PET-Asept L
Aseptic system for high and low acid products
Absolute product safety, even under extreme conditions

The PET-Asept L system has proved its worth among beverage producers all over the world. It provides reliable results, even under problematic ambient conditions and, at the same time, requires amazingly low maintenance.

To keep it that way also in future, KRONES developers have completely re-designed the system: systematic improvements such as the media distributor with axial face seal in the filler or the ultrahygienic capper upgrade the PET-Asept L to state-of-the-art technology.

At a glance

− Latest version of a system proven all over the world
− Aseptic filling of low and high-acid products
− Suitable for all bottle shapes
− Bottle sterilisation by means of peracetic acid (PAA)
− Output up to 65,000 bottles per hour*
− Particle filling of up to 10 x 10 x 10 millimetres possible
− Also available as PET-AseptBloc L with blow moulder

*L = Liquid
* Base: 500 ml bottle
Microbiological sensitivity of beverages
Aseptic: all process steps at a glance

- **Treatment**
- **Media** (e.g. filtration)
- **Product** (UHT process)
- **Caps** (hydrogen peroxide steam)

- **Sterile packaging**
  - Aseptic filling
  - Aseptic capping

- **Finished packed goods**
### All KRONES aseptic solutions in direct comparison

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PET-Asept L: What's new?

**Container steriliser**
- High-performance bottle sterilisation with continuously operating exterior sterilisation

**Rinser**
- Single-channel rinsing nozzle
- Efficient rinsing by full cone nozzle
- No use of CIP cups required
- Recycling of the peracetic acid

**Filler**
- Product feed from top
- Media distribution system with axial face seal
- Filling valves are suitable for steaming

**Capper**
- Completely modified servo capper
- Hygienically designed discharge conveyor
The design: PET-AseptBloc L with blow moulder

1. Preform feed unit
2. Blow moulder
3. Container steriliser
4. Rinser
5. Cap sterilisation system
6. Capper
7. Filler
The key components: Container steriliser

- Continuous treatment of container exterior with a mixture of peracetic acid and steam
- Spreader-shaped nozzles for thorough cleaning of the neck area
- Best draining properties by Tabletec table top inclined to one side
- No use of surfactants
The key components: Rinser

- Removes residual peracetic acid from the containers
- Efficient single-channel full cone nozzle with adjusted dimensions
  - Without CIP cups
  - Open SIP in the clean room housing
- Reduced water consumption
- Time saved during rinsing and cleaning
- Recycling of the peracetic acid
- Recycling of sterile water
The key components: aseptic filler

- The product is fed from top via a media distribution system with axial face seal and integrated condensate barrier.
- Steam sterilisation of the filling valves
- No CIP return required: open CIP in the clean room housing
- Reduced loss of product thanks to product feed from top
- Highest microbiological safety
- Time saved during sterilisation
- Extended maintenance intervals

Filling technology with load cells or flow meters? With particle dosing or without? Everything is possible: The filling system is individually adjusted to suit the product and integrated into the system.
The key components: Cap sterilisation module

- Simple mechanical design
- Sterilisation of the caps by means of hydrogen peroxide steam
- Short treatment time at high temperature
- Treatment true to quantity: last cap for last bottle

Cap inspection unit
Checks caps for
- deformation, ovality
- faultless tear-off ring on caps
- correct orientation
The key components: Aseptic capper

- Servo motor for each capping head
- All drives are located outside the clean room housing
- Reduction of the mechanical movement within the clean room housing
- Liquid barrier for isolating the rotating part from the static part
- Electrical control cabinet positioned outside of the clean room housing
- Completely newly developed discharge conveyor prevents risk of recontamination
The peripherals: standard CIP module without tank

The PET-Asept L is equipped with its own CIP module. Special features: it works completely without CIP buffer tank because the machine housing of the block 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.

Dimensions: 3.10 m x 1.70 m x 2.60 m (L x W x H)
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
- 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.

Dimensions: 2.40 m x 2.40 m x 2.70 m (L x W x H)
Benefits to you

Smaller installation surface
- New, linear machine design
- Integration of the valve block into the machine frame
- Unburdened rinser
- Reduction of the sterilisation modules from three to one

Reduced operation and maintenance work involved
- Tabletec table top inclined to one side
- Integration of the valve block into the machine frame
- New filler in hygienic design

Highly efficient and safe sterilisation
- Spreader-type nozzles for reliable interior treatment of the containers, even in the neck-finish area
- No surfactants required
- Hermetically isolated sterile areas

Energy efficiency and environmental friendliness
- No surfactants required for better quality of the rinser waste water
- The single-channel rinser with improved nozzles reduces the air consumption
- Lower energy consumption thanks to a modified ventilation system

High output
- Minimum loss of product during type change-over by product supply to the filler from the top
- Reduced SIP time by steam sterilisation of the filling valves
- No CIP cups therefore faster and easier operation
- Product change-over: from the last bottle to the first within a mere 150 minutes
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.

Lubricants from KIC KRONES for every 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
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.