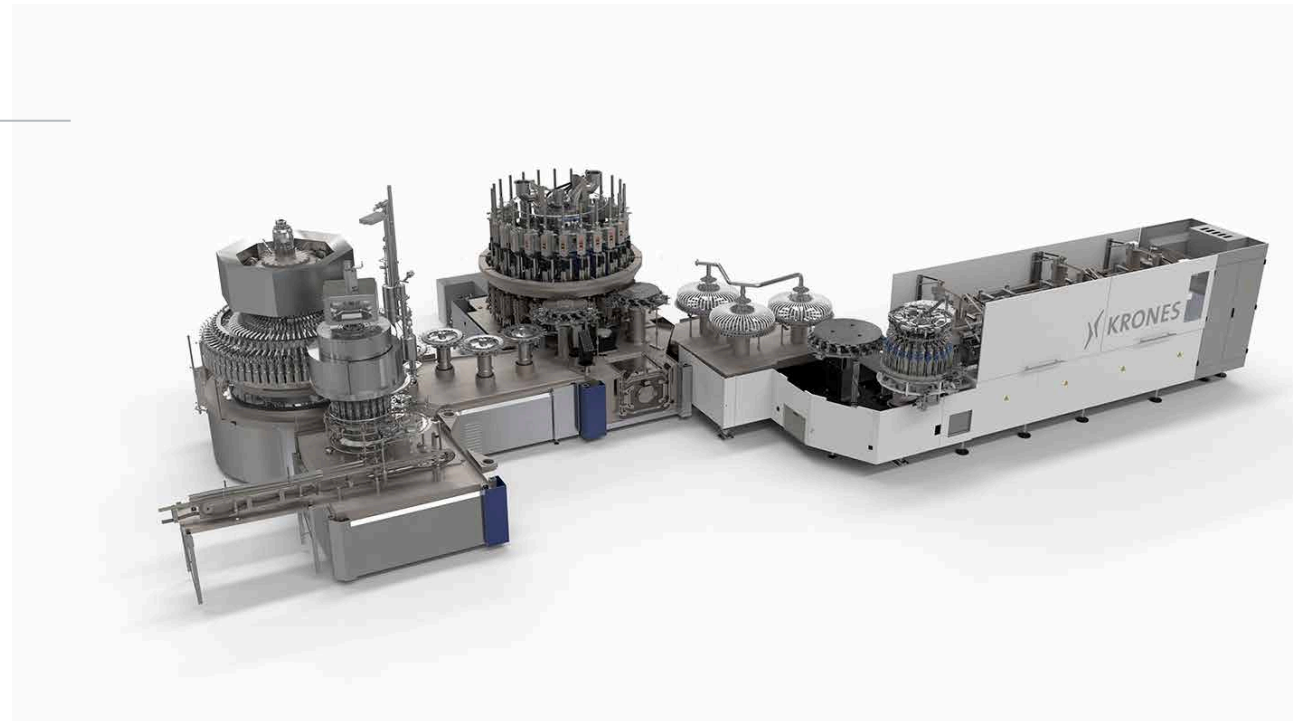


The Krones aseptic systems family includes experts for all kinds of different sterilisation methods and products to be filled. One of them is the Contipure AseptBloc. Regardless of whether you are blow moulding, filling or capping, with the Contipure AseptBloc every production step is safely included in an aseptic processing chain.

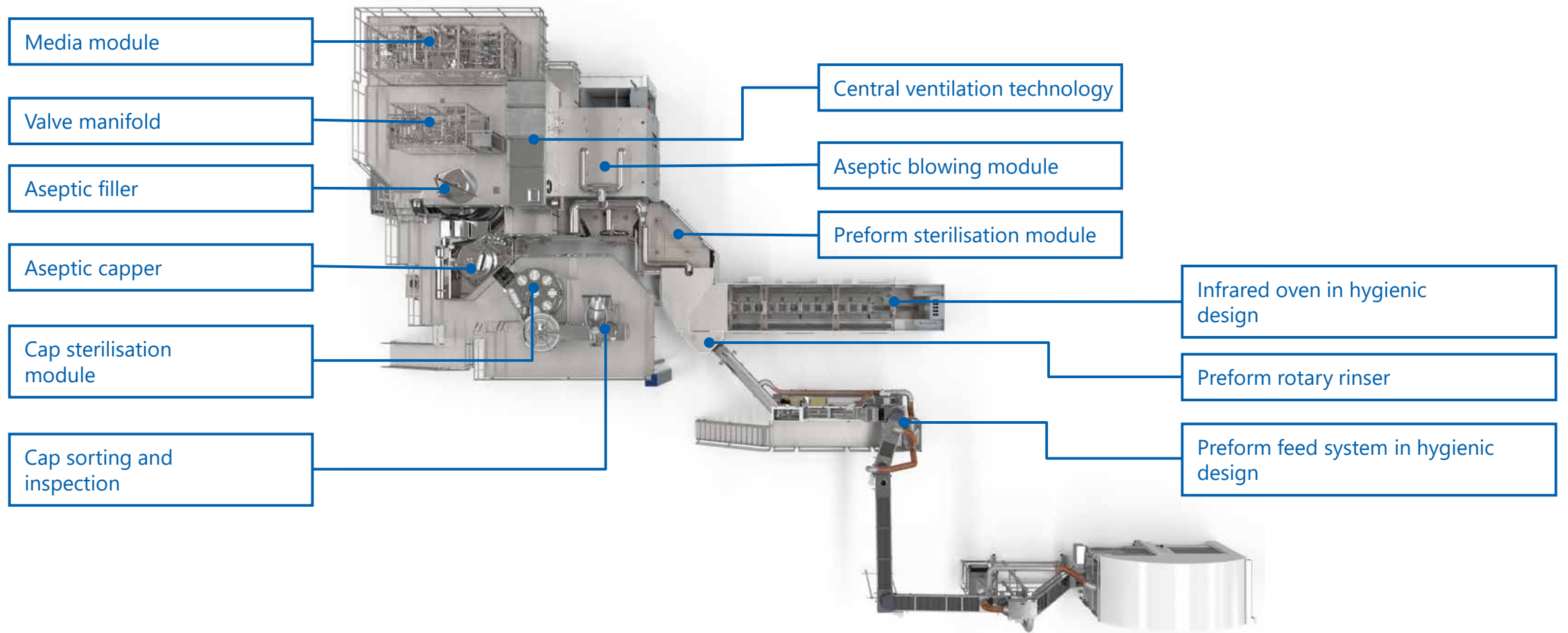
At a glance

- Design:
 - Preform sterilisation module
 - Aseptic blow moulder
 - Aseptic filler and capper
- Suitable for:
 - Aseptic filling
 - Round, square and rectangular PET containers
 - Standard and lightweight containers
- Output: Up to 72,000* containers per hour
 - Compact variant: 8,000 to 27,500* containers per hour, for non-carbonated beverages
- Only one sterilisation medium: gaseous hydrogen peroxide (H₂O₂)

* Depending on the container size and product



The key components at a glance



The key components

Contifeed preform feed system



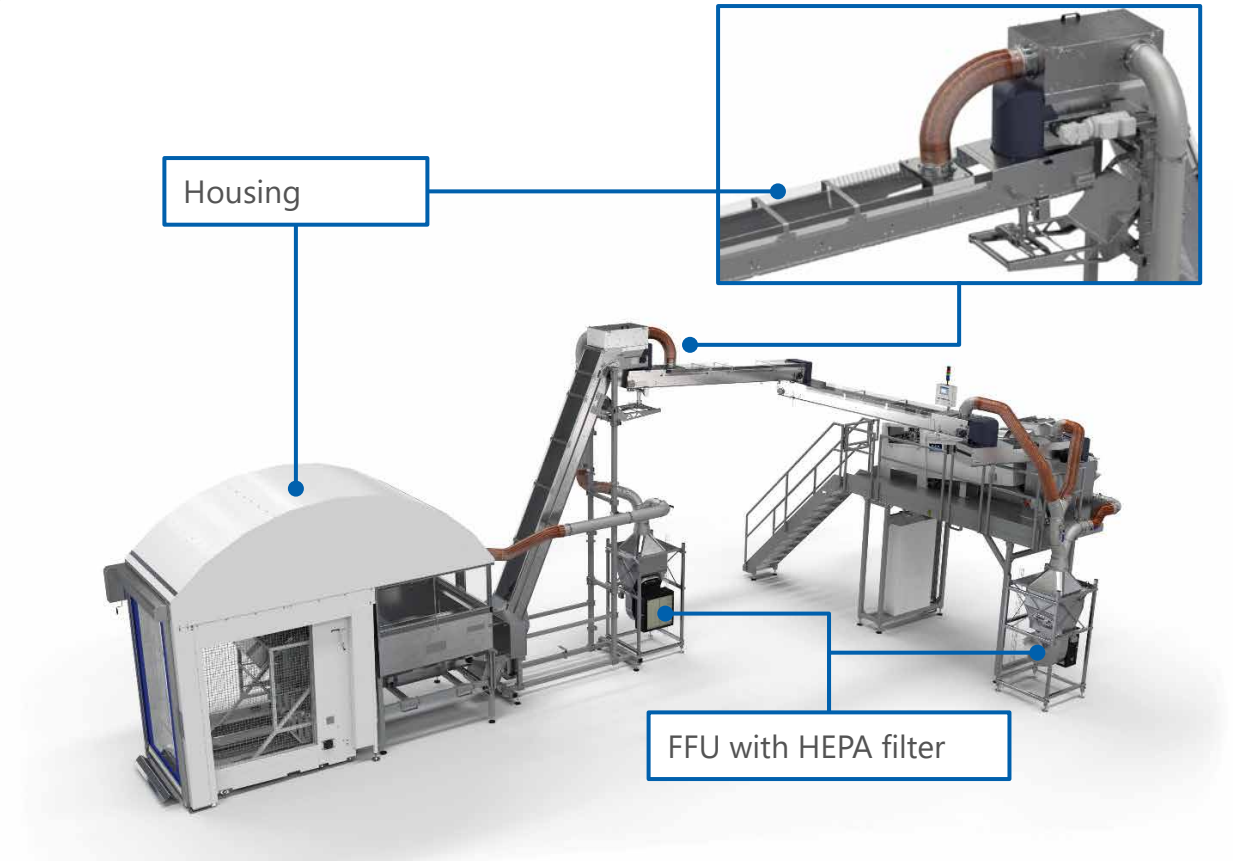
- Thanks to hygienic design, it is optimal for the Contipure AseptBloc
- Variants adjustable depending on the installation position

Optional

- Completely closed preform feed system
- With fan-based air treatment system (FFU) with HEPA filter

Benefits to you

- Controlled air exchange
- Significant reduction in the number of particles inside the preform feed system
- Separation of the preform feed system from the existing ambient conditions



The key components

Prejet preform rotary rinser

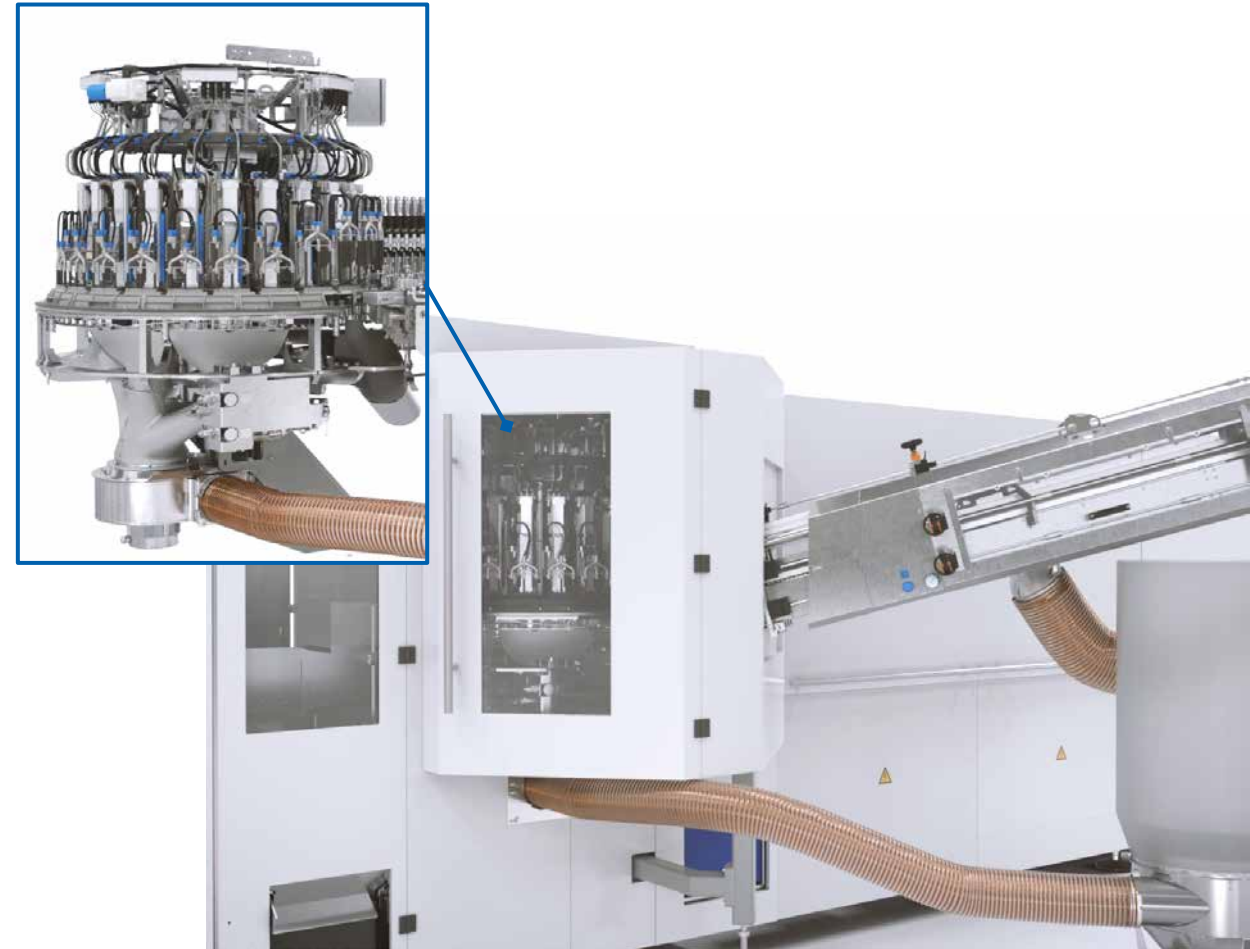


Technical features

- Compact one-starwheel concept at ground level
- Method of operation:
 - Immersion of the rinser lances in the preforms
 - Blowing out of the particles with pre-filtered and ionised sterile air
 - At the same time as the particles are blown out: Extraction of the mix of air and dirt

Benefits to you

- Low space requirement with good accessibility
- No unnecessary transfer points as the existing infeed starwheel is used as rotary rinser
- Low number of handling parts, quick tool-free change-over
- Very good cleaning performance
- Low air consumption



The key components

Infrared oven

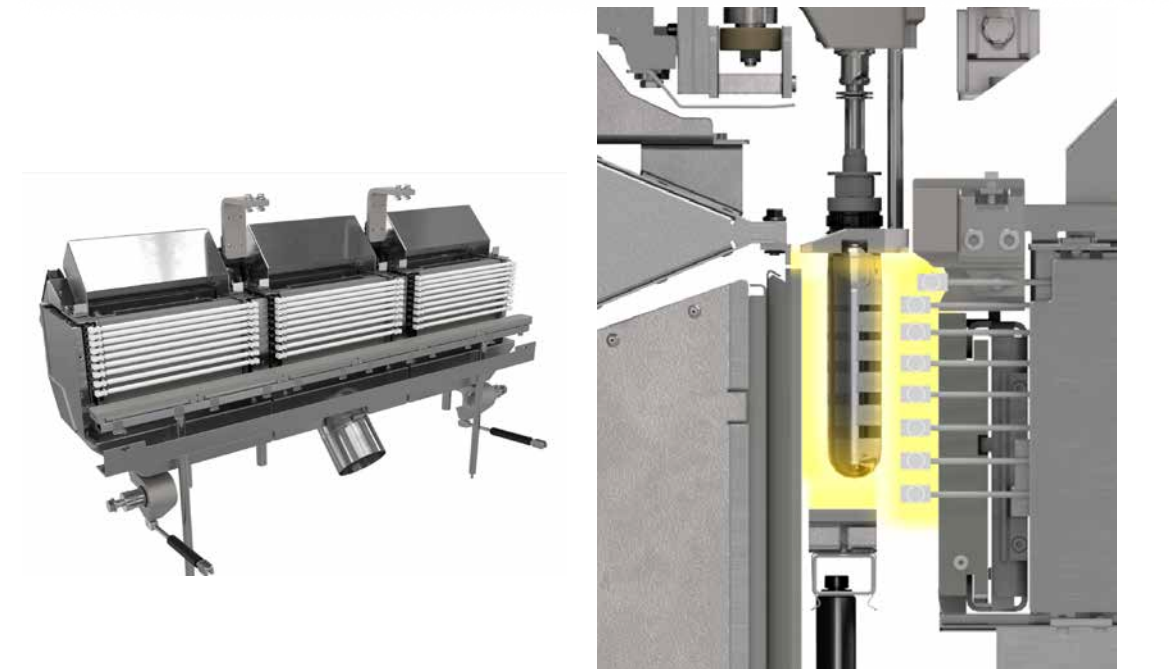


Technical features

- Servo-controlled oven of the Contiform standard series with efficient and pre-filtered preform air cooling system
- Option: Tool-free quick-change of the protective plates of the oven heating mandrels
- Optimised in terms of energy:
 - Smaller distances between heaters and longer infrared radiators
 - Use of parabolic mirrors

Benefits to you

- No critical control point (CCP) in the oven
 - Easy operation
 - No risk of corrosion thanks to the sterilising medium
 - Handling of preforms made of 100 rPET
 - No revalidation required if the preforms are changed
- Significantly improved hygiene thanks to additional air filters
- Reduced change-over time and energy costs



The key components

Contipure D* preform sterilisation module



Technical features

- The module is between the infrared oven and the aseptic blowing module.
- Targeted and directed feed of gaseous hydrogen peroxide (H_2O_2) via nozzles.
- This provides an overflow and thus results in simultaneous internal and external preform sterilisation.

Benefits to you

- 360° treatment for the sterilisation of the complete preform surface at once: inside, outside and neck-finish area
- High-performance preform sterilisation up to log 6
- No sterilisation blind spots thanks to three-starwheel concept
- No further contact with the preform inner side wall after sterilisation
- Particularly suitable for lightweighting: Sterilising preforms stops them from shrinking. This is not the case when completely blown bottles are sterilised

* D=Dry



The key components

Aseptic blowing module



Method of operation

- The preforms are transferred to the aseptic blowing module after sterilisation.
- The blowing process takes place within a sterile isolator which is protected from its environment by means of a liquid seal system.
- The stretching rod never leaves the sterile zone during the entire blowing process.
- The blowing process is carried out with pre-filtered sterile air.

Benefits to you

All components involved in the blowing process can be completely sterilised in a fully automatic process:

- Mould – inside and outside surface
- Stretching rod
- Valve block and blowing nozzle – including the high-pressure air channels which, in turn, enables air recycling: This saves up to 35 percent of the high-pressure air!



The key components

Aseptic filler



Method of operation

- The appropriate filling valve for the widest range of products – still and carbonated
- It is also suitable for beverages with (fruit) pieces with a size of up to 10 x 10 x 10 millimetres

Benefits to you

- The filler has its own CIP module – thus no separate CIP system is required.
- The filling valves are sterilised with steam.
- The isolator is sterilised with gaseous H_2O_2 – a fully dry method.
- Handling parts change-over is possible up to a defined output in an automatic way.
- Optional: After an intervention into the isolator, there will be an intermediate sterilisation with peracetic acid within 30 minutes.
- Optional: "Last bottle – first bottle" is possible within 90 minutes depending on the product.



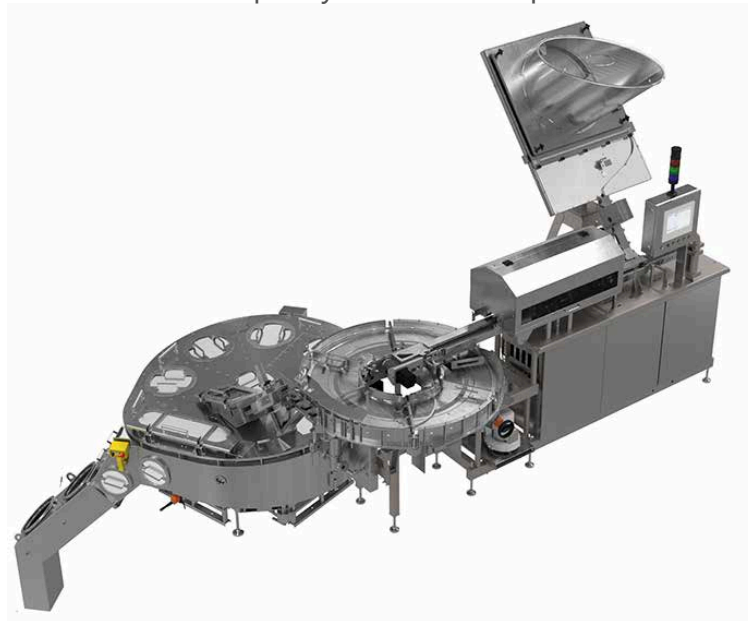
The key components

Cap conveyor



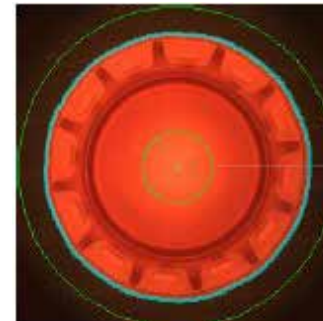
Sorting and buffering

- The best sorting concept for all caps is selected from a wide range of Krones sorting variants.
- One camera inspects the caps after sorting – rejection of inappropriate caps prevents product and bottle losses.
- The cap buffer ensures sufficient buffer capacity, – if, for example, the block has to be emptied.

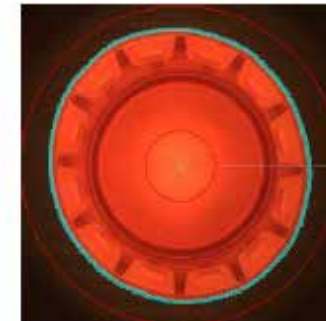


Examples of inspections

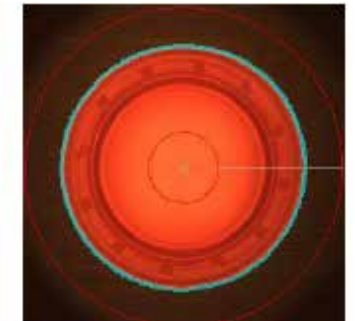
Tamper-evident ring



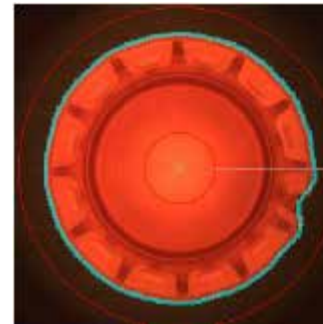
Without damage



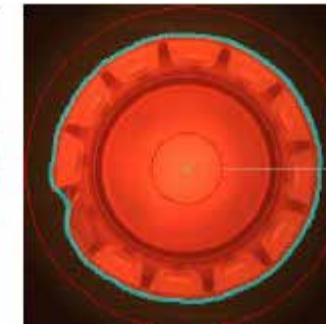
Oval



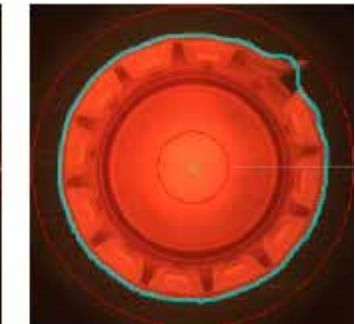
Missing



Vertically interrupted



Bent inward



Bent outward

The key components

CapAsept D* cap sterilisation module



* D=Dry

Cap treatment system

- Cap blower using ionised air right in front of the unit
- Sterilisation by means of gaseous H_2O_2
- No back-up pressure acting on the caps – no deformation
- Clocked feed of the caps on demand: No bottle – no cap
 - Gentle on resources
 - Optimum treatment of the caps – no over-treatment

Flexibility

Flat caps and sports caps can be processed with the same handling parts.

Hygiene

Particles fall through the perforated plate and are flushed during the cleaning process.

The key components

Aseptic capper



Technical features

- Every capping head has its own separate servo drive.
- A transfer tunnel separates the sterile area from the outside area.
- The proper technique for every cap – overcaps with round bottle possible!

Cleaning and change-over

- The open design enables excellent cleaning of all capping heads.
- The handling parts adjustment system operates fully automatically up to a defined speed.



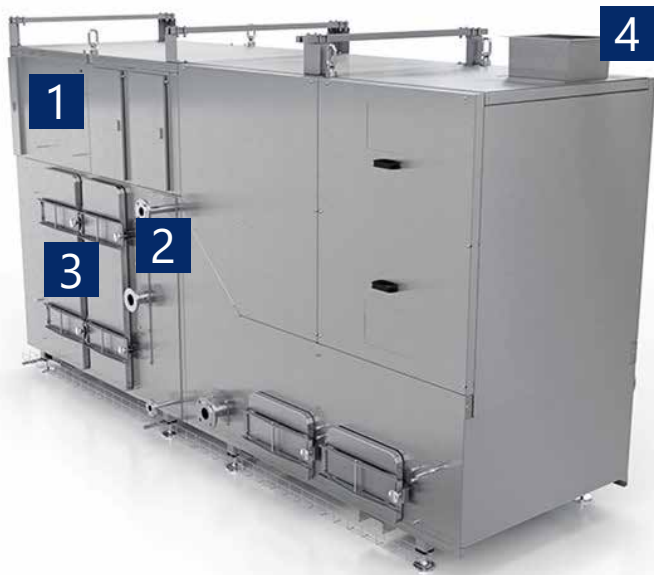
Hygiene

- The Krones aseptic capper is always in a hygienic design and meets even the most difficult hygiene requirements.
- All drives are outside the isolator.
- A liquid seal system seals all of the capper carousel's rotational movements.
- The movements of the capping head are sealed with bellows.
- Depending on the type of cap, a chuck-cone capper or a gripping-head capper are used.



The peripherals

Air handling unit



1 Preliminary filtration

2 Air treatment system

3 HEPA filtration

4 Exhaust air

In the new, central Krones air handling unit, the entire air treatment system is combined to create one single functional unit. This way, it is no longer necessary to work with a large number of filter fan units which are placed on the machine housing.

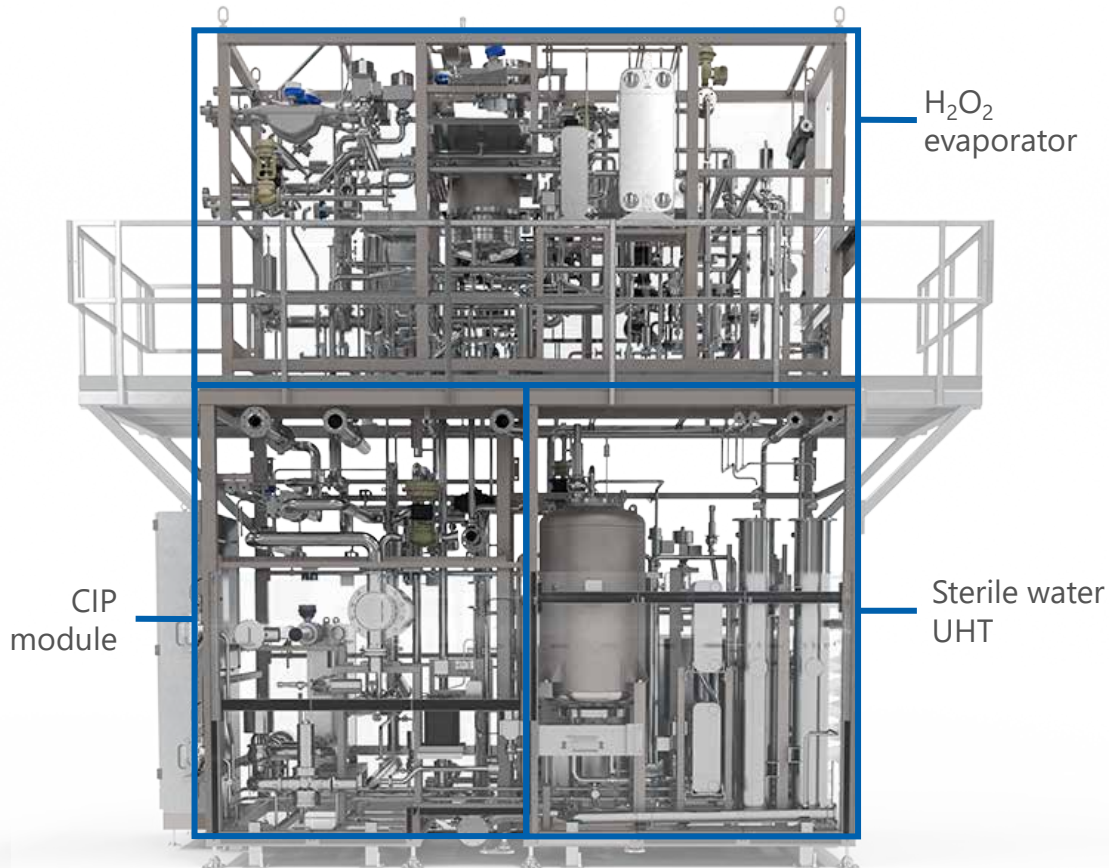
- All filters and ventilators in one unit
- Piping as integrated component of the air handling unit
- Centralised exhaust air pipe system
- Direct air guidance, no pressure cascade required
- HEPA filters easy to sterilise

Benefits to you

- Optimum accessibility
- Complete filter exchange of the air handling unit in less than 30 minutes
- Time savings of up to 90 percent during restart
- Only one exhaust air pipe system required for the entire block

The peripherals

Media handling



Media arranged clearly and compactly in one module

The media module combines the H₂O₂ evaporator, the CIP module and the sterile water UHT system in the smallest of spaces.

Benefits to you

- One connection point per medium: Simplifies both planning and installation, and saves piping
- One draining point for the complete filler
- Simple and very efficient cleaning concept
- Fully automatic and self-sufficient media delivery just-in-time
- Small footprint with clear and straightforward design guarantees good accessibility for measured-value checking and maintenance

Compact variant



Main components

- Stretch blow moulder: available with four, six or eight cavities
- Aseptic filler: Pitch diameter 1,080

Services

Up to 27,500 containers per hour

Space requirements

- Total: only approx. 100 square metres
- Possible thanks to a revised clean room concept, optimum positioning of the peripherals and media supply or valve manifold, integration of the pipe systems directly in the line

Product treatment system

VarioAsept UHT system



As little as possible, as much as necessary – this is the declared goal of the product heating process in terms of the parameters time and temperature. The VarioAsept UHT system masters this challenge with flying colours.

At a glance

- Output range: Between 3,500 and 60,000 litres per hour
- Proven design which ...
 - meets the highest hygiene requirements.
 - treats the product extremely gently.
- With Krones tubular heat exchangers, developed by Krones process equipment experts
- In-house laboratory for product analysis
- Perfectly matched with the Krones aseptic fillers



Benefits to you



Triple protection

The all-round treatment with gaseous H₂O₂ sterilises the entire preform surface at once: Inside, outside and in the neck area.

Fully-automatic change-over

Handling parts change-over at the filler and the capper can be performed up to a defined output without any manual interference.

Gentle preform treatment

The sterilisation of the preforms hardly leaves any residues: This is because the surface enlarges by many times and the residues of the sterilisation medium are diluted accordingly.

Pinpoint production

Filling to the last drop: The system uses the remaining product quantity in order to calculate exactly how many more PET containers and caps are still to be sterilised.

Proof of safety

The concept of the Contipure AseptBloc has FDA certification and is already in practical use multiple times.

Microbiological safety

The system does not consume any water during operation. Therefore, there is no living environment at all for microbiological organisms.

High availability

The entire block is in production for 168 hours non-stop. Depending on the product, it is cleaned and sterilised after 90 minutes or two and a half hours and can be used again. Intermediate cleaning after manual interventions also only takes 30 minutes.

New machine enquiry

You can easily enquire a non-binding quotation in our [Krones.shop](https://www.krones.com/shop).



Everything from a single source



Training courses at the Krones Academy – trained personnel will increase your line efficiency

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 make your machine shine

An immaculate production environment is essential if your product is to shine. 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.

High-quality components from Evoguard and Ampco

Are you looking for shut-off, separation or control valves? For hygienic or aseptic applications? Would you like to have pump technology that perfectly fits into your machines? You will find exactly what you are looking for at Evoguard and Ampco Pumps. The two Krones subsidiaries cover the entire spectrum of process technology components that you need for high-quality production.

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BEYOND
TOMORROW**

