

Contipure AseptBloc DA

Aseptic block for high-acid products



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 DA, which is specialised on high-acid products and fully meets their requirements.

At a glance

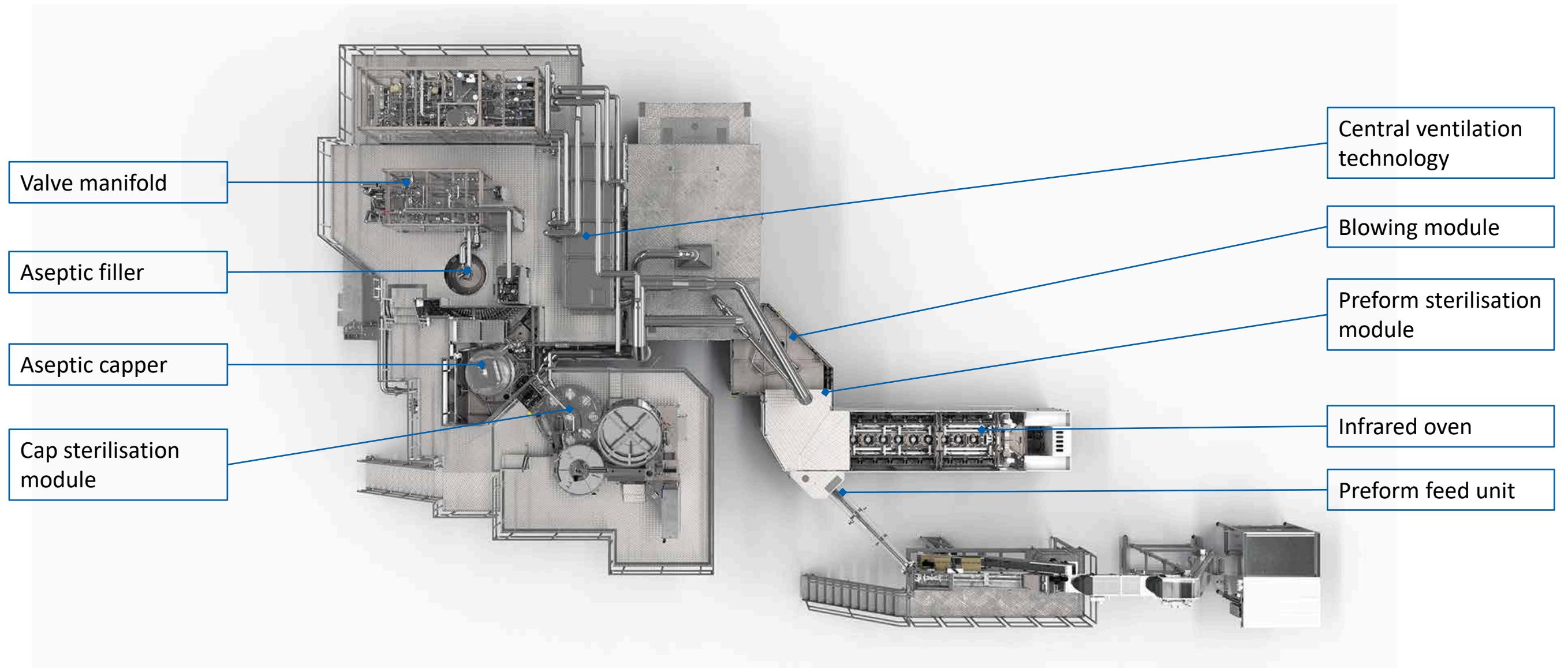
- Design:
 - Preform sterilisation module
 - Blow moulder
 - Aseptic filler and capper
- Suitable for:
 - High-acid products
 - Cylindrical and square PET containers
 - Standard and lightweight containers
- Output: up to 70,000 containers per hour
- Only one sterilisation medium: gaseous hydrogen peroxide (H₂O₂)



DA = Dry, Acid



The key components





The key components: preform sterilisation module

- The Contipure D module is installed between the blow moulder heating and blowing module.
- The application of an individual temperature profile prepares the preforms for both the blow-moulding process and the dry sterilisation.
- Gaseous hydrogen peroxide (H_2O_2) flows through nozzles into the preform interior.
- At the same time, the exterior of the preform is sterilised through the H_2O_2 atmosphere in the module.

Benefits

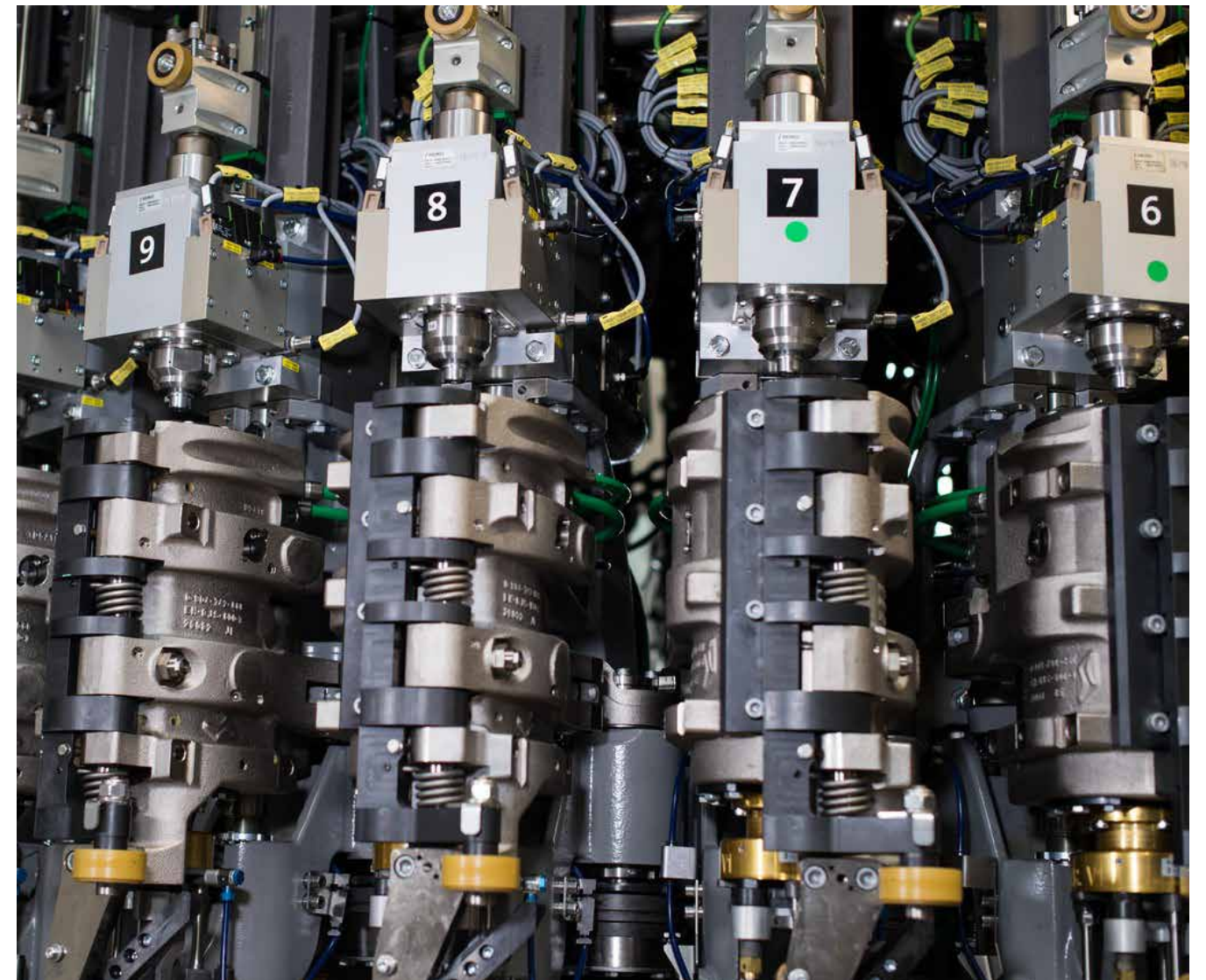
- No sterilisation blind spots thanks to three-starwheel concept
- No condensation
- No contact with the preform inner side wall after sterilisation





The key components: blow moulder

- Improved hygiene standard
 - The air used for stretch blow moulding the PET bottles is filtered beforehand using a pre-filter unit with autoclaveable filters.
 - A fine dust filter is also installed on the heating module to ensure that dirt particles such as coal dust, pollen or plant spores are filtered from the ambient air.
 - The preforms are rinsed with ionised air and transferred to the infrared oven of the blow moulder.
 - Optional: use of superimposed filter air in the preform feed module
- Increased flexibility through the blow mould change-over concept, optionally available with robot





The key components: aseptic filler

- The sterile bottles reach the filler via a safe transfer area.
- The product is fed from top via a media distributor with axial face seal and integrated condensate barrier.

The filling valve

- Thanks to the double-stroke seat valve it implements two different filling speeds
- It is also suitable for beverages with (fruit) pieces of a size of up to 10 x 10 x 10 millimetres

Cleaning and change-over

- The filler is equipped with its own CIP module.
- The filling valves are sterilised with steam.
- The clean room housing is sterilised with gaseous H_2O_2 – a fully dry method.
- The handling parts can be adjusted fully automatically up to a defined speed.





The key components: cap sterilisation module

Sorting and buffering

- The standard cap sorting system uses a disk sorter.
- A camera inspects the caps after they have been sorted.
- The cap buffer ensures sufficient buffer capacity, if, for example, the block has to be emptied.

Sterilisation

- It is performed with gaseous H_2O_2

Different caps can be processed with the same handling parts.





The key components: aseptic capper

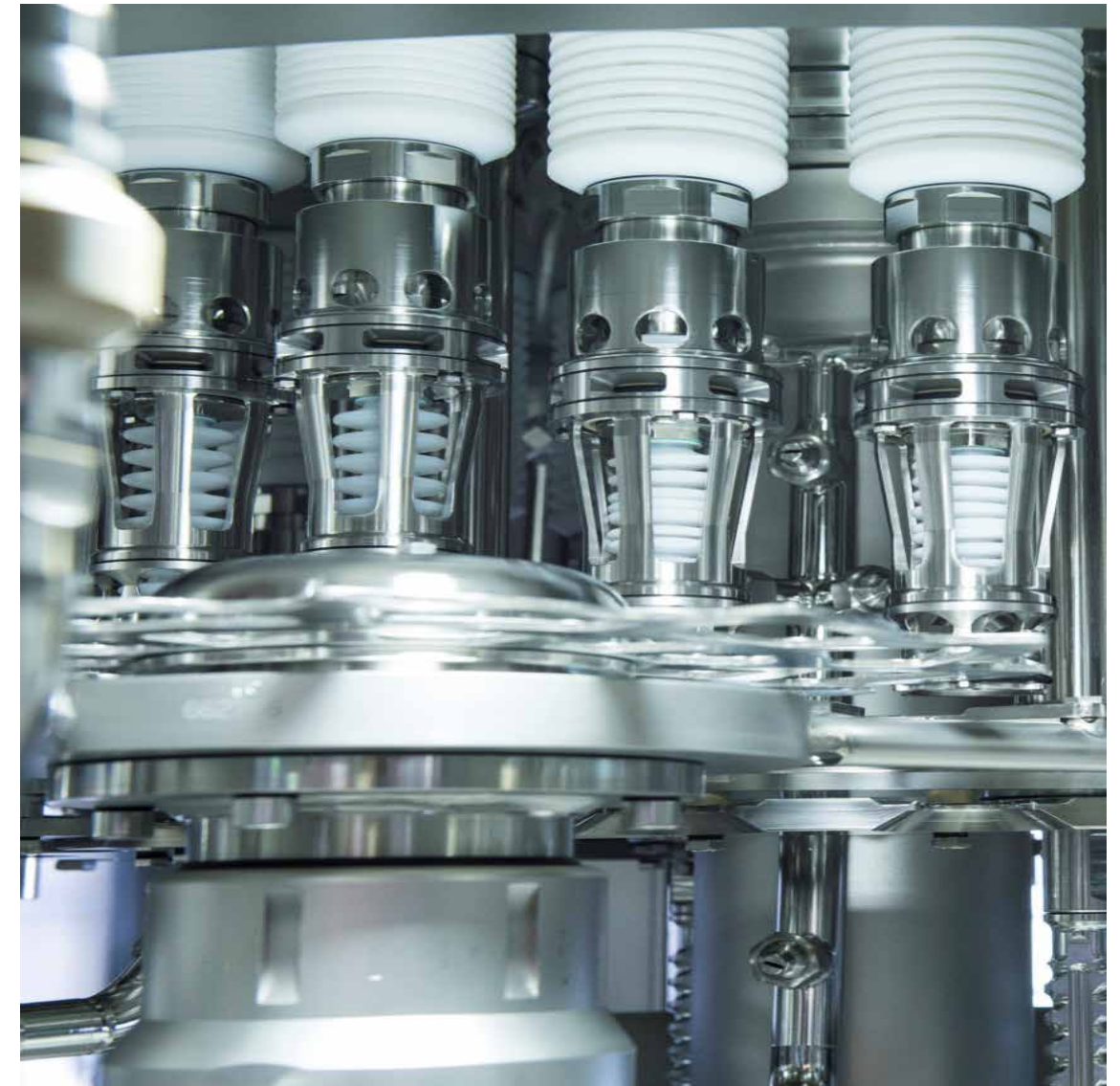
- Every capping head has its own separate servo drive.
- Lowering the closed bottle is done up to a defined speed via a height-adjustable discharge conveyor.
- The bottles leave the block via a transfer tunnel.

Hygiene

- The new Krones aseptic capper is always in a hygienic design and meets even the most difficult hygiene requirements.
- All drives are outside the clean room housing.
- A liquid barrier seals all rotational movements of the capper carousel.
- The movements of the capping head are sealed with bellows.
- Both, a cone capper and a gripper capper are available.

Cleaning and change-over

- Thanks to its open design, the cap retainer can be easily cleaned.
- The handling parts adjustment system operates fully automatically up to a defined speed.

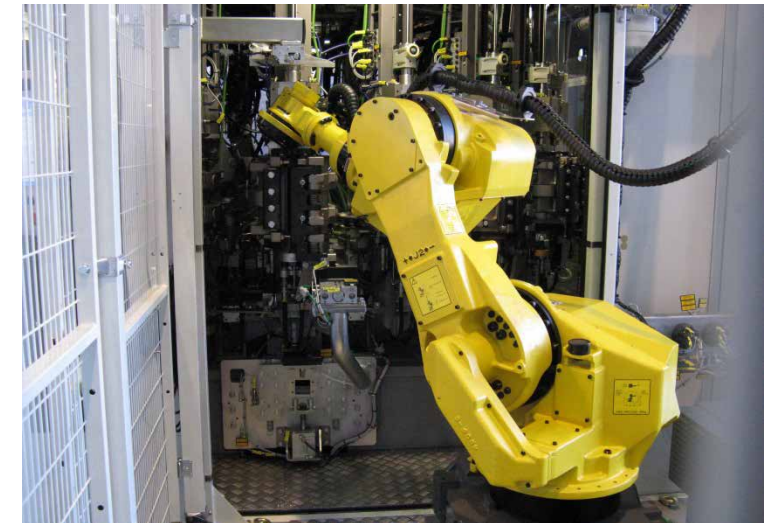




Automation options for type change-over

Blow moulder

- Quick-change system
 - Tool-free mould change-over: approximately one minute per mould
- MouldXpress Robot
 - Fully automatic mould change: less than 30 seconds per mould



Fillers

Height-adjustable capper handling parts and discharge conveyor

- Automatic change-over for outputs of up to 36,000 bottles per hour
- Change-over at the blow moulder without infiltrating the sterile area: no intermediate sterilisation required, even for change-overs with different container heights





The peripherals: air handling unit

In the new Kronos 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

Benefits to you

- Optimum accessibility
- Time savings of up to 90 percent during filter replacement
- Time savings of up to 90 percent during restart
- Material savings of up to 45 percent

1. Preliminary filtration
2. Air treatment system
3. HEPA filtration
4. Exhaust air



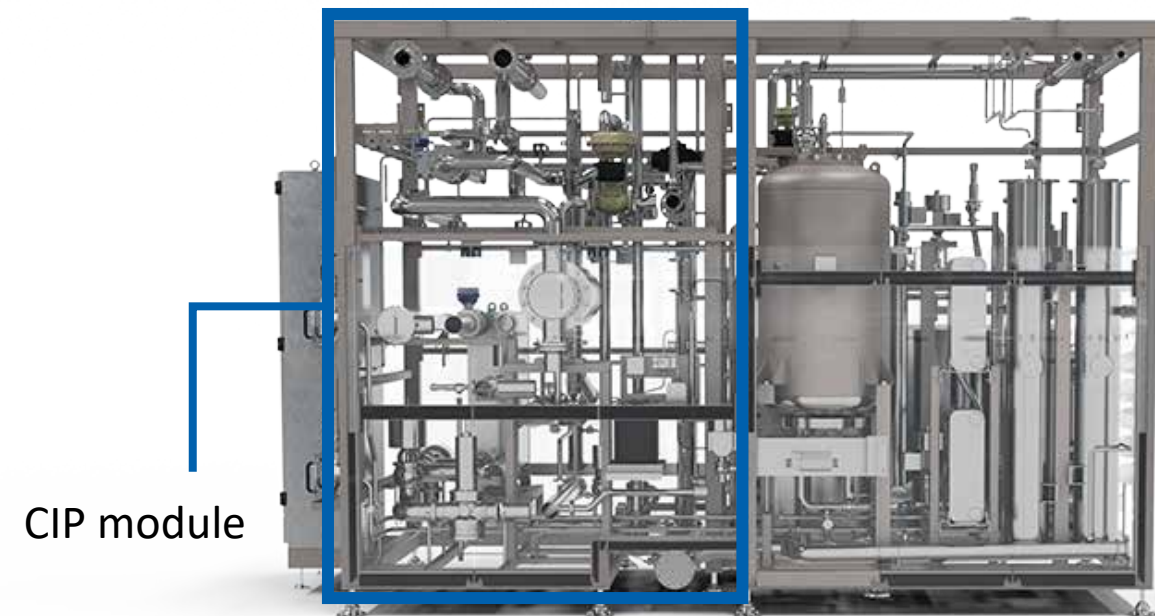


The peripherals: standard CIP module without tank

The Contipure AseptBloc DN is equipped with its own CIP module for cleaning. Special features: It works without any CIP buffer tank because the machine housing also buffers the CIP fluid.

Benefits to you

- Thanks to the fact that no buffer tank is required, about 85 percent of the installation surface and 40 percent of space-consuming volume can be saved.
- No separate valve manifold is required for the CIP return flow.
- All media are provided just in time.





The peripherals: sterile water UHT system

- Depending on the requirement, it provides 5 to 12 m³ of sterile water per hour
- Kills germs by means of thermal treatment
- Equipped with a connection for surface disinfectants
- Enables quick chilling of the bottling system after steam sterilisation to production temperature such as for CSD or cold chain products

Benefits to you

- The sophisticated unit arrangement reduces the installation surface by 45 percent and the space-consuming volume by even 60 percent.
- The thermal treatment guarantees a safe sterile water production with low operating costs.



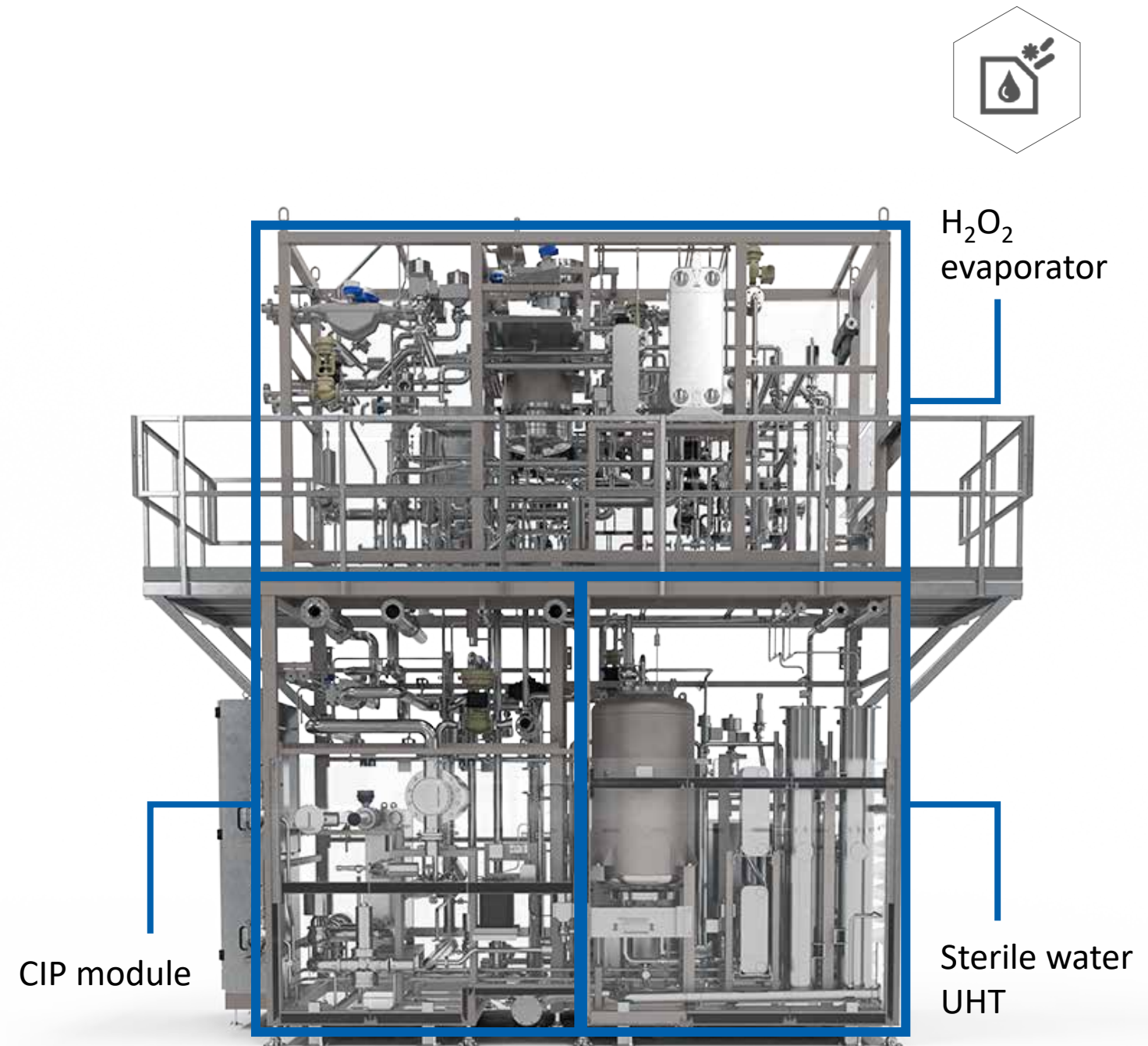
The peripherals: media module

All media arranged clearly and compactly in one module

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

Benefits

- Simple connection of the media to the machine, with each medium only having one connection point. The media are then distributed within the machine to the corresponding consumers.
- Clear footprint: the compact design creates more space for the operator area around the filler. It is also not necessary to provide a complicated pipe connection between free-standing modules and the filler.
- Streamlined design: the uniform and clear design guarantees good accessibility for measured-value checking and maintenance.





Product treatment: Krones VarioAsept UHT line

As much as possible, as little as necessary – this is the declared goal of the product heating process in terms of 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 utmost hygiene requirements of dairy-processing companies.
 - 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

Triple protection

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

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.

High availability

The entire block is in production for 120 hours non-stop and only two and a half hours later is ready to start again.

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.

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.

Flexible production

The optional automation package allows change-overs to be performed on the entire block in under 20 minutes – including the emptying and starting up of the machines. This means that you gain an additional two hours of production time with each change-over – and operators have their hands free to perform other tasks.



Everything from a single source

Training sessions at the Krones Academy – trained personnel increases your line efficiency

The versatile training offer ranges from operation, servicing and maintenance to management training. We will gladly also establish your individual training programme.

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 every production step

Whether for gears, chains or central lubrication systems – our greases and oils are true all-round talents. You can reach every lubrication point, protect your line and provide gentle treatment for your product thanks to our products' suitability for food.

Krones Lifecycle Service – partner for performance

Also after having purchased a new machine, Krones will take care of your line; the LCS experts are always ready to consult you and translate your goals and wishes into optimal LCS solutions.

Evoguard – excellent valve technology all along the line

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

Evoguard – pumps for absolute process safety

In addition to the separation and locking of a line, one thing is particularly important - and that is the reliable conveyance of your product. This is why Evoguard also offers innovative centrifugal pumps in addition to high-quality valves.



We do more.

 KRONES