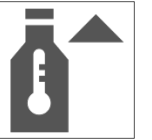


LinaTherm

The warmer in Clean Design



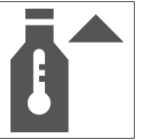
Quick and efficient heating of containers

Cold-filled beverages are literally too cool for their packaging. As soon as the containers leave the filler, condensation collects on them. The consequences: soaked containers and transport damage. This can be prevented with the LinaTherm warmer. It is employed right after the filler and it gently adapts the containers' temperature to the ambient temperature. Hence, there are no obstacles to perfect labelling and packaging.

At a glance

- Compact and one-piece warmer, which adjusts the containers to the dew point after filling
- Clean design in stainless steel AISI 304
 - Pumps in stainless steel design
 - Plastic conveyor Marathon Belt with long service life
- Integrated CHESSE heat exchanger system
- Infeed and discharge at a height of 1.2 metres each

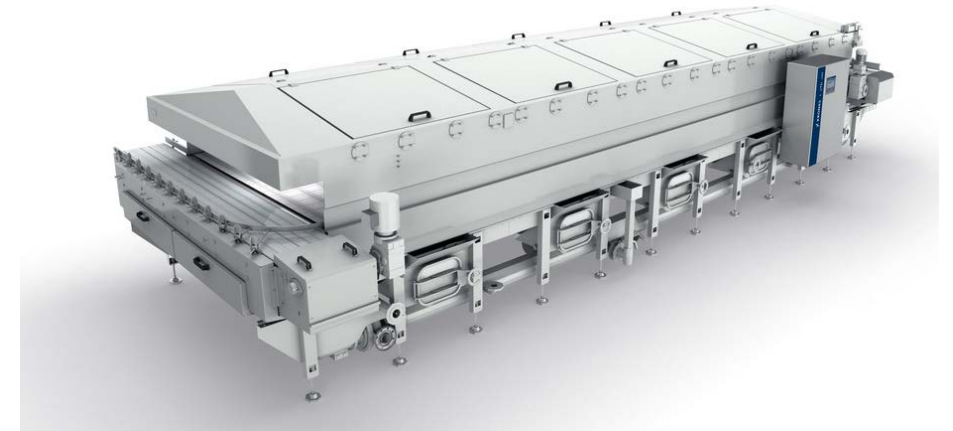




Spraying system and transport system design

Spraying system

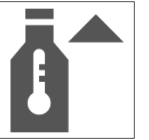
- Even water distribution
- Snap-in spraying system
- Double plug-in sieves to protect the pumps
- Blower covering the machine width for reduced water consumption



Conveyor: Marathon Belt

- Service life of up to 20 years
- Stable and robust structure thanks to its stainless steel frame
- Up to 75 percent less friction due to high-grade roller bearings for the conveyor
- No wear or glide strips
- Optimum transfer properties
- Max. load up to 260 kg/m²





Drive and controller

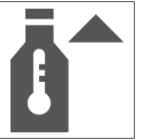
Frequency-controlled drive system

- Only one main drive (< 0.75 kW)
- No centre bearing, no return shaft
- Drive and bearing outside the machine

Machine controller

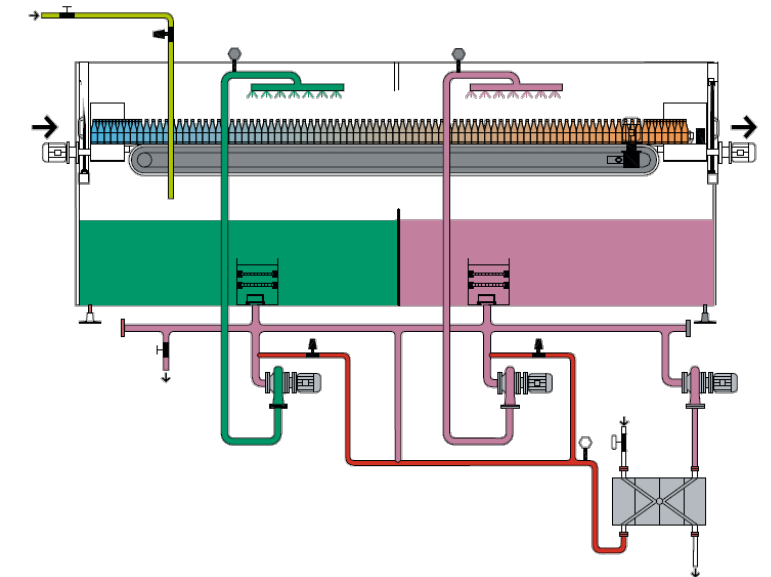
- Siemens S7 or Allen Bradley PLC
- ZenOn visualisation system on 5" touch-screen with adjustable parameters, e.g., for
 - Zone temperatures
 - Output
 - Bottle diameter

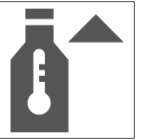




Clean Design – high hygiene standard granted

- Plane side walls in the machine
- Sloped covers and collecting pans in the tanks
- Water drains without residues in the draining process
- Optimum accessibility
 - in the infeed and discharge area due to hinged drip pans
 - to the spraying system through roof covers

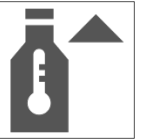




Optional equipment

- Connection of alternative heat sources such as heat pumps or recovery systems
- Dosing system for disinfectants
- Consumption data measurement for water, heat, air and power
- Intermediate conveyor cleaning for the Marathon Belt with cleaning nozzles
- Dew point control (dynamic adjustment of the spraying temperatures)
- Guards at the infeed and discharge: reduced evaporation
- Pressure reduction for media connections, condensate collecting tank





Benefits to you

Ideally tempered containers

The LinaTherm safely adjusts the temperature of cold filled products to the ambient temperature and thereby ensures that no condensation develops which would impair the labelling and packaging quality.

Compact design

All machine areas and components are easily accessible. Required maintenance work can be performed quickly.

Components with long service life

High-quality materials are installed in the warmer. This goes for the drive elements and the conveyor elements as well as for the housing and the pumps, which are completely made of stainless steel. This reduces the risk of corrosion and ensures a longer warmer service life.

Plug and play

All LinaTherm components are completely pre-assembled and tested already at the KRONES plant. The subsequent installation is done at the site via plug and play. This way, you can use your warmer fully within very short time!

Clean design

The Clean Design with plane side walls, inclined drip pans, and central draining provides ideal, hygienic conditions and guarantees that no water remains in the machine. As an option, you can also include controlled dosing systems for disinfection media in the LinaTherm.



Everything from a single source

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.

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.



Digitalisation



Process
technology



Bottling and
packaging equipment



Intralogistics



Lifecycle
Service

We do more.

 **KRONES**