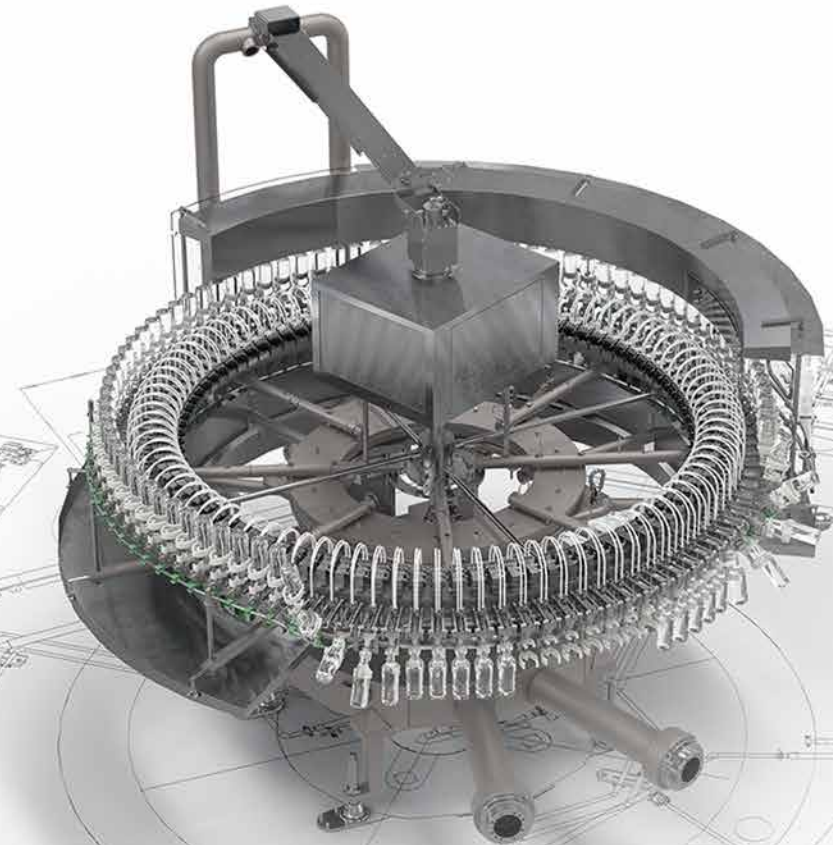




# Krones Moduljet

Rinser for sparkling clean bottle cleaning



 **KRONES**

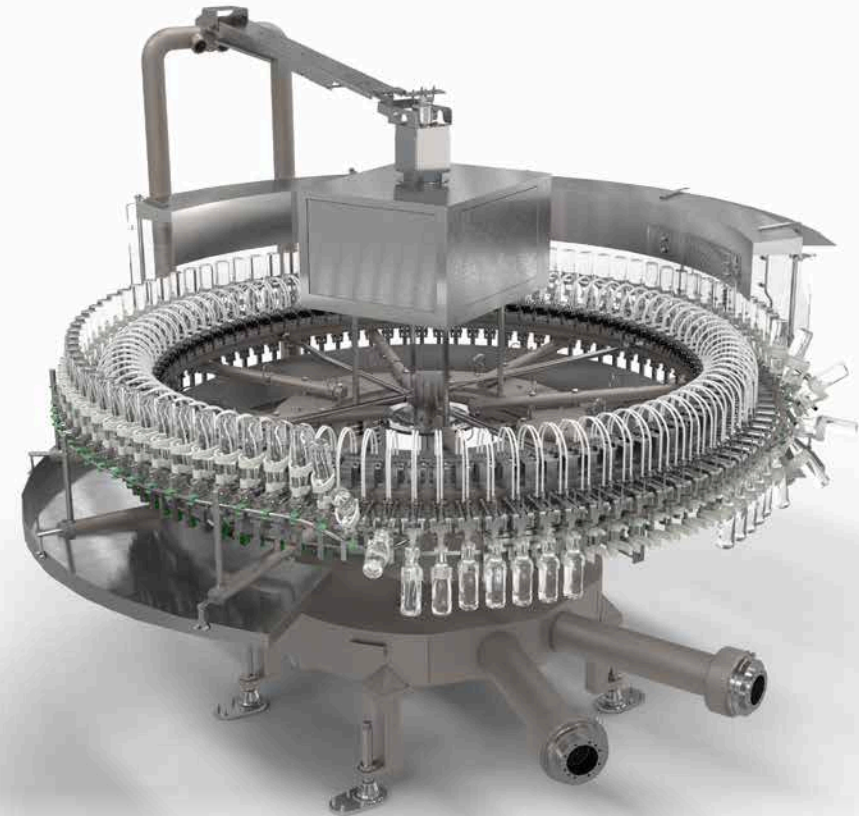
# The rinser for any container and any medium.



This is what a brilliant start in the filling process looks like: The Moduljet rinser meticulously removes dust and other residues from containers - laying the cornerstone for care-free filling. Which and how many rinsing media are used for this purpose? This decision is completely up to you. That's because the Moduljet rinsers can be individually adjusted to any task. Just contact the Krones specialists. They will be happy to advise you on which rinser achieves the best cleaning results for your bottle.

## At a glance

- Remove dust particles and other residues from PET and glass containers
- Suitable for many different media
- Process a wide range of container materials and shapes
- In-house laboratory: Allows for testing of customer-specific particles



# Configure your own customised Moduljet

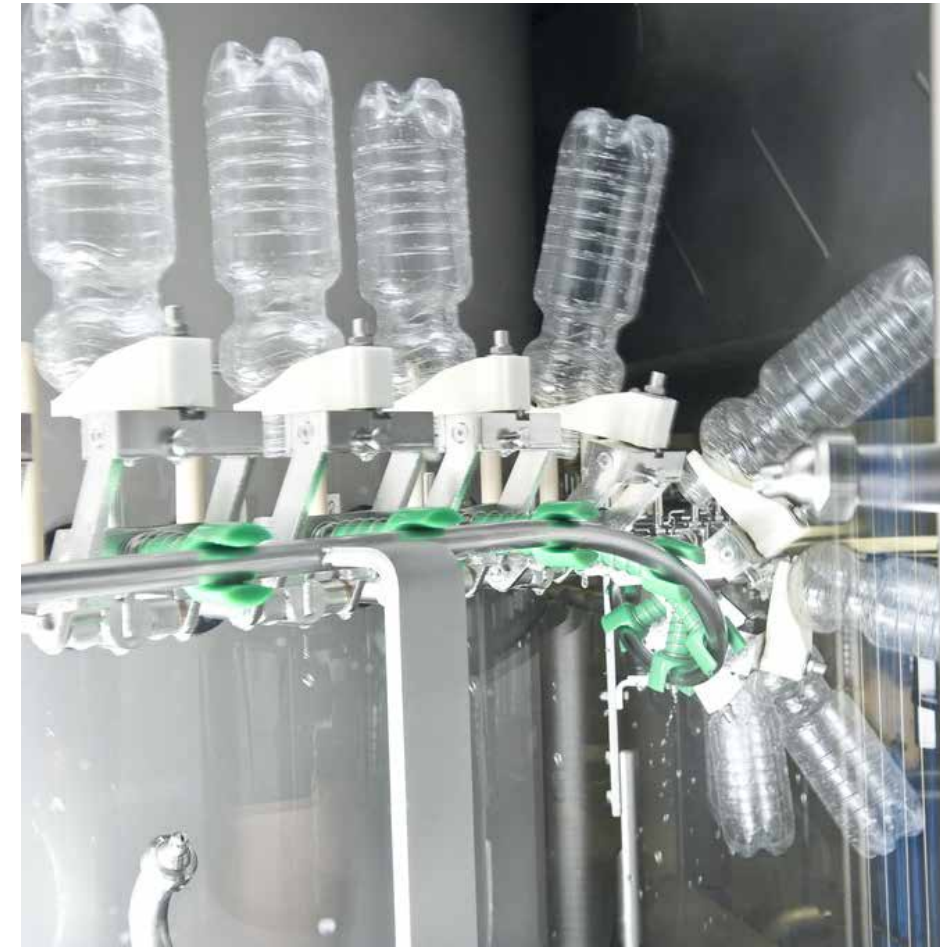


	Mechanical	Electronic
<b>Controller</b>	<ul style="list-style-type: none"> <li>– Adjustable treatment angle</li> <li>– Wide range of rinsing media</li> <li>– Low investment cost</li> </ul>	<ul style="list-style-type: none"> <li>– Freely programmable treatment times</li> <li>– Maximum selection of rinsing media</li> <li>– Freely programmable rinsing program (e.g. rinsing at intervals)</li> </ul>
<b>Nozzles</b>	<ul style="list-style-type: none"> <li>– Rigid nozzles</li> <li>– Plunging nozzles</li> </ul>	
<b>Container conveyor</b>	<ul style="list-style-type: none"> <li>– Neck grippers for PET</li> <li>– Neck and body grippers for glass bottles</li> <li>– Controlled clamps</li> </ul>	
<b>Number of channels</b>	<ul style="list-style-type: none"> <li>– One rinser channel for one medium</li> <li>– Two rinser channels for two media</li> </ul>	<ul style="list-style-type: none"> <li>– One rinser channel for one medium</li> <li>– Two rinser channels for two media</li> <li>– Three rinser channels for three media</li> </ul>
<b>Special variants</b>	<ul style="list-style-type: none"> <li>– Closed system for rinsing with filling product</li> <li>– Stationary rinsing jet monitoring</li> <li>– Jetting process using full-cone nozzle</li> <li>– Tilting cam for residual water reduction</li> </ul>	<ul style="list-style-type: none"> <li>– Rinsing with ionised air (bottle interior and exterior)</li> <li>– Stationary or continuous rinsing jet monitoring</li> <li>– Vacuum for particle extraction</li> </ul>

# Differences between mechanical and electronic rinsers



	Mechanical	Electronic
<b>Container</b>	Suitable for glass or PET containers	
<b>Rinsing media</b>	Suitable for many media	Suitable for the entire rinsing media spectrum (in variable order)
<b>Number of channels</b>	Up to two rinsing media	Up to three rinsing media
<b>Other</b>		Automatic self-cleaning



# For special tasks

## Jet method – exploits the media to its full potential

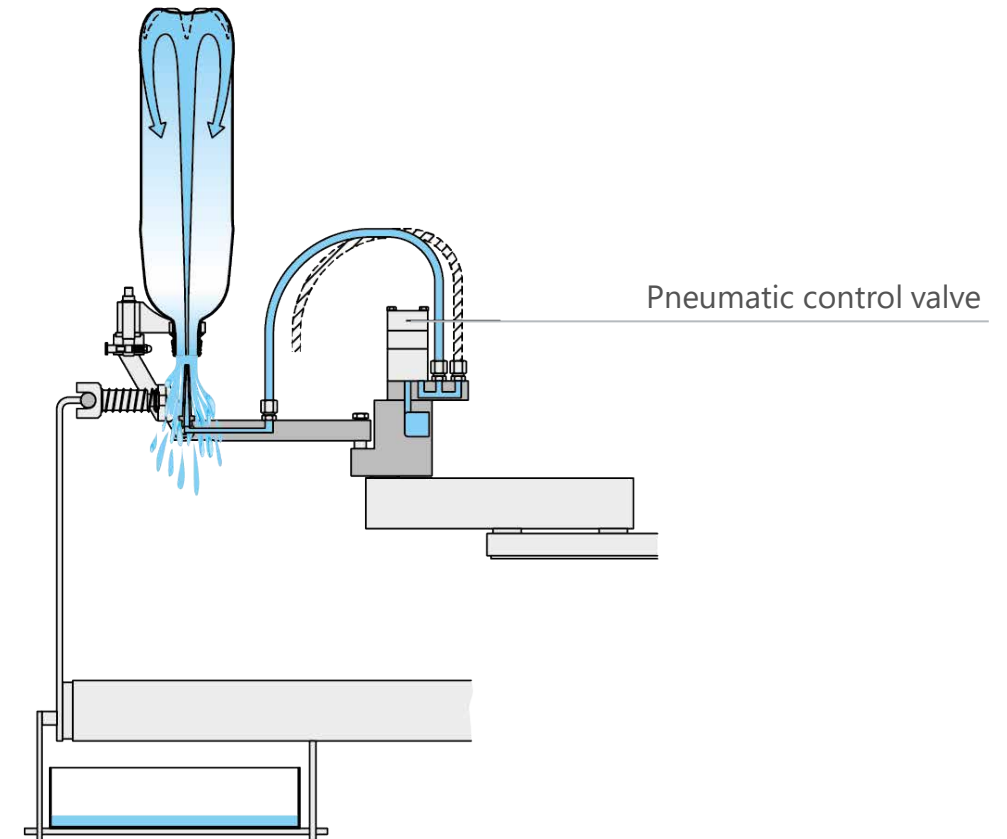


Rinsing via full cone nozzle:

- Water
- disinfectants

### Benefits to you

- Treatment times per bottle are reduced
- Medium is distributed even better in the container
- Additional mechanical cleaning effect is created
- No formation of unwelcome “windows” on the container inner wall during rinsing



## For special tasks

### Rinser with ionised air – for dust-free PET bottles



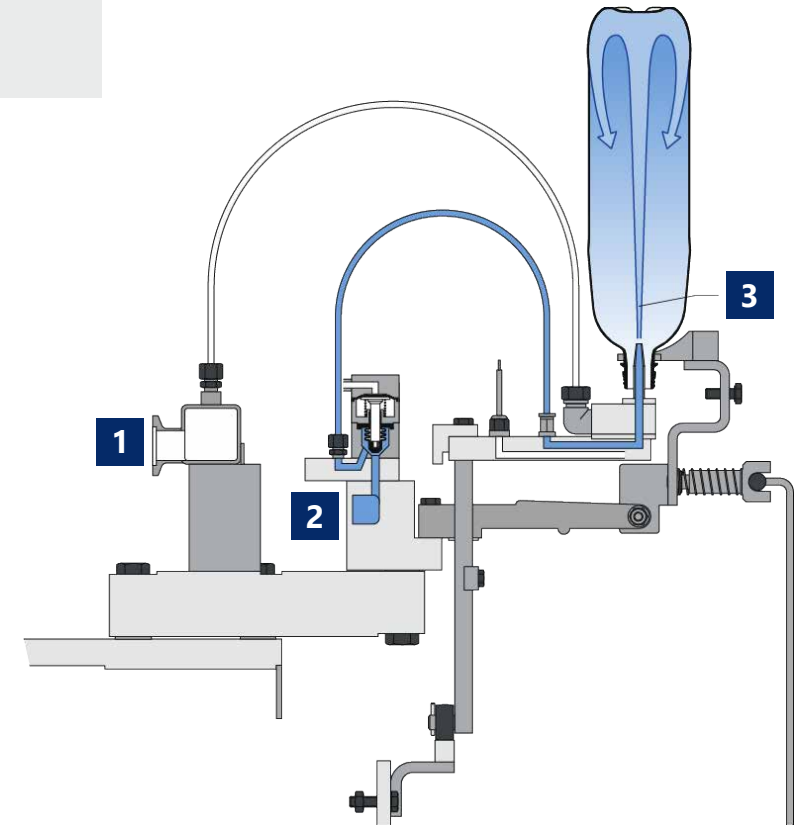
- Rinses PET bottles with ionised air.
- Extracts dust particles which fall out.

Because plastics are electrostatically charged, PET containers are highly attractive to dust. The rinser uses ionised air to counteract that attraction. As a conductive medium, the ionised air absorbs the charge from the container. The result: The bottle loses its adhesive power, meaning particles can be removed very easily from it.

#### Add-on for air-rinser: Exterior blower

PET bottles turn into little dust magnets especially when being transported. That's because the friction occurring there charges them electrostatically, causing them to attract particles swirling around in the surrounding air. An exterior blower removes the particles quickly and efficiently, rinsing the outsides of the bottles with ionised air and so simply blowing away any adhering dust.

- 1 Vacuum
- 2 Sterile air
- 3 Ionised air



# Controlled grippers (active rinser grippers)



- Quick-change system through integrated interlock in rinser gripping jaw (disassembly and assembly per jaw: < 10 seconds)
- Long-life, durable stainless steel design
- Use already possible from the smallest pitch (87 millimetres)
- No limitations when it comes to the choice of media, bottle geometry, size or weight, nozzle type or rinser design
- Retrofitting or conversion possible at any time
- Use of MultiGuide Base clamping starwheels only in combination with the controlled grippers

## Benefits to you

- Improved hygiene through gripping jaw in open design
- Reduction in undercuts
- Simple cleaning
- Low wear thanks to optimised motion sequence and lower control forces



# Benefits to you



## Suitable for many different media

Whether ionised air, cold water, peracetic acid or the filling product itself – Moduljet gives you the option to choose which rinsing media you wish to use.

## Protect your product:

To ensure glass and PET containers start the filling process in perfect condition, Moduljet rinsers do two things: They reliably remove contamination and barely leave a trace themselves.

## Adapt flexibly to your needs:

The rinser configuration can be individually adjusted to suit the different tasks and requirements: from the nozzles to the controller and even to the number of media channels included. Consult the Krones product specialists to identify the right variant for you.

## Use rinsing media efficiently

To ensure the cleaning media reach every part of the container, the nozzles of each rinser are pre-set exactly to the task at hand. That enhances the efficacy of the cleaning, and at the same time cuts media consumption.

## Enhance the Krones UltraClean process

Moduljet rinsers are the assured professional solution for filling sensitive ESL and EHF products. In practice, they have proven their worth thousands of times over in Krones UltraClean systems.

### 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 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.

**SOLUTIONS  
BEYOND  
TOMORROW**

