



# ErgoBloc L

The wet section block which performs much and requires very little



# A lot of machinery in just a small space

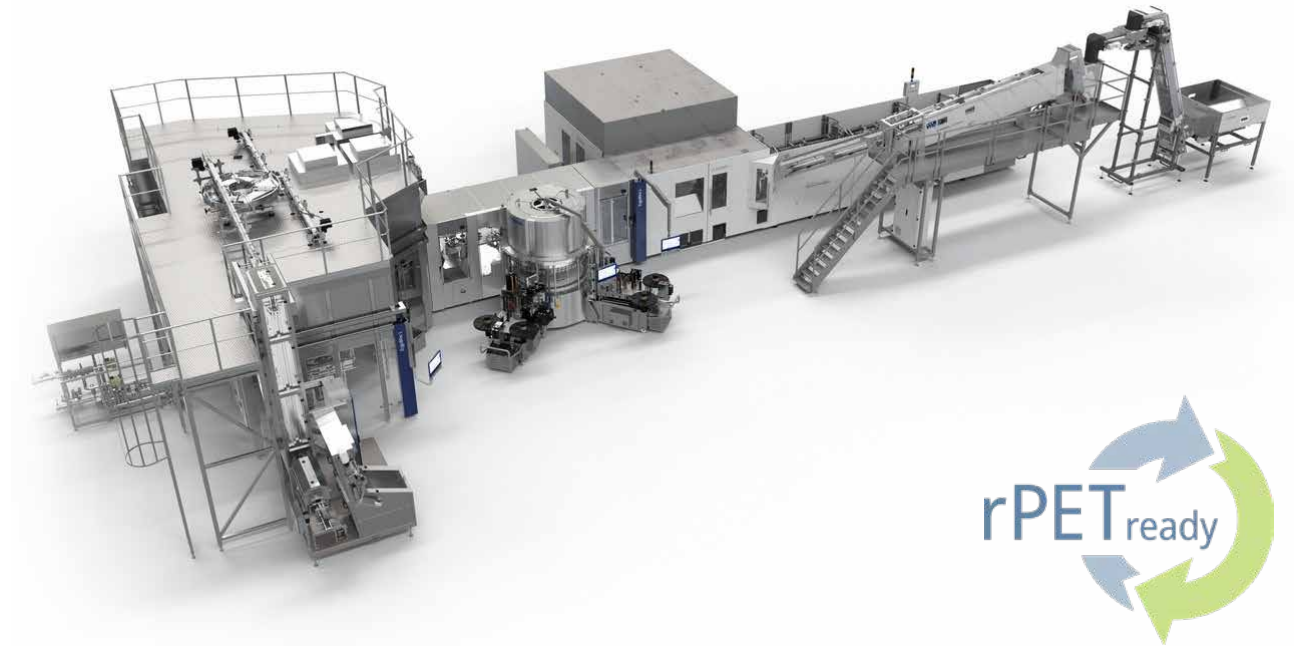


When it comes to output per square metre, the ErgoBloc L is in a league of its own. The wet section block has an output of up to 100,000 containers per hour – and requires 30 percent less space than conventional block solutions.

## At a glance

- Functions: Stretch blow moulding, labelling, filling and capping
- Output: Up to 100,000 containers per hour\*
- Processing range:
  - Non-carbonated and carbonated beverages
  - Cylindrical and square PET containers
  - Standard and lightweight containers
  - Container volumes of 0.25 to 3.5 litres
  - Containers of up to 100 percent rPET
  - Self-adhesive labels and reel-fed plastic labels
  - Flat caps and sports caps

\*depending on the processing range



# Functions and structure



Filling and capping



Labelling and cooling of the container base



Stretch blow moulding



Feeding and heating the preforms



Fully-electronic PFR filling valve with infinitely variable control

- Labelling station with selective labelling for up to 50,000 containers per hour
- Container base cooling only required with CSD

Up to 2,750 containers per hour and blowing station

Highly efficient infrared heating technology

**The all-rounder with 30 percent less space requirement compared to conventional block solutions!**

# Components

## Stretch blow moulder

- Torsion-resistant platform with skip-and-run technology
- Only four internal horizontal preform and container transfer points
- Actively controlled transfer grippers
- Five high-precision Monotec servo motors with real-time synchronisation

### **Infrared heating technology**

---

- Parabolic reflector for top infrared emitter
- Adjustable base reflectors: adjustable to the respective preform length
- Maintenance-free system of ceramic reflectors

### **Air Wizard Triple**

---

- Further developed compressed air recycling system with intermediate pressure levels for internal re-use of the compressed air
- Automatic self-optimisation of the blowing air recycling process
- Significantly reduced switching time dispersion



# Components

## Modular labellers



### Why label first and fill afterwards?

- Full bottles can have varying internal pressures.
- These variations can impact the labelling result.
- The bottles do not have any unwanted moisture.

### Solution: The ErgoBloc L ...

- labels the bottles before filling them.
- pressurises the empty bottles with compressed air.



### Result

- Consistently excellent label fit
- Optimum conditions for lightweighting
- Ideal access for handling parts change-over
- Optimal accessibility from three sides
- "No bottle – no label" function
- Reduced hotmelt consumption due to "Gravure Glue Application"
- Unique servo motor technology
  - Flexible selection of the pitch
  - Maximum stable handling of thin, sustainable films

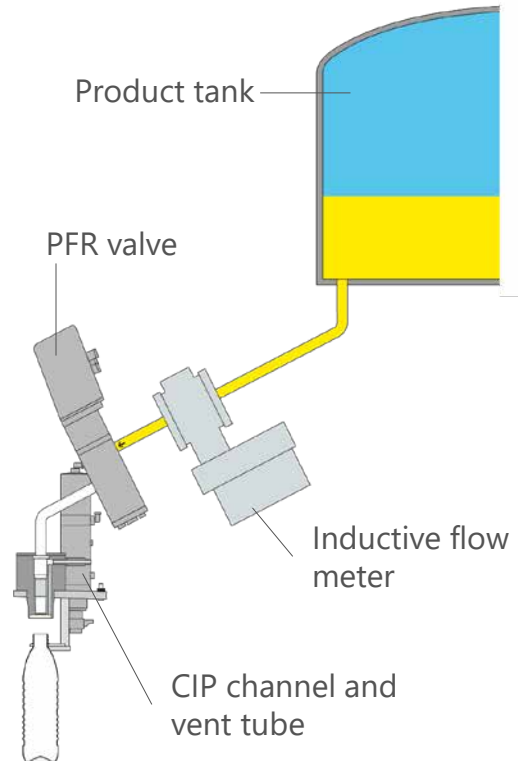


# Components

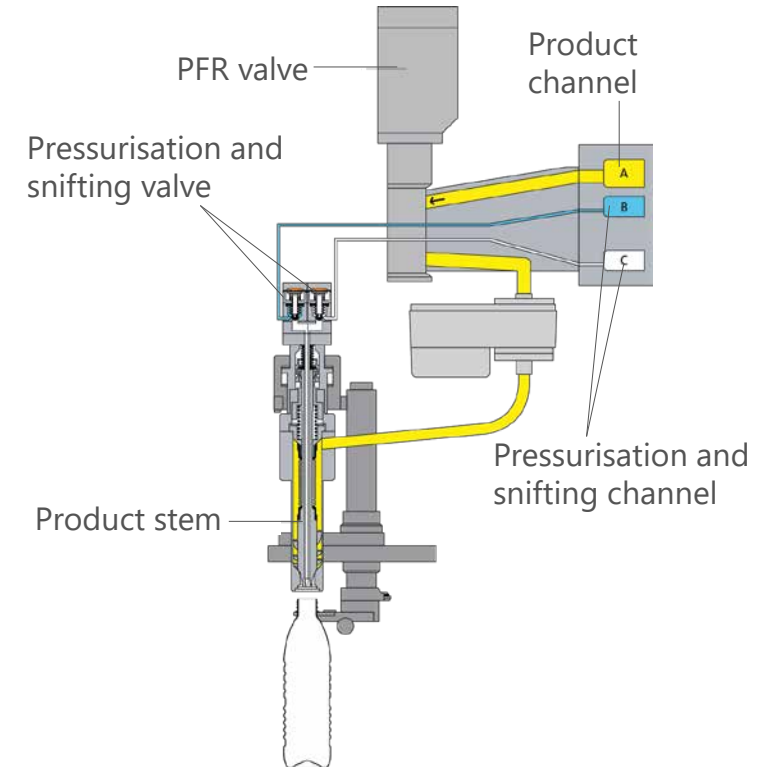
## Filler – maximal flexibility



### Filler for non-carbonated beverages: Modulfill VFJ



### Filler for non-carbonated and carbonated beverages: Modulfill VFS



- Maximum product quality through ideal adaptation of the filling speed to the respective production characteristics
- Best efficiency rates due to the combination with Krones cap feed units
- Simple maintenance and assembly of the PFR valve
- Maximum efficient cleaning due to the use of automatically positioned CIP cups
- Significant reduction of the required energy for the machines through use of PFR valves

- Microbiological safety due to contact-free filling and perfect machine design

- Non-carbonated and carbonated products can be filled on one system
- Adjacent product tank

# Components

## Drive and transfer technology



### Drive technology

---

- Servo drive use throughout all applications
  - Energy-efficient
  - Low wear
  - Reliable

### Transfer technology

---

- Actively controlled transfer grippers
- Container conveyance via neck handling
  - Quick and very precise preform and bottle transfer
  - Smallest possible contact area between the material and the machine
  - Gentle conveyance also for light-weight containers
  - Reduction of handling parts
  - No PET abrasion during the transfer

### Servo Joint Control (SJC)

---

Single machines or block mode? Both is possible: Because with the Servo Joint Control, you can electronically decouple the blow moulder, labeller and filler from the block.

- Automatic decoupling during malfunction
- Automatic synchronisation during restart
- Manual decoupling of individual machines for efficient change-over processes

---

**SJC makes it possible:  
The ErgoBloc L thinks on its own!**

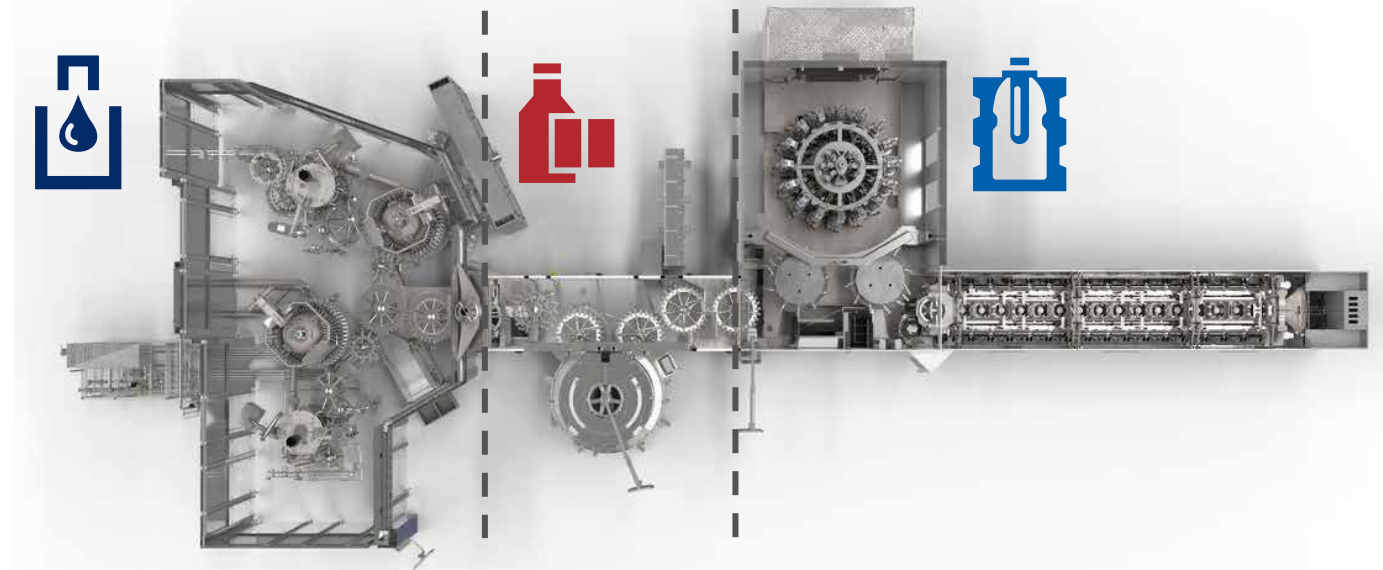
# Maximum output in the smallest space

100,000 containers per hour – utmost efficiency on the market!



## Overview of processing range

- Non-carbonated beverages
- Cylindrical PET containers
- Containers of up to 100 percent rPET
- Standard and lightweight containers
- Volumes of up to 0.75 litres
- Plastic reel-fed labels
- Flat caps



## Filling and capping



- Infinitely variable filling speed
- Cap sorting close to the ground with maximum speed
- Up to 40 percent<sup>1</sup> less filling valves
- Up to 10 percent<sup>1</sup> less space requirement

<sup>1</sup> in comparison to conventional fillers

<sup>2</sup> in comparison to Contiform 3

## Labelling



- "No bottle – no label" function
- Minimal glue consumption (Contiroll TS)
- Best precision due to neck-handling system
- Minimal label tension due to gentle, dynamic buffering
- Optimised glue steam extraction system

## Heating and blow moulding



- Up to 2,750 containers per hour and blowing station
- Up to 30 percent<sup>2</sup> less compressed air consumption due to Air Wizard Triple
- Up to 5 percent<sup>2</sup> reduced energy consumption of the infrared oven
- Maximal line OEE due to "Skip-and-Run"



# Operation

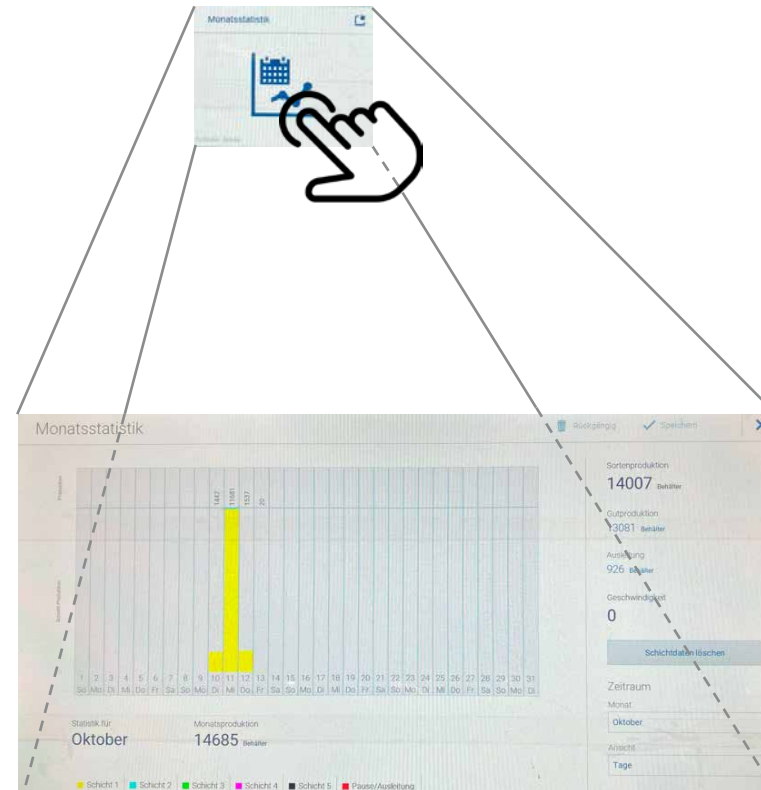


## Human Machine Interface (HMI)

- Intuitive operation with task-oriented menus
- Uniform look and feel at all three individual machine HMIs

## High degree of user friendliness

- Block operation **with just one operator**
- Height-adjustable 21-inch touch-screen (16:9)
- Optimal visibility due to large pivoting range of the screens
- VisiWin visualisation system
- LED status indicator for notifications



# Option

## Retrofitting in record time with LineXpress

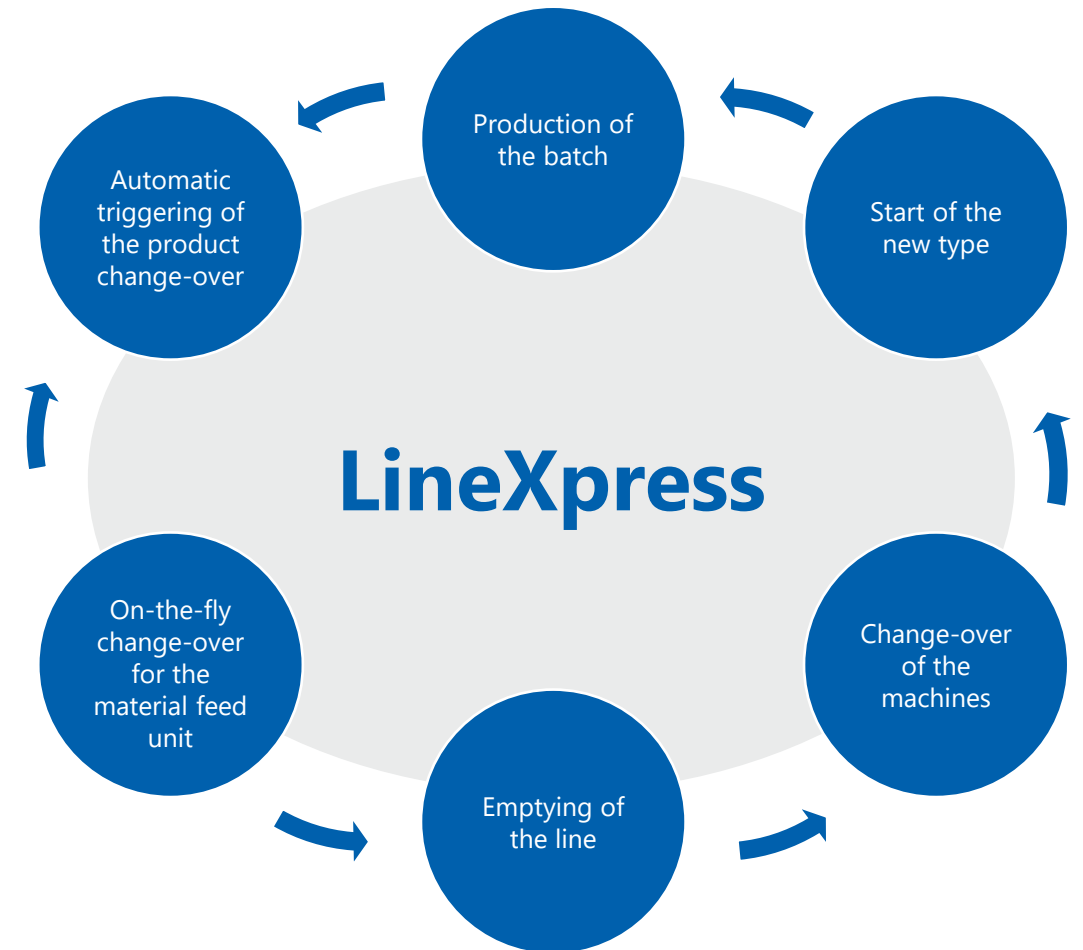


### Function: The LineXpress ...

- coordinates all steps which are required for the change-over.
- allows a fully-automatic performance of essential processes
- leads the operator quickly through the process and without any faults.
- enables several process steps **simultaneously instead of in succession**.

### Result: The ErgoBloc L ...

- can be adjusted to a new product in 10 minutes.
- can be changed to different types in 30 minutes.
- increases the line efficiency by up to 20 percent.



# Benefits to you



## Four process steps – one operator

With the ErgoBloc L, the entire process from stretch blow moulding right through to the capping of the containers can be handled by just one person. The compact design without conveyor sections also keeps the transport distances short and offers an easy overview over the entire line.

## Large output in a small area

Even though it processes up to 100,000 containers per hour, the ErgoBloc L requires up to 70 percent less space than a line consisting of individual machines. This way, you can save hundreds of square metres of hall surface.

## Trouble-free continuous operation

Full power without breaks: The labelling module automatically detects bottle gaps and does not apply glue or labels in this case. Disruptions due to missing bottles and unnecessary glue and label consumption are therefore not an issue.

## Energy savings

From optimised infrared heating technology to consistently implemented servo drive technology: The topic of energy efficiency goes all the way through the block just like a red thread. Particularly ambitious savings targets can also be achieved with the Air Wizard Triple compressed air recycling system.

## Gentle treatment for PET containers

The active transfer grippers only touch the preforms and bottles in their neck area. This makes the contact area between the material and the machines as small as possible and minimises the risk of damage.

### Requesting a new machine

You can easily send a request for a non-binding quotation in our [Krones.shop](#).



# Certified ecological efficiency

## Machines with enviro seal



At Krones, the enviro label stands for excellent ecological efficiency. Products that bear the enviro label have proven in an objective test procedure that they efficiently use energy and media, 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.

**This is why the ErgoBloc L is enviro-classified:**

### Energy efficiency

---

- Increased station performance during stretch blow moulding and labelling
- Reduced energy consumption thanks to the omission of transfer starwheels and redundant components
- Height-adjustable base thermal shield and frequency-controlled neck finish cooling system
- Energy-efficient separated vacuum during labelling

### Media efficiency

---

- Efficient cooling of the entire block
- Air Wizard Triple air recovery system
- No compressed-air consumption during the filling process

### Environmental compatibility

---

- Use of enviro-compliant lubricants
- Recoverable CIP media



# Everything from a single source



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

---

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.

## Evoguard – excellent valve technology all along the line

---

The Evoguard valve series comprises a modular system with hygienic and aseptic components which contributes to an increased performance at every point of the production line and has the perfect solution for every process step.

## 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.

## KIC Krones adhesives – the all-rounder for a strong grip

---

Regardless if PET or glass, plastic or paper, labels or packagings – at KIC Krones, you will find your ideal adhesives for a high-quality product presentation.

## Krones Lifecycle Service – Partner for Performance

---

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 lubricants for each production step

---

Whether for gears, chains or central lubrication systems – our greases and oils are true all-rounders. They can reach every lubrication point, protect your line and ensure gentle treatment for your products thanks to their food-grade quality.

**SOLUTIONS  
BEYOND  
TOMORROW**

