

Aseptic dosing of particles and fruit pieces

Do you manufacture fruit-based drinks containing solids such as pulp or fruit pieces? Would you like to have a new, elegant and inexpensive option for aseptically processing such solids? It is precisely for this purpose that Krones has developed the DosaFlex aseptic container station, a system for dosing the aseptic ingredients for finished products containing solids.

At a glance

- Highest-precision dosing of product ingredients with an increased concentration of solids, such as fruit pieces or cereals, in a single-flow process
- Prepared connections for fast container change-over
- Valve manifold in aseptic design for dosing
- Gentle product treatment (damage rate < 5%)

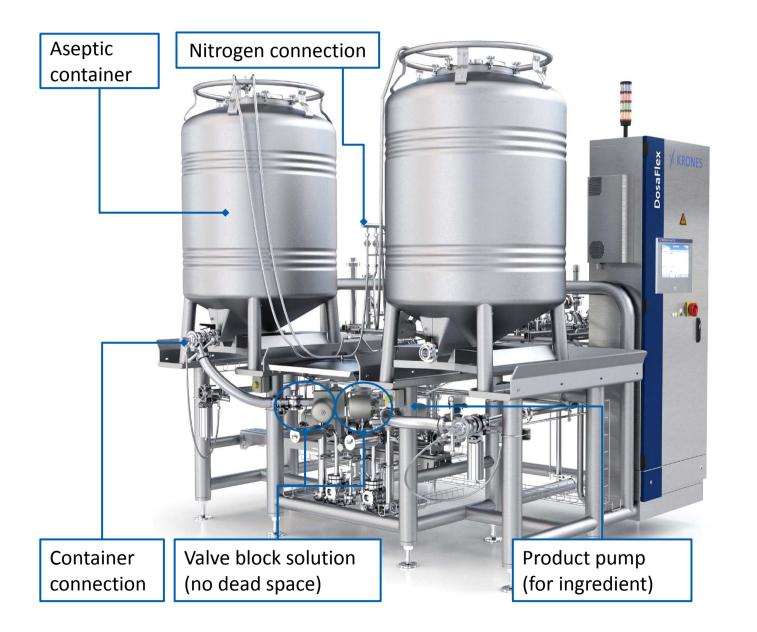


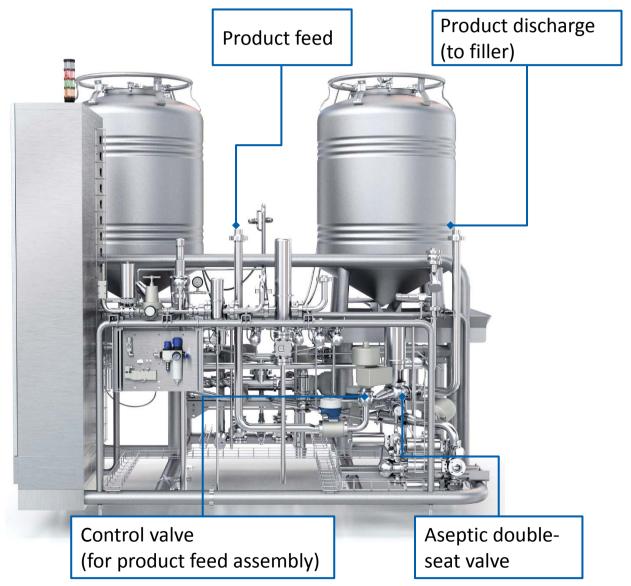




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Components







Aseptic design

The completely aseptic design guarantees a high level of microbiological reliability when it comes to the treatment of solids.

- Blending of the finished beverage via controlled dosing
- Use of an aseptic double seat mixproof valve with steam barrier
- Valve and gas connections newly developed in collaboration with the valve manufacturer GEMÜ
- Flow-optimised design without dead space
- Reduced product loss thanks to short channels and fewer mixing phases







Guaranteeing aseptic conditions

An automated monitoring device checks the container pressure level before the product to be dosed enters the unit

- Detection of non-aseptic containers when the normal pressure level is not reached or exceeded
- Elimination of damaged containers before the product is used in production
- Prevention of contamination of larger production volumes
- Increase in product safety, in particular when it comes to the production of slightly acidic products







Container change-over – step by step

- Continuous operation with alternating use of two container connections
- Fast container change-over:
 - Rinsing of the product feed pipe with condensate, or optionally with water from the CIP system
 - Subsequent steam sterilisation of the connections before the product channel is opened









Media use

— Dosing rate: 24 − 600 or 60 − 1,500 litres per hour

Maximum particle size: 10 x 10 x 10 millimetres

Container size: 200 – 1,000 litres

Dosing accuracy: +/- 0.3 percent of the dosed quantity

Container change-over time: < 8 minutes

Dimensions: 2,960 x 2,000 millimetres

Empty weight 2,000 kilos

Maximum support load: 400 kilos

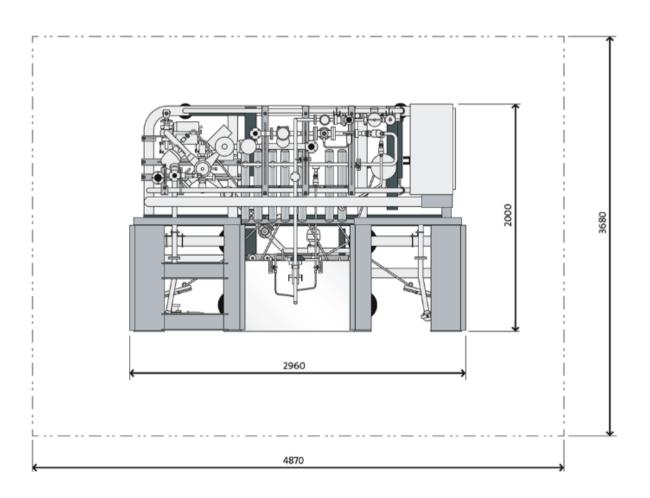
Consumption data*

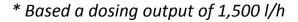
Electric power: 2.3 kWh

Thermal output: 2.0 kWh

Nitrogen: 2.0 Nm³/h









Benefits to you

Reliable and precise dosing

The inline dosing system also makes it possible to dose small portions of ingredients (e.g. flavourings, concentrates fruit preparations etc.).

High flexibility in aseptic dosing

The DosaFlex doses ingredients of every type and consistency As a result, we can offer you a quick and easy solution to position new products on the market.

Gentle product treatment

By omitting the additional heating of the product, you can achieve a low damage rate and thus high product safety. It is also possible to deaerate and homogenise the main flow.

Addition to the twin-flow concept

The compact and space-saving modular design ideally complements the KRONES twin-flow concept — especially for applications in the low output range.





Certified ecological efficiency: Machines with enviro label



At Krones, the blue enviro label stands for excellent ecological efficiency. Products that bear the enviro label have proven in an objective test procedure that they use energy and media efficiently, and that they produce in an environmentally-friendly way. The requirements are defined by the EME standard that has been developed by the TÜV SÜD (technical inspection authority) for assessing production plants. The enviro test procedure has also been certified by TÜV SÜD as an independent expert. Therefore, you can be sure that an enviro label stands for ecological efficiency.

The DosaFlex enviro achieves:

Energy efficiency

- Use of a frequency-controlled IE3 motor for the drive of the dosing pump
- The pump is optimally designed to achieve the required dosing performance
- The compressed-air consumption is monitored with a flow meter (option)

Media efficiency

- No cooling medium required for the supply of sliding ring seals
- Reduced cleaning media consumption and cleaning times





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.

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.



