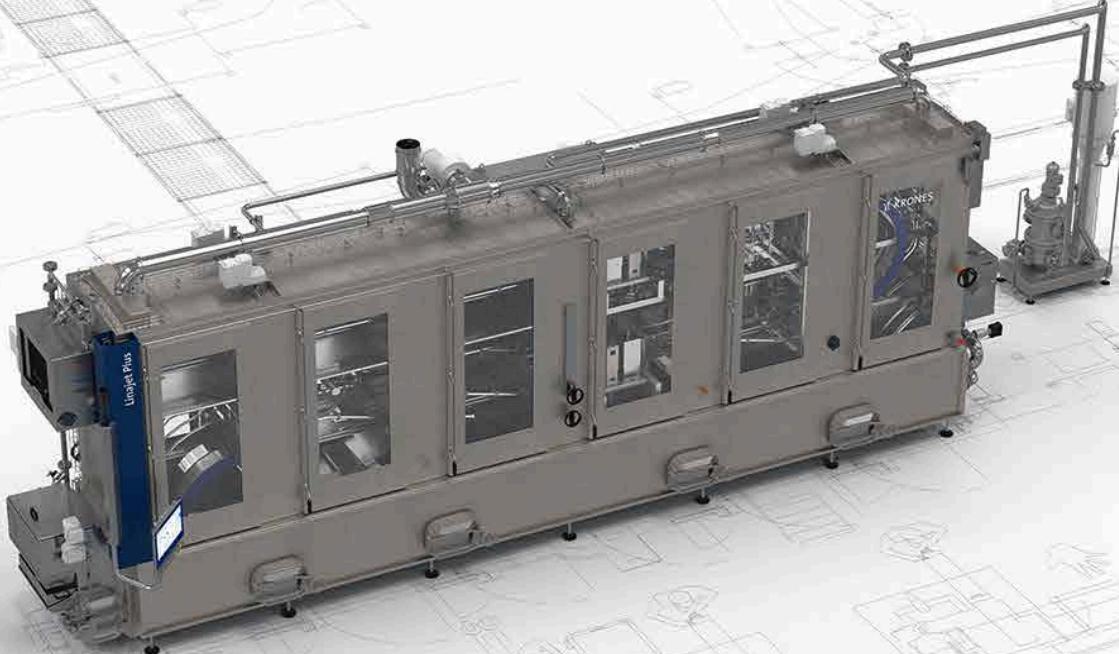


# Linajet Plus

Crate washer for the premium sector



# Longer treatment times for an even greater cleaning effect



Do you produce beverages for the premium sector? Do you attach great importance to the presentation of your products at the point of sale - and of course not only for the containers but also for the crates? Then the Linajet Plus is worth a look for you. Because it combines the proven advantages of the standard Linajet crate washer and even tops it: With three treatment zones on three levels, it ensures a significantly longer treatment time - and thus even more thorough cleaning of the crates.

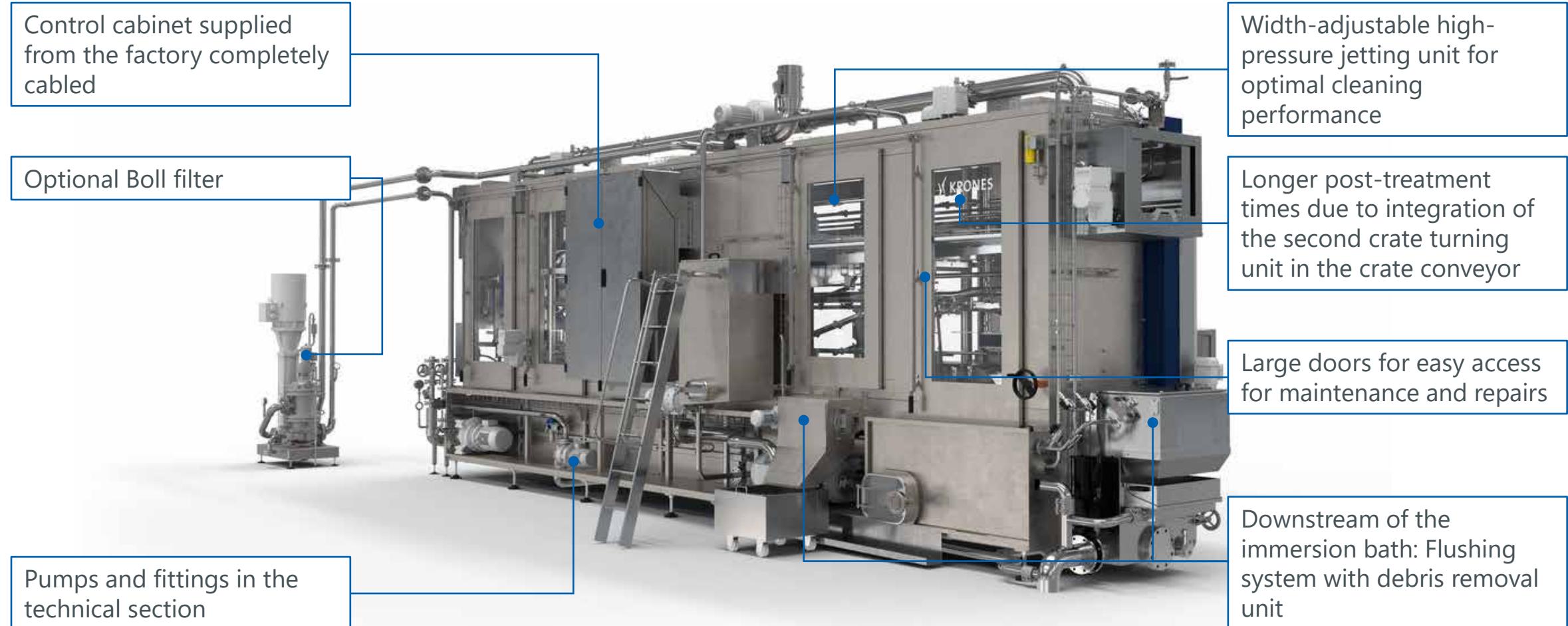
## At a glance

- Premium crate washer on three levels (pre-treatment, main treatment and post-treatment).
- Reliably removes even heavy contamination from the crates
- Output range: Single-lane up to 3,600\* crates per hour



\* Referring to measurements of 400 x 300 mm

# The Linajet Plus at a glance



# Equipment options



## Included by standard

- Debris removal unit (automatic sieving conveyor with spraying system in the immersion bath)
- Crate flushing after the first gripper with additional debris removal unit
- Interior lighting (can be switched ON via touch-screen)
- Automatic tank filling and emptying
- Pressure and temperature measurement (display via touch-screen)
- Drive system (rubberised flat-top chain, frequency-controlled servo drive)
- Visualisation system (21" VisiWin touch-screen with ASi Safety)
- Height and width adjustment with crank

## Optional

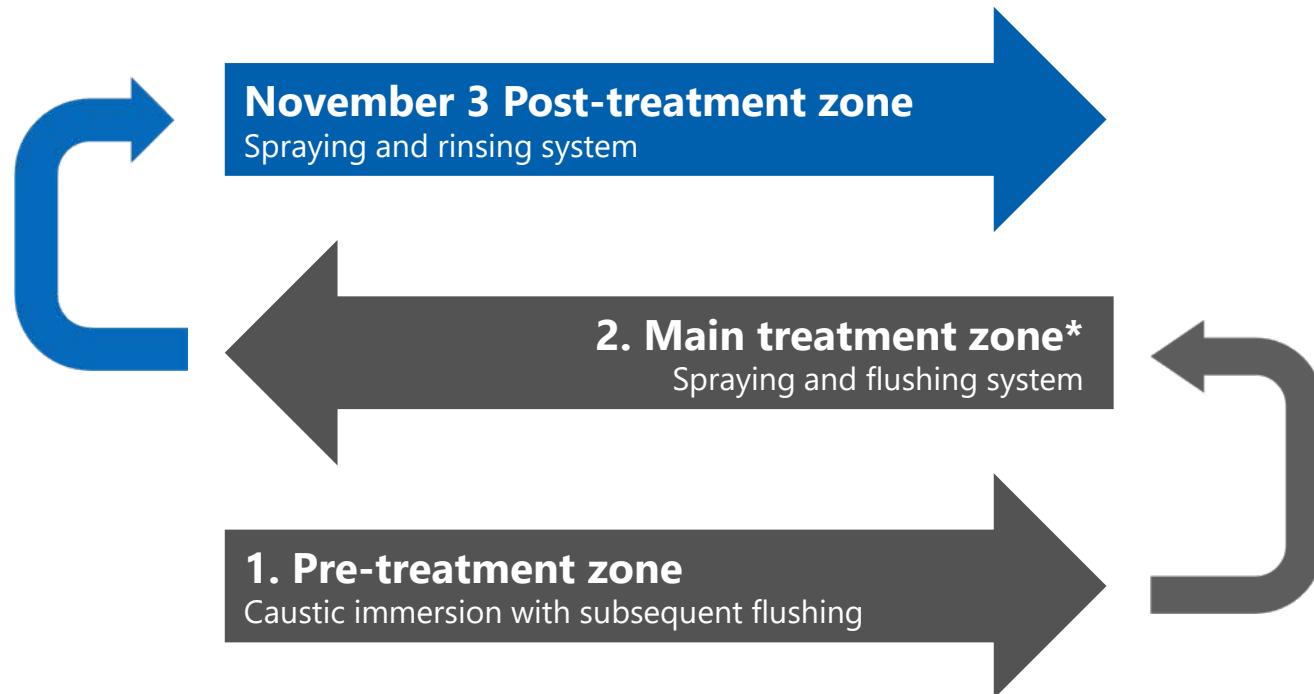
- Heating system for caustic (in immersion bath) and fume extraction system
- Housing insulation in the area of the immersion bath
- Internal crate turning unit for crate treatment on both sides (second crate turning integrated in the pack conveyor)
- High-pressure jetting system (25 to 30 bar jetting pressure, incl. pre-filtration and manual adjustment of the jetting system)
- Two-sided brushing unit
- Dosing unit incl. conductivity control
- Caustic filtration – bypass filtration of the main jetting system
- Height and width adjustment of the crate guide via drive
- Consumption metering (fresh water, heating medium, power, air, chemicals)
- enviro option for increased energy and media saving

## Two model types



In the Linajet Plus, the crates pass through three levels in three different treatment zones. Depending on the treatment time and the scope of cleaning, there are two different model types.

- The height and width of each machine type is the same (3.6 x 1.95 metres).
- The length varies depending on the type (8.1 metres or 10.8 metres). In its maximum design, the treatment zone is 32 metres.



### \* Scope of the main treatment zone

- 
- Standard features: Spraying system with caustic
  - Optionally with high-pressure jetting system and brushing unit

# Details: Treatment zones



## 1. Pre-treatment zone

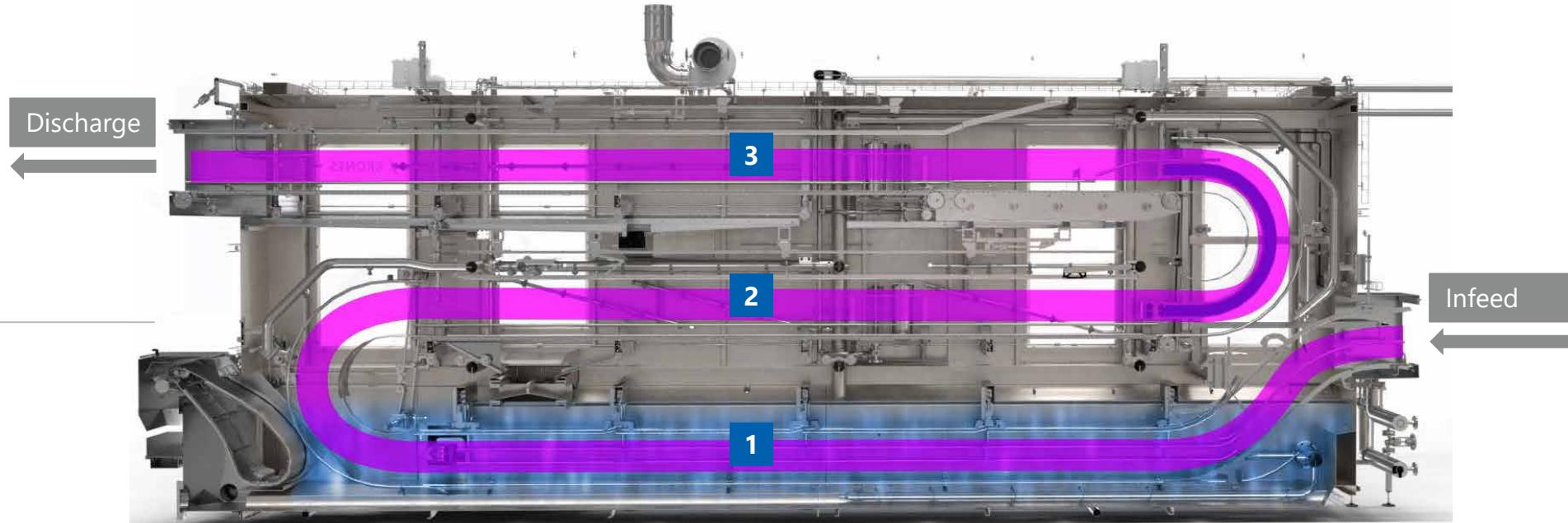
Pre-cleaning in bath for steeping

## 2. Main treatment zone

Spraying and flushing system. A high-pressure jetting system and brushing unit are optionally available

## 3. Post-treatment zone

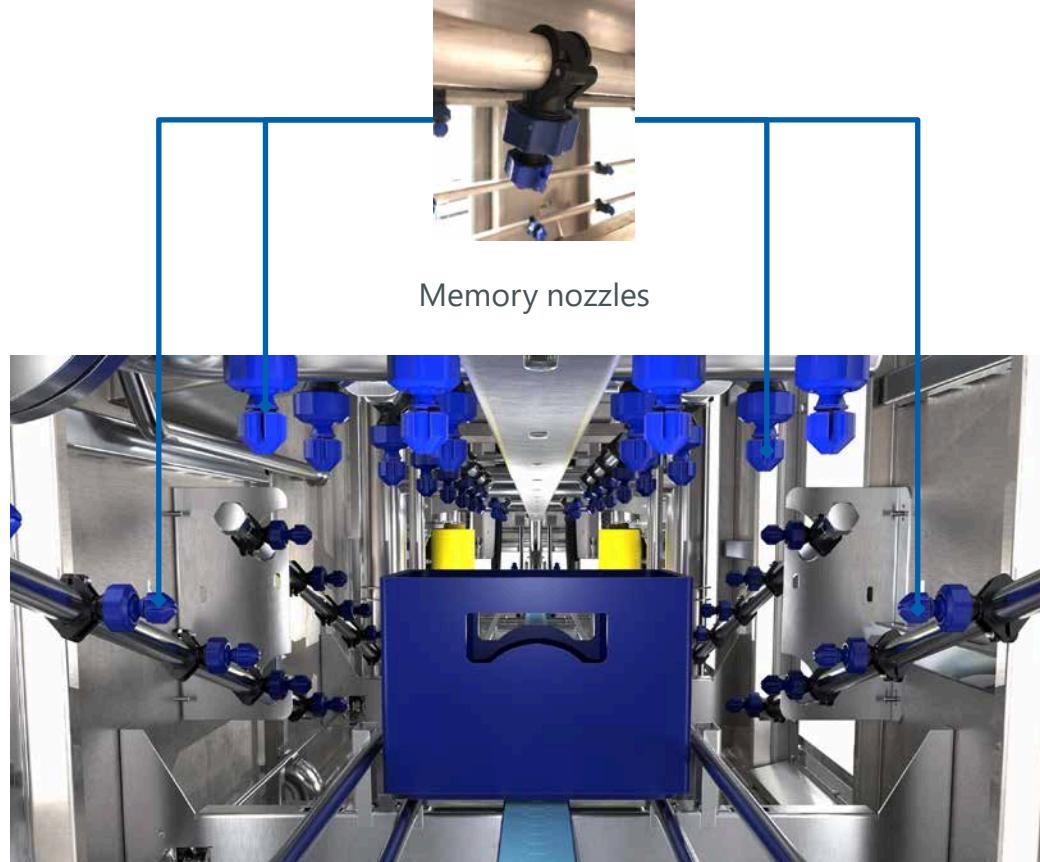
Effective post-treatment zone with jetting system and rinsing



# Jetting pipes



- Diagonal jetting pipe system:
  - Reduced spray shadow
  - Peeling effect due to spray nozzles
- Improved cleaning results:
  - High-pressure jetting system with multi-stage centrifugal pump (25 – 30 bar)
  - Up to 60 percent more cleaning intensity thanks to jetting distances that are adjusted to suit the crate portfolio
  - Quick-release fastening jetting pipes for easy installation and dismantling (position defined by numbering)
  - Nozzles with exchangeable neck finishes with a maintained nozzle adjustment (memory nozzles)

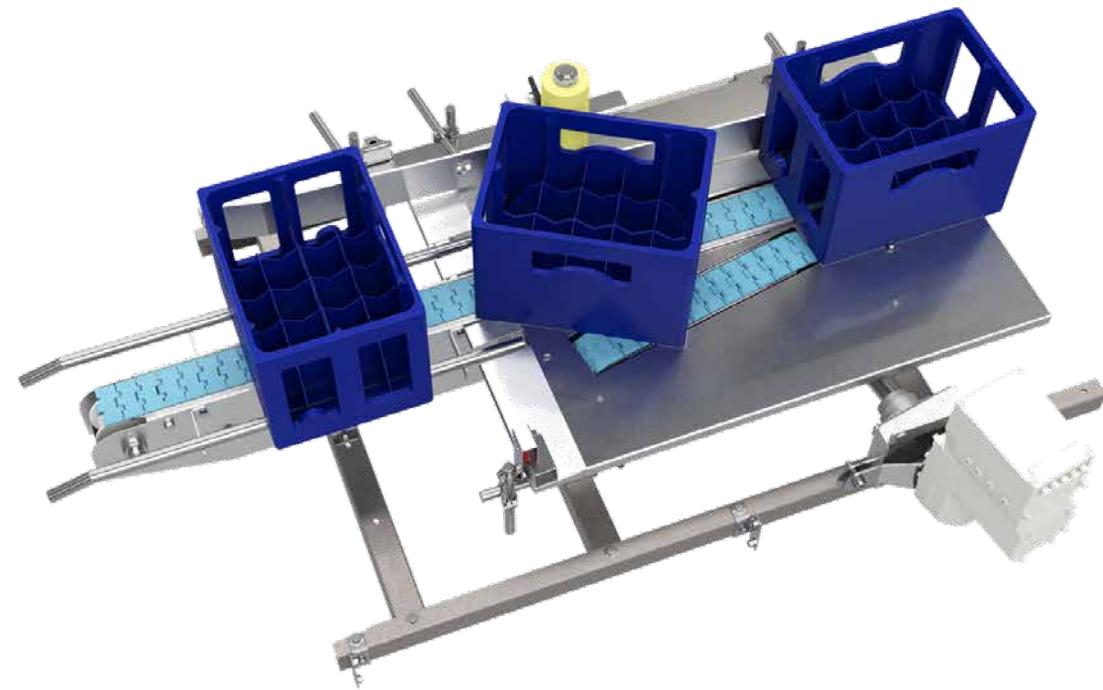


Jetting zone and crate guide

# Crate turning unit



- Crate turning unit with diagonal conveyor to reduce change-over work
- Relocation of the second turning unit:
  - Longer treatment times during rinsing
  - Reliable cleaning of caustic/additive residues
  - Less prone to malfunctions
- Even cleaning of all sides of the crate



Internal turning unit

# Change-over and maintenance



- Automatic readjustment of the gripper chains via torque monitoring (case-by-case review required):
  - Permanent reduction of wear
  - Prevents incorrect adjustments by the operating personnel
- Free access to the immersion bath
- Easy removal of jammed crates
- Monitoring of the degree of contamination of the treatment zones:
  - Regulation of the amount of fresh water as required
  - Saving of chemical additives
- Continuous sand and debris removal:
  - Use of the flow in the immersion bath
  - Flushing of the crates after the immersion bath



Easy access to the units on the pump side

# Digitalization



## Connected HMI – state-of-the art operator interface

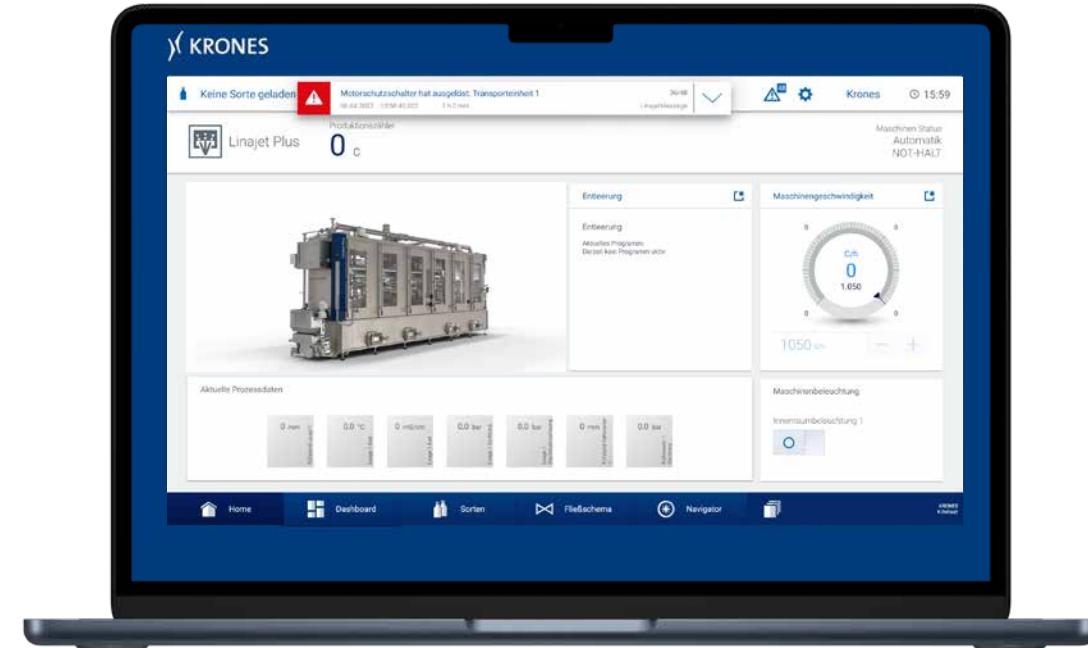
- Direct access to more information and data
- Individual design of the interface through widgets
- Multi touch-screen and click-and-response feature

## TIA – future-oriented machine controller

- Use of control components with a long service life
- Easy and fast implementation of new software packages

## Interfaces for digitalization products

- Share2Act
- Connected Line



The new Connected HMI touch-screen

# Standard crate washer and premium crate washer in comparison



Feature	Standard: Linajet	Premium: Linajet Plus
Treatment time*	18 seconds (KGW 750-E)	48 seconds (TBW 810)
Pre-treatment	None	Flushing and immersion
Jetting pressure	5 bar	5 bar, optional 25 – 30 bar
Mechanical treatment	None	Brushes
Chemical treatment	Optional dosing	Dosing in the immersion bath
Width adjustment system	With crank	For gripper and lateral crate guide: with a crank or optionally with a drive

\* With 3,600 crates/hour, crate size of 400 x 300 mm



## Automatic debris removal

Dirt residues are conveyed via a flow channel to the end of the machine and removed. This way, continuous operation is possible even in cases of high contamination.

## Longer post-treatment zone

In the Linajet Plus, the second crate turning unit has been relocated enabling the post-treatment zone to be extended by 1.5 metres. This increases the rinsing duration – resulting in an even better post-treatment rinsing effect.

## Less susceptible to faults

Revisions to the gripper conveyor, the relocated crate turning unit, servo drive technology and the use of a multi-stage centrifugal pump for high-pressure jetting reduce the system's susceptibility to faults and ensure smooth operation.

## Improved cleaning performance

Three treatment zones plus targeted adaptive high-pressure jetting and other treatment methods ensure that even heavy contamination can be reliably removed.

### New machine enquiry

You can easily send an enquiry for a non-binding quotation in our Krones.shop.



# Everything from a single source



## **Training sessions at the Krones Akademy – trained personnel for an increased efficiency of your line**

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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.

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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.

## **KIC Krones cleaning agents make your machine shine**

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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.

## **KIC Krones lubricants for each production step**

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BEYOND  
TOMORROW**

