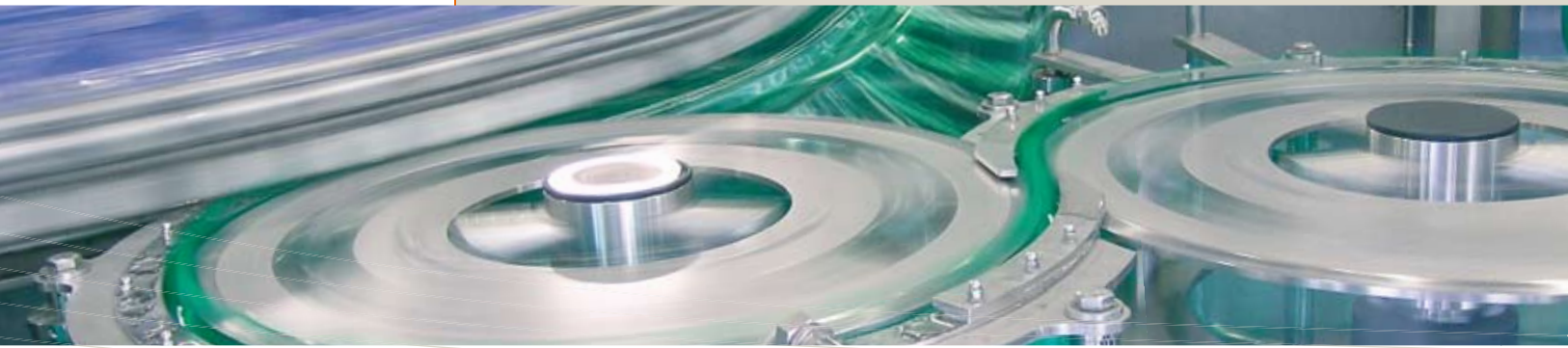


Blockrinsler
Rotary rinsler



THE BLOCKRINSER IS A ROTARY TYPE RINSER DEVELOPED TO MEET VERY VARIED BOTTLING MARKET REQUIREMENTS.

Blockrinsler

a rotary type rinsler

The large range of different sizes and speeds means these machines can handle both PET and glass bottles. They come in two free-standing versions or mechanically blocked with a filler. The Blockrinsler treatment cycles can

be customized for the application required by combining single or multiple treatments for a suitable length of time and using, where necessary, fluids of various kinds, such as air, water, steam, and sterilizing solutions.



Main features

- Variable treatment times within very wide limits
- cycles can be made to measure
- treatment can be with low consumption thanks to the inclusion of systems for recovering and recycling liquids
- very effective rinsing
- easy fast format changeovers
- a very wide range of shapes and sizes of bottles can be treated
- the use of grippers mean very light and heavy (plastic and glass) containers can be handled
- simple and reliable mechanical structure
- multiple treatments are possible with very different cold or hot fluids
- the rinser can be blocked with fillers
- a spray nozzle penetrating the bottle can be used
- several rinsing carousels can be combined for longer treatments.



Gripper

To treat the widest range of bottles possible - from the lightest to the heaviest - various kinds of grippers have been devised, their main components being made of stainless steel. The insert for gripping the bottle is made of plastic and can be easily changed according to the bottle neck to be handled.

According to the treatment required, different kinds of grippers can be mounted either with a "fixed nozzle" or a "mobile nozzle".

Lastly, an optional "no bottle-no spray" device is worked mechanically and ensures that spraying will not commence when there is no bottle. It also controls the length of treatment.



Chlorine preparation unit



Treatment cycles

The treatment cycles can consist of a single treatment or multiple treatments. Treatment times in the various stages are determined by the geometry of the fluid manifolds. In order to reduce consumption, in the case of double treatment, an optional recovery and recycling tank can be included between the two stages. The two-stage cycle normally

consists of an initial spraying stage with a sterilizing product and a final rinsing stage with water. During the treatment stage with sterilizing fluid, various products can be used, such as chlorine, ozone, oxonia, etc. Moreover, more complex treatment cycles can also be introduced (for example with a sterilization stage, rinsing with sterile

water, and blowing with sterile air). With the "no bottle-no spray" option, the length of the individual treatment stage can be regulated according to the format, speed, etc. On request, the rinser can be supplemented with a preparation and dosing system for the sterilizing solution.

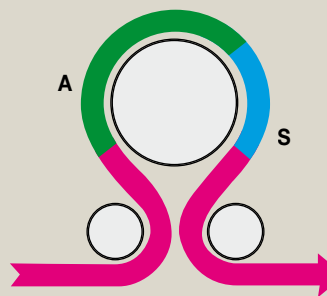
For hot fill lines in glass bottles, the Blockrinsler can be used:
 – together with the filler
 – as a preheater for the bottles.
 In order to avoid thermal shock, there is an internal injection and an external spray of steam or hot water. Water heating units for achieving the required temperature can be supplied as an accessory.



Hot water preparation unit

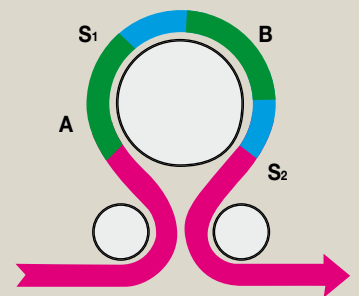


Example of a single treatment cycle



A = treatment
 S = draining

Example of a double treatment cycle



A = 1st treatment
 S₁ = 1st draining stage
 B = 2nd treatment
 S₂ = 2nd draining stage

Blockrinser S/A

Waterless bottle treatment

The Blockrinser S/A is a valid alternative to traditional rinsing methods with water for cleaning PET bottles.

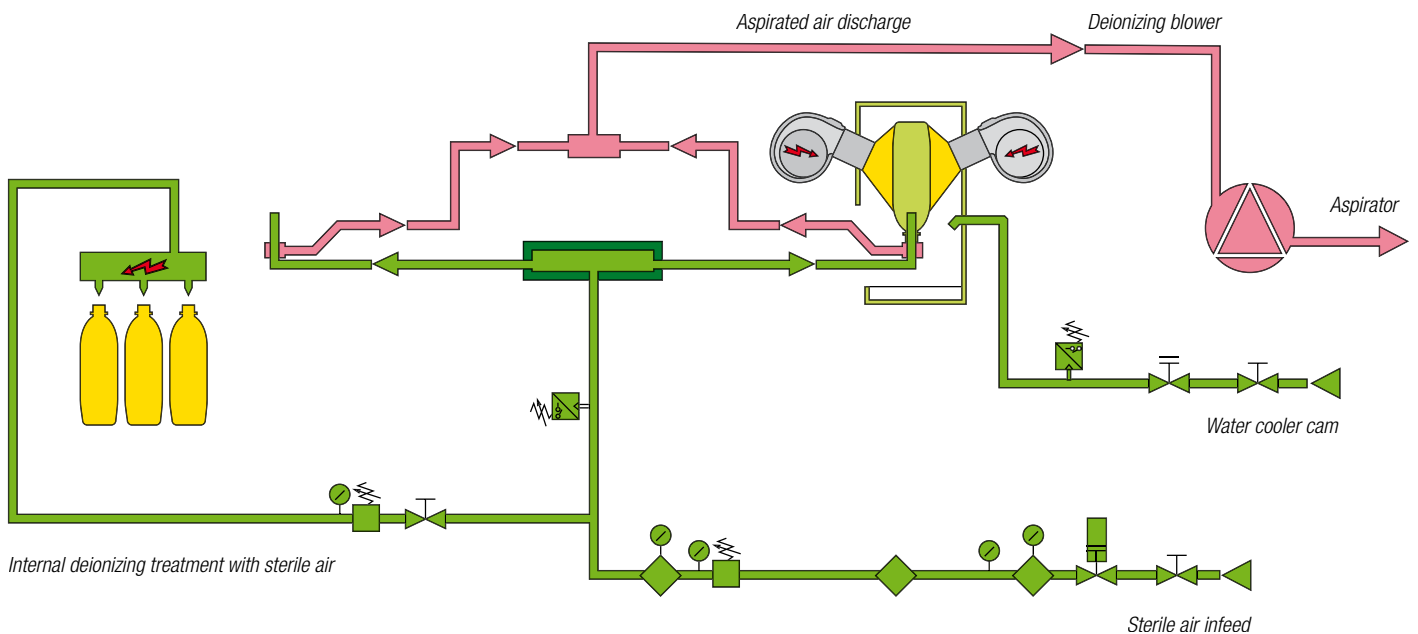
The complete bottle treatment includes:

- internal/external deionizing treatment
- internal blowing with sterile air and simultaneous aspiration.

The outcome of experience with applications in various sectors (mineral water, soft drinks, and beer)

this system guarantees not only perfectly clean containers, but offers a number of important advantages:

- no water consumption
- no dirty water disposal problems
- no residual liquids inside the bottles
- much shorter treatment times (no need for a draining stage) with smaller machines compared to traditional solutions
- simple and reliable mechanical structure
- low running costs.



Sanitization

To guarantee the greatest effectiveness in cleaning bottles, the machine is equipped with a three-stage filtering unit to produce sterile air, which is blown into the bottles by means of mobile nozzles.

At the same time, in order to ensure an effective circulation of the air and, therefore, a better cleaning action, aspiration takes place at the bottle mouth area.

A sophisticated system measuring the flow and pressure parameters – both of the sterile air and the aspiration circuit – controls the correct working of the system.

If requested, the machine can be supplied with a closed-circuit CIP system.

By manually inserting dummy bottles on the nozzles it ensures all the air and aspiration pipes are sanitized.

