

Dosomat Iced Coffee

Talking about “Iced Coffee”



Iced coffee is great when you're on the go.
Waldner engineers show how this on-trend drink is
reliably filled into cups with a long shelf life



Iced coffee is in. Not black coffee, but with a good shot of milk – possibly as a latte macchiato. This makes it attractive to dairies as a niche product, as this fashionable drink has the potential to provide a good profit margin. But the chilled drink is sensitive: its cup and lid essentially need to be sterilised to give the product an extended shelf life. Generally milky coffee is bottled directly in the dairy where there is often a moist, warm climate – in which germs tend to thrive. This is why filling plants are needed that “keep this climate outside”, for example by being accommodated in their own sealed housing and being “enclosed”. However, they therefore tend to be quite large.

Ultra-compact system

Waldner has therefore now developed a very compact filling system, which provides optimum sterilisation but also includes a checkweigher and packing station. Different cup formats and materials can be used on it at the touch of a button.

“We deliver the complete line,” says Michael Finkenzeller of Dosomat Sales. “The benefits for the customer: the customer has only one contact and all the controls look the same – so employees only need to familiarise themselves with one system. What is more, the storage costs for spare parts are lower as the same components are used throughout the entire system.” Manufacturing the entire system in stainless steel is a given for Waldner – ensuring the long service life of the plant.

In detail, it is what is known as a laminar flow system, which is housed in a purified air cabinet. There is slightly overpressurised sterile air in the cabinet to guarantee a sterilised environment. Additional hygiene measures are also incorporated in this machine: the cups themselves are sterilised internally with hydrogen peroxide (H₂O₂), while the aluminium cup lids are sterilised with ultraviolet light with a wavelength of 100–280 nm (UV-C). “We use H₂O₂ for our cups so that we can safely sterilise different cup materials, even cardboard cups, which are increasingly used for environmental reasons,” explains Michael Finkenzeller. This provides optimum flexibility in terms of cup materials for the customer. And the milky coffee then has a shelf life of up to 40 days.

Weight control with quick feedback to the filling station

Once securely filled and sealed, the cups leave the housing and pass over a checkweigher integrated into the conveyor belt. The weights of each individual cup are immediately fed back to the filling plant and the target value is immediately adjusted in the event of any deviations. On the one hand, this is legally prescribed – there needs to be 200 ml in the cup if the label says 200 ml. But on the other hand, too much content can mean additional costs for the dairy. Reporting a deviation from the target weight to the system as soon as possible translates into actual money for the company.

The system can be easily adapted on a control panel to other cup sizes and

materials, and also to other recipes. All the necessary information is already stored and can be called up at any time, or reproduced perfectly.

Flexibility as far as the packing station

From the checkweigher, the cups then proceed along a conveyor belt to the packing station. Here, on the one side they are grouped into 4 x 5 cups, while on the other side the cardboard is folded and glued into the required pack size. A gripper arm then lifts the 4 x 5 cups into the box, which is already waiting on a conveyor belt – that’s all there is to it. Of course, other pack formats are also possible here. “We have developed this compact filling line including “end of line packer” for a well-known dairy customer from the Middle East, for whom a high degree of flexibility was important,” reports Michael Finkenzeller. “Our customer received extremely in-depth information in advance. We were able to show him a similar filling machine in a dairy in Germany, so that he could get an impression of our expertise – this was the decisive issue in opting for Waldner.” And the plant, which was sophisticated at the request of the customer, speaks for itself. The combination of optimal hygiene and format flexibility is only available from Waldner. “We are always happy when we make our customers’ wishes a reality,” says Michael Finkenzeller with a smile.



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The ultra-compact system provides excellent flexibility. Bottom photo: The ultra-compact system provides excellent flexibility.



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