



## Reverse vending machines

Sustainable and future-proof,  
for everyday heroes



# Sielaff – red logo, green heart

## **We are visionaries when it comes to sustainability**

Protecting and managing resources is how we contribute to a sustainable life.

In all areas of our company, we take a holistic approach as the basis for our way of thinking and acting.

The production processes we employ ensure a very high level of air purity both inside and outside the company. Sielaff is always up to date with the latest ecological standards through the consistent use of environmentally-friendly technologies and regular modernisation of its production facilities.

The constant review of standards and a climate-friendly vehicle fleet comply with the Eco-design Directive.

That's why every Sielaff product reflects the company's conscientious approach of doing what is best for the climate, environment and society.



At Sielaff we believe that there is more to sustainability than complying with legislative regulations and guidelines.

Sustainability is the guiding principle behind the development of our corporate goals and their implementation across all areas of the company.

## SIELAFF – engineering innovation for you

**For more than 135 years, Sielaff has been combining high-level engineering with a modern lifestyle**

Since 1886 Sielaff GmbH & Co. KG Automatenbau Herrieden has been developing, manufacturing and distributing smart vending systems and subsequently reverse vending machines. We are a successful medium sized family business with a strong foundation and healthy growth.

As a technological pacemaker, Sielaff is driving the development, production and distribution of state-of-the-art vending machines and reverse vending machines. Sielaff's service solutions complete our portfolio.

From the initial concept to the complete vending machine, manufacturing and assembly take place in-house and everything is always "Made in Germany". Sielaff invests in state-of-the-art manufacturing, research and efficient processes to ensure maximum production flexibility. A sustainable approach is the basis for how we think and act in all areas of our company. Sielaff is always up to date with the latest ecological standards through the consistent use of environmentally-friendly technologies and regular modernisation of production facilities.

## It all started with one patent



# Plastics – Facts and Figures

## Essential to our way of life

Our lives would be inconceivable without plastics. They are an integral part of products, from cars to trainers. Almost half of plastic products are predominantly used in packaging and end up as waste after a single use. Only a fraction of this enters the recycling loop.

Our annual consumption of resources is currently at an all time high. Awareness of the need for change has increased. Consumers are demanding a rethink in material and recycling so there is a willingness to change behaviour. And they are willing to change how we act.

Plastics are valuable materials, not waste. Sielaff has the technical capacity to meet legal requirements and to enable the transition to a consistent circular economy. We show how it works – economically in operation and effectively in recycling.

**1,000,000 plastic bottles**

are sold worldwide every minute.

## The biggest market

for plastics is packaging materials. This accounts for about half of the plastic waste produced worldwide.

**8.3 billion tonnes of plastic**

were produced between 1950 and 2015.

**62% of plastic waste**

in Europe comes from single use packaging.

**78 kg of plastic waste**

was produced by every person in Germany on average in 2020, 6 kg more than in 2019.

# Clear strategies, always future-oriented

## In the past 10 years

we have produced more plastic worldwide than in the past 100 years combined.

## Acceptance of all plastic packaging from the retail sector

Not yet feasible, but the goal going forward: acceptance of all plastic packaging from the retail sector.

Our reverse vending machines promote long-term acceptance of virtually all plastic packaging, made possible via a sophisticated and secure barcode recognition system. A closed loop for more than 20% of plastic waste is achieved via this straightforward return method, even encompassing items such as milk bottles or yoghurt pots. This is not a complete solution to every challenge and

if the increasingly high waste generation nowadays compared to 2010 is anything to go by (70% increase) it is imperative that actions are accelerated. Governments worldwide are now responding to this task. Sielaff's SiCompact Series or SiVario 2020 are transforming the acceptance of reusable cups and bowls in the retail and To-Go sector by providing a smooth and hassle-free experience for our customers. The return of packaging into a loop is reliably ensured thanks to the simple sorting mechanism fitted to our reverse vending machines.

## Today we are already developing technologies for modern life in tomorrow's world

We are members of or involved in the following organisations:



# Routine for Sielaff: Protecting the environment

Our modular reverse vending machines actively promote climate protection and resource efficiency in the retail sector. Flexible container recognition in our reverse vending machines uses barcodes to clean and hygienically collect reusable and single use empties, including cups.

Sielaff reverse vending machines improve the environmental footprint, while at the same time easing the workload on staff in the store.

Our reverse vending machines enable us to collect valuable materials. This protects resources, enables the recycling of raw materials and enables the establishment of a closed loop for valuable materials.

## Flexible

Specialists provide support and will configure your machine to meet your specific requirements.

## Broad acceptance

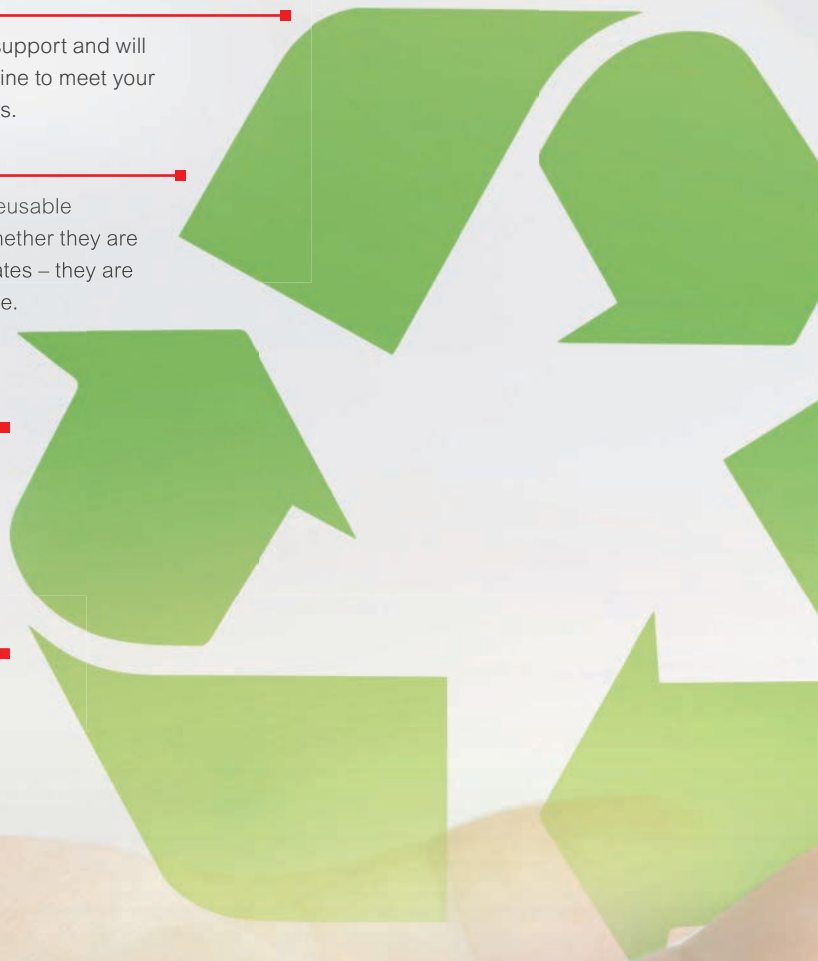
The systems enable hassle-free return of single use and reusable packaging in a wide variety of materials. Regardless of whether they are made of PET, metal or glass – whether bottles, cups or crates – they are reliably recognised by their shape, weight, logo or barcode.

## Variable

Custom designed, the systems are definitely the right fit for your store. The reverse vending machine is planned to suit your premises.

## Everything from a single source

From conception/design to development, implementation, planning and servicing – everything from a single source. The sheer scope of this concept gives Sielaff a clear competitive edge.



### Simple

Our RVM's are intuitive, easy to use and keep staffing levels to a minimum.

### Secure

Certified in compliance with the German bottle deposit scheme requirements, our reverse vending offers the highest level of fraud protection.

### Clean

Well-conceived solutions ensure cleanliness and efficient processes for the smooth return and recycling of materials.

### Reliable

High levels of productivity is key to daily operation.

## Sielaff plans an active contribution to greater sustainability with its intelligent solutions

Since 2022, customers have been required to pay a deposit on almost all single use plastic beverage bottles and on all single use beverage cans in Germany. In order to reduce the increasing consumption of resources, the Germany Government plans to levy a deposit on more containers. Starting in 2023, the fast food and To-Go sectors have been required to provide reusable containers and, if a deposit is made, RVM machines are available to enable returns.

Sielaff is ready.



# SiCompact Series

## Suitable for every small store

### Convenient and quick

Despite their compact dimensions, the SiCompact 2020 and the SiCompact 2020 XL offer a large collection capacity and are designed as free-standing or wall-mounted units.

### Suitable for every small store

New legislation means that the stand-alone SiCompact ECO reverse vending machine for single use containers only and the SiCompact ECO M for single use and reusable containers are the ideal solutions for small stores that are required to take back empties.

Learn more



SiCompact 2020

Required  
space:  
**1.53 m<sup>2</sup>**

Height x width x depth\*:  
1,880 x 1,350 x 1,130 mm



SiCompact 2020 XL

Required space:  
**2.78 m<sup>2</sup>**

Height x width x depth\*:  
1,880 x 1,880 x 1,514 mm



# SiCompact – the best choice for real heroes

## Adapting to the changes ahead

The SiCompact series offers the right system for every store operator. The SiCompact ECO series is more suited to smaller stores collecting lower volumes of containers.

The SiCompact ECO M and the SiCompact 2020 series are designed to accommodate larger quantities of disposable or reusable containers as an option. Sielaff ensures that you are fully equipped and prepared for everyday heroes returning their empties.

Learn more



SiCompact ECO

Required  
space:  
**0.80 m<sup>2</sup>**

Height x width x depth\*\*:  
1,900 x 880 x 910 mm

SiCompact ECO M

Required  
space:  
**1.09 m<sup>2</sup>**

Height x width x depth\*\*:  
1,900 x 1,195 x 910 mm

# SiCompact ECO

Small but mighty – however small the footprint

The stand-alone SiCompact ECO for single use containers only is the ideal solution for smaller stores taking back empties.

## Ready to go in no time wherever the location

Installation is very simple – a domestic 230 V socket is all it takes – and the system is ready for commissioning via plug and play.

The eye-catching SiCompact ECO with its high capacity and minimal footprint is easy to use, boasts high collection capacity and high processing speed. These are the hallmarks of the SiCompact ECO.

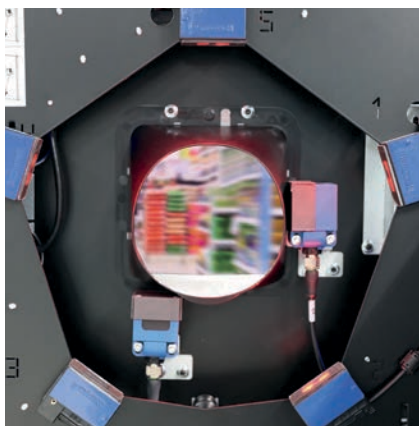
## Features

- One bin (optionally with partition wall), max. 2 sections: PET/can

## Optional

- Sieface software:
  - New software releases
  - Changes in opening hours
  - Inclusion of couponing promotions, donations or advertising on the display

The non-rotating 360° recognition unit eases the workload on staff while ensuring cleanliness on site and a high level of customer satisfaction. The non-rotating return process reduces run-off of residual liquids and prevents contamination.



*SiEye, the non-rotating 360° recognition unit for barcodes, 1D barcodes and 2D codes, barcode reader (imager-based code reader) and recognition unit 5.0 (compliant with the German bottle deposit scheme, recognition unit identical to the SiVario 2020, see the following pages)*

Required space:  
0.80 m<sup>2</sup>

## General SiCompact ECO

- Stand-alone reverse vending machine for PET bottles and cans for stores with limited space
- Precise technology and plug and play installation based on 230 V
- High capacity within a very small space (footprint 0.80 m<sup>2</sup>)
- Troubleshooting assistant
- Intuitive user prompting via the touch display
- Optional feature:
  - non-rotating
    - 360° SiEye recognition
    - 360° Omega and barcode reader recognition
- Optional feature: metal recognition
- Sorting by 2 sections
- Bag hook
- Electronic lock – opening code (keyless access)
- Easy to clean with the aid of internal colour coding (the interior and exterior are both designed to reduce soiling)
- Low maintenance



Learn more





### Fast, compact and efficient

Not much free space in your store?  
The SiCompact ECO takes up less than one metre squared of floor space, which makes it perfect for those smaller areas. Easy to operate and maintain the SiCompact ECO is the perfect fit for accepting single use containers.

This machine is ideal for store owners who are new to reverse vending.

*SiCompact ECO  
with bin*



*SiCompact ECO Mix 2F  
one bin for single use containers*



*SiCompact ECO Sort 2F  
one bin to separate bottles and cans*

### SiCompact ECO – variants

- **SiCompact ECO Mix 2F**  
1x single use, compacted
- **SiCompact ECO Sort 2F**  
single use, compacted,  
sorted by  
1x single use bottles and  
1x single use cans (½, ½)



# SiCompact ECO M

Modular design, numerous variants – to suit any requirement

The SiCompact ECO M stand-alone solution boasts a small footprint but providing a wide range of variants. The recognition system, sensors, compactors and bins can be brought together in a modular design to meet specific requirements.

This makes the SiCompact ECO M the perfect solution for small to medium-sized stores that have previously not had a returns solution, but are now required to accept reusable empties. Reusable containers made of various materials and even reusable bowls can be collected in the SiDrop. Quick, secure and easy to use.

## Variety of designs

Customer-bespoke branding can be fitted to the machine if required.

## Optional

- Sieface software:
  - New software releases
  - Changes in opening hours
  - Inclusion of couponing promotions, donations or advertising on the display



*SiCompact ECO M, sufficient space for a wide range of design options*

## SiCompact ECO M

- Stand-alone reverse vending machine for reusable bottles (glass, PET), single use bottles and cans, reusable cups and bowls
- Precise technology and plug and play installation based on 230 V
- Large capacity on a small footprint (required space 1.09 m<sup>2</sup>)
- Troubleshooting assistant
- Intuitive user prompting via the touch display
- Optional feature:
  - non-rotating
  - 360° SiEye recognition
  - 360° Omega and barcode reader recognition
- Optional feature: metal recognition
- Simultaneous sorting of up to 3 types of container (market leader)
- Bag hook
- Electronic lock – opening code (keyless access)
- Easy cleaning with the aid of our colour coding concept inside (the interior and exterior are both designed to reduce soiling)
- Low maintenance

## Features

- Two bins
  - 1x PET and cans, plus 1x SiDrop for reusable bottles or as a SD+ variant for reusable containers
- or
- 1x PET and cans
- One compactor with two sections
- Wallbox to empty the SiDrop

*SiCompact ECO M MIX 2F I SD, with one bin and one SiDrop*



Learn more



Required space:  
1.09 m<sup>2</sup>



Wallbox:  
Convenient emptying of the SiDrop

### SiDrop emptying made easy

The SiDrop is the ideal solution for returning reusable containers in even the tightest spaces. Reusable bowls and cups from the food, To-Go or pre-filled sector are accepted on a flexible belt that automatically adjusts its height to the filling situation.

The belt is continually raised for emptying purposes to enable ergonomic and operator-friendly removal of contents. For this operation the SiDrop is connected to the wall-mounted terminal – which can be installed anywhere – for optimised use of available space.



SiCompact ECO M Mix I SD+, one bin for single uses on the left, SiDrop for reusables on the right: Glass and PET bottles, as well as cups from the To-Go sector



SiCompact ECO M Mix 2F I SD, bin for single use containers on the left with PET and cans compacted separately, mixed collection, SiDrop for reusables on the right: Glass and PET bottles

### SiCompact ECO M – Variants

- **SiCompact ECO M Mix I SD+**  
1x single use, compacted,  
1x SiDrop for reusable bowls,  
cups and bottles
- **SiCompact ECO M Mix 2F I SD**  
1x single uses, compacted separately  
mixed collection, 1x SiDrop
- **SiCompact ECO M Sort 2F I SD**  
1x single uses compacted separately,  
sorted collection,  $\frac{2}{3}$  PET,  $\frac{1}{3}$  cans,  
with partition wall, 1x SiDrop

2F = 2-section compactor



SiCompact ECO M Sort 2F I SD, one bin for single uses on the left, PET and cans compacted separately, separate collection, with one SiDrop for reusables on the right: Glass and PET bottles, as well as cups from the To-Go sector

# SiCompact 2020

The solution for smaller stores with lots of potential

Despite its compact dimensions, the SiCompact 2020 offers a large collection capacity and is designed as a free-standing or wall-mounted unit.

## For low-volume stores – the SiCompact 2020

The SiCompact 2020 reverse vending machine is ideal for stores with a low volume of single use containers and limited space. Easy handling, optimised collection capacity and high processing speed are the hallmarks of the SiCompact 2020.

### Features

- Two half pallet bins
- Two integrated compactors
- Two integrated container distributors

### Optional

- Siface software:
  - New software releases
  - Changes in opening hours
- Customer-bespoke branding can be fitted to the vending machine if required, enabling the vending machine to compliment the store design.

### Variety of designs

Different front brandings on film can be attached individually at the request of the customer.

Customers can there adapt the front with no trouble at all to suit their own design and the look of the store.



#### SiCompact 2020

- SiCompact 2020 Mix I Mix  
2x single use, mixed compacting



#### SiCompact 2020

- SiCompact 2020 Sort  
1x single use bottles, compacted  
1x single use cans, compacted

Required  
space:  
1.53 m<sup>2</sup>



SiCompact 2020 with two half pallet bins



# SiCompact 2020 XL

Also for reusable containers

MADE  
IN  
GERMANY

## SiCompact 2020 XL – for medium-volume stores

The SiCompact 2020 XL is the ideal reverse vending machine for stores with medium volumes of single use and reusable containers.

Like the SiCompact 2020, the SiCompact 2020 XL also provides easy handling and the same technical features in daily use.

### Features

- Two Euro pallet container, available in metal or plastic
- Two integrated compactors possible
- Two integrated container distributors possible
- Optional: Metal recognition
- Optional: SiDrop and wall-mounted terminal (or docking station)
- Optional: HardDrop for the acceptance of reusable cups and bowls

### Optional

- Sieface software:
  - New software releases
  - Changes in opening hours
  - Inclusion of couponing promotions, donations or advertising on the display

Required space:  
**2.78 m<sup>2</sup>**

## SiDrop and wallbox

The SiDrop is the ideal solution for returning reusable containers in even the tightest spaces.

Reusable bowls and cups from the food, To-Go or pre-filled sector are accepted on a flexible belt that automatically adjusts its height to the filling situation.

The belt is continually raised so that contents can be ergonomically and easily emptied.

To do so, the SiDrop is connected to the wallbox – which can be installed anywhere – for optimised use of available space.



*SiDrop for reusable containers*

Wallbox:  
For convenient  
emptying of the  
SiDrop



*SiCompact 2020 XL Mix 2F I SD  
one bin and one SiDrop in Euro pallet size*

Learn more



# SiCompact 2020 XL

Built to accept everything –  
both single use and reusable

MADE  
IN  
GERMANY

## SiCompact 2020 XL – suitable for reusable containers in the To-Go sector and single use containers

The SiCompact 2020 XL is used for returning reusable bowls. They are transported into the container sorting area with a 1/3, 2/3 partition and without virtually any capacity reduction in the acceptance area.

On the right, the SiDrop covers the entire range of returnable bottles in a wide variety of sizes.

The SiCompact 2020 XL is able to accommodate almost every store requirement.

## SiCompact 2020 XL – Variants

- **SiCompact 2020 XL Mix I Mix**  
2x single use, compacted
- **SiCompact 2020 XL Sort**  
1x single use bottles,  
1x single use cans, compacted
- **SiCompact 2020 XL Mix 2F I SD**  
1x single use, compacted, 1x SiDrop
- **SiCompact 2020 XL Sort 2F I SD**  
1x single use, compacted,  
sorted cans/PET,  
1x SiDrop
- **SiCompact 2020 XL Mix HD I SD**  
1x single use, compacted, and  
HardDrop (¾, ½),  
1x SiDrop
- **SiCompact 2020 XL Mix HD I Mix**  
1x single use, compacted and  
HardDrop (¾, ½),  
1x single use, compacted



*SiCompact 2020 XL Mix I Mix  
two bins  
2x single use containers, compacted*



*SiCompact 2020 XL Mix HD I SD  
one bin for PET (¾), one HardDrop (½) and  
one SiDrop in Euro pallet size*



*SiCompact 2020 XL Sort 2F I SD  
one bin for PET (¾), cans (½) and  
one SiDrop in Euro pallet size*

# Easily manage large quantities of single use containers and the To-Go sector

## SiCompact 2020 XL – for large quantities of single use and To-Go products

The modular design of the SiCompact 2020 XL greatly simplifies the acceptance of large quantities of single use containers. Both bins can be filled with compacted single use containers, which saves staff emptying time. In addition, reusable bowls can also be accepted in a bin to the left of the container.

For large volumes of single use items and smaller quantities of reusable bowls and cups.



*SiCompact 2020 XL Mix 2F I SD  
one bin for single use containers, compacted  
one SiDrop for reusable containers*



*SiCompact 2020 XL Mix HD I Mix  
one bin with single use containers, compacted (2/3) and  
HardDrop (1/3) and one bin, compacted*



*SiCompact 2020 XL Sort  
one bin for PET  
one bin for cans*



# SiVario 2020

Modern technology for everyday heroes

## Convenient and quick

The shopping experience starts on a more positive note by making it more convenient to drop off empties. See how positively your customers and employees respond to our modern SiVario 2020 solutions.

## Sustainable shopping and efficient returns

Fast returns mean relaxed customers, even during rush hour. Up to 60 containers and 20 crates per minute can be accepted at the same time by the Sielaff reverse vending machines. This ensures smooth processes with high efficiency even when things become busy.

## Faster than a human

Our system recognises the barcode and the DPG symbol faster than the human eye. The shape of the container is recognised by a camera during acceptance and compared with the taught bottle contours.

The process of accepting returned crates requires genuine top performance. It means using identifying points to recognise all conceivable shapes, colours, logos, low and high crates, the number of bottles, the weight and the dimensions.





# SiVario 2020 – the best support for genuine heroes

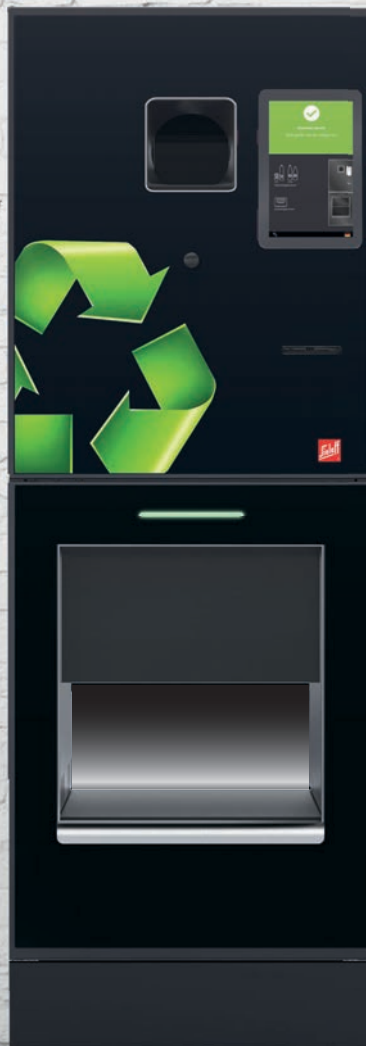
## New functions

Continuous upgrading of our SiVario 2020 means that we will also be able to meet the demands of the store going forward.

We always accommodate the market needs, whether they involve To-Go bowls and cups, single use or reusable, or reusable containers or crates.



SiVario 2020



Height x width x depth\*:  
1,715 x 600 x 1,080 mm

Learn more



# SiVario 2020

## Modern technology for new challenges

The SiVario 2020 is the systematic progeny of the generations of our already well-known vending machines.

### Faster, better and more intuitive thanks to cutting-edge technologies

The SiVario 2020 can accept empties extremely quickly and is already equipped for future demands.

The high speed ensures a pleasant return experience with no waiting.

### Features

- Omega 360° recognition
- Optional:  
SiEye and barcode reader possible
- Optional: Metal recognition

### Variety of designs

Different front brandings on film can be attached individually at the request of the customer. The SiVario 2020 is as flexible as your on-site needs.



Standard branding  
RAL 9005 with crate  
acceptance



Branding RAL 9006



"Sphere" branding  
with crate acceptance



"Bee" branding

### Dispenser

- Thermal printer and receipt roll
- Receipt is presented outwards
- Receipt data can also be loaded on a smartphone app via QR code

### Interfaces

- Standard XML-data interface
- LAN (Ethernet)

### Optional

- Siface software:
  - Range releases
  - Changes in opening hours
  - Inclusion of couponing promotions, donations or advertising on the display
- Connections to conveyor and sorting units for single use and reusable packaging
- SiWash 2020 – The hygiene station: emptying of residual liquids and hand washing point

### Optionally available

- Wheelchair and child-friendly design with a 10 cm lower insertion height for easy and barrier-free container insertion
- Activation of an energy saving mode for background processing to save power



Learn more





# SiVario 2020 – Faster and more features

## Acceptance of all containers

with EAN code, whether PET, single use or reusable containers, glass bottles, cans or cups. Also 2D codes, such as Data Matrix available as an option

## Container recognition

camera-based, non-rotational Omega-360° recognition in real time.  
Weight, barcode and shape recognition, safety label and full product recognition in the bottle acceptance area

## High speed

during acceptance,  
up to 60 containers per minute,  
up to 20 crates per minute

## Basic clean

thanks to the optimised shape of the input ring (prevents dripping).  
Display-guided cleaning using animation and colour-coded surfaces.

## Service-friendly

All operator controls on the front are fully accessible, errors can be remedied with menu guidance and the electronic lock can be opened without a key using a code

## Secure

against tampering using software and mechanics, certified in line with the DPG safety requirements



# MonoSort

## Enclosure positioned lengthways



The MonoSort technology is the ideal compacting solution for medium to high return requirements.

MonoSort combines a slim design capable of fitting into almost any installation space with a flexible, modular construction. The system manages up to five housings to ensure clean material separation and high failure safety at any time.

### Features

- A space-saving, powerful sorting solution for medium to high volumes
- One compactor per housing ensures fast and reliable throughput with up to 60 containers/minute
- Material separation possible with up to 5 housings or within the housing
- Fully redundant system guarantees continuous operation for non-stop return, even when containers are being emptied
- The modular technology allows for easy, cost-saving installation and set-up
- Easy access and flexible removal direction, optionally on the right or left
- Unique FlexiSort belt enables container transport in almost any size and design
- Dynamic resorting – the deflector with directly driven belt ensures correct positioning of bottles and cans



Learn more



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# MonoSort Short

## Space-saving and customised

MADE  
IN  
GERMANY

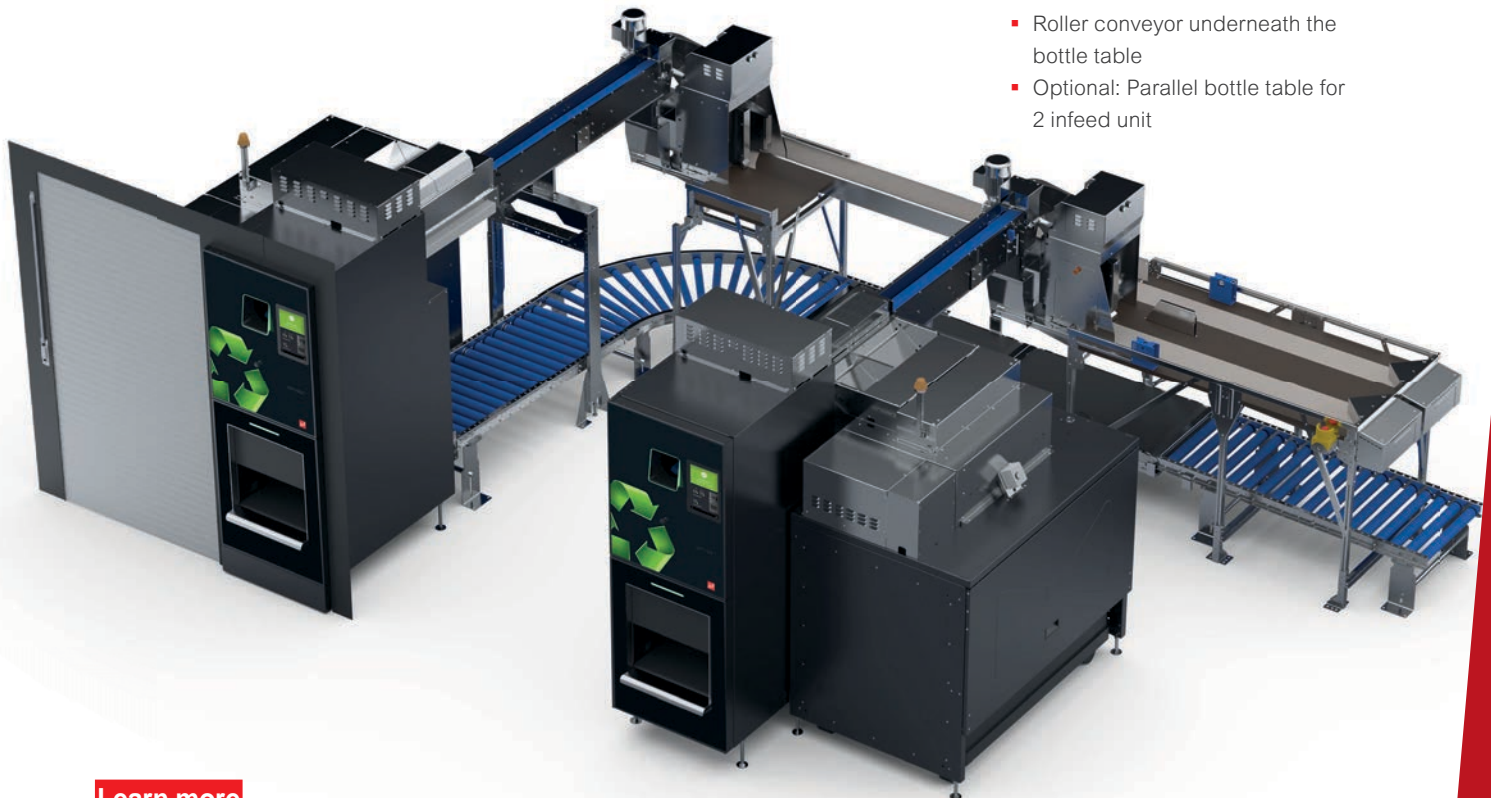
### Features

- A space-saving miracle thanks to compact construction
- Housings at the sides
- Roller conveyor runs underneath the bottle table
- Material separation within the housing possible
- Removal direction to front, back or side possible



### MonoSort Short for narrow rooms

- Optional roller module for emptying forwards into the store
- FlexiSort extension to rear
- Roller conveyor curve
- Removal direction either to the front, back or side
- Roller conveyor underneath the bottle table
- Optional: Parallel bottle table for 2 infeed unit



Learn more



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# DualSort

## Housing positioned crosswise



The DualSort technology allows two acceptance heads to share one background system.

Sorted collection according to material type is also easily possible. The consistently separate processing of containers at the individual infeed units guarantees 100% efficiency.

Even use of each component helps to extend service life. The two compactors per housing doubles compactor performance.

### Non-stop return

Once an empties container is full, the next one is filled automatically. The system remains ready for operation even when emptying a container. The DualSort technology with smart controls therefore allows customers to enjoy an uninterrupted return process.

### Low staff workload

Store personnel are flexible with their time thanks to dynamic resorting and can then empty the collection container at the most suitable time.

The number of housings can be planned variably to suit the needs of the store.

### Space-saving

The compact design reduces the amount of space needed. This results in more storage space to use as necessary.

### Features

- 2 compactors per housing
- Removal direction on the right or left
- Material separation with several housings
- 1 to 7 housings possible
- Dynamic resorting; the system remains ready for operation even when the collection container is being emptied

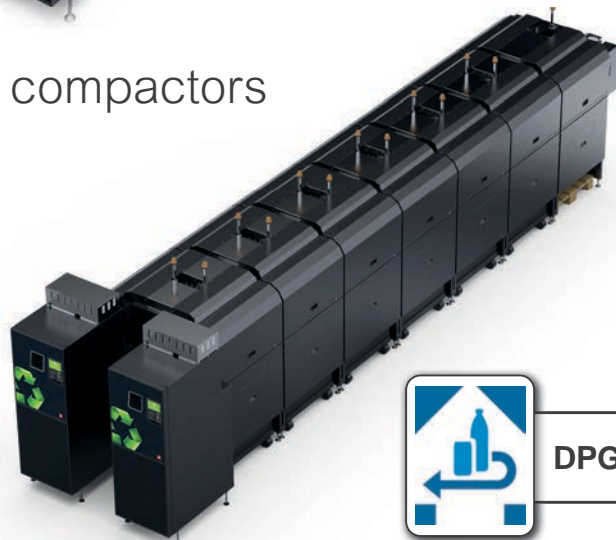


## With 7 enclosures and 13 compactors

### Features

- Infeed unit and housing in one line
- 2 compactors per housing
- Removal direction on the right or left
- Material separation with several housings
- 1 to 7 housings possible
- Dynamic resorting; the vending machine remains ready for operation even when the container bin is being emptied
- Good accessibility
- Easy and quick installation through plug and play

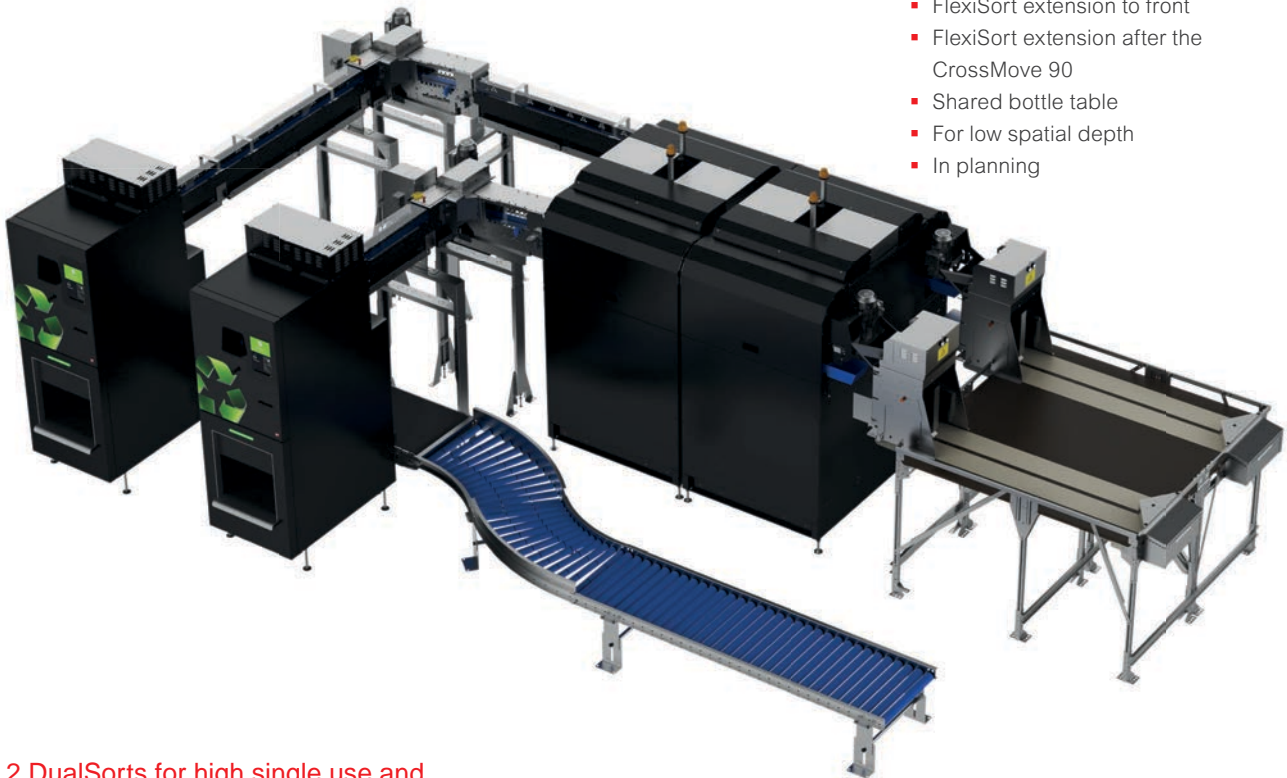
Learn more



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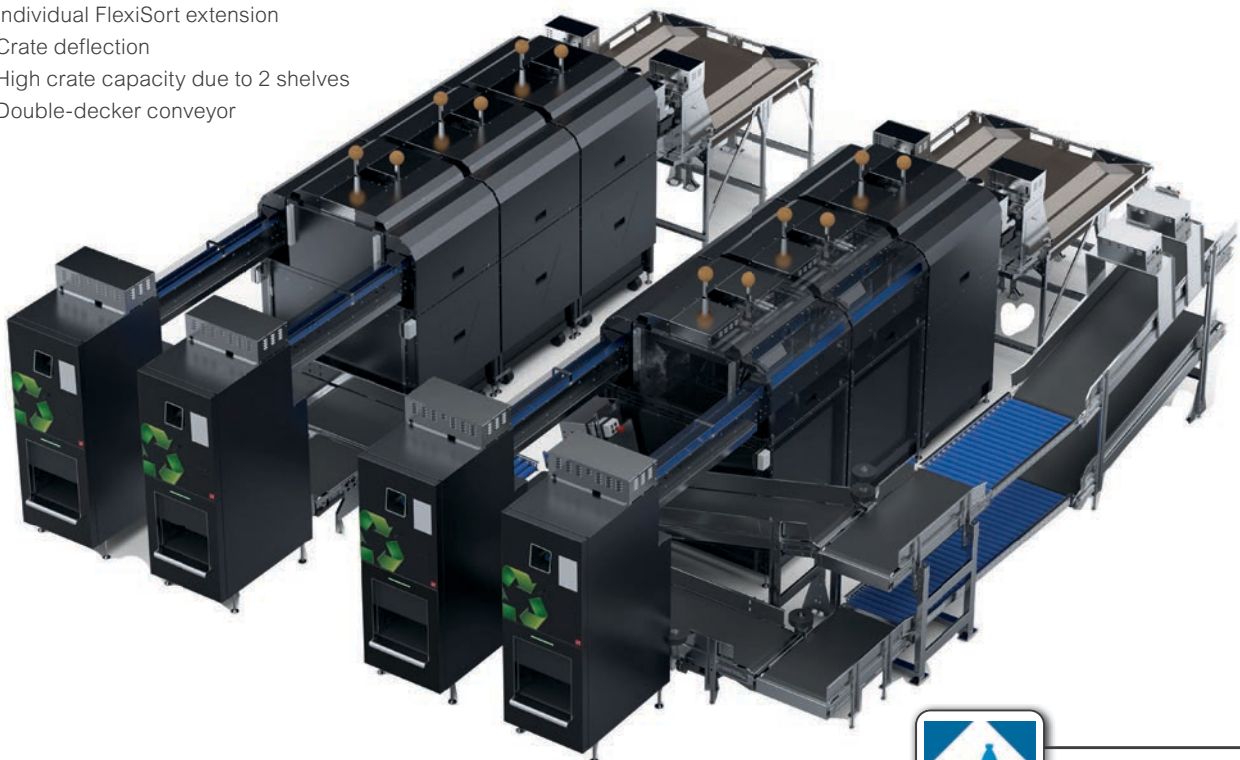
## DualSort with CrossMove 90 as a flexible solution

- CrossMove 90
- FlexiSort extension to front
- FlexiSort extension after the CrossMove 90
- Shared bottle table
- For low spatial depth
- In planning



## 2 DualSorts for high single use and reusable volumes

- Individual FlexiSort extension
- Crate deflection
- High crate capacity due to 2 shelves
- Double-decker conveyor



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# Accessories

## CrossMove – curved element for 90° deflection



### Flexible and modular

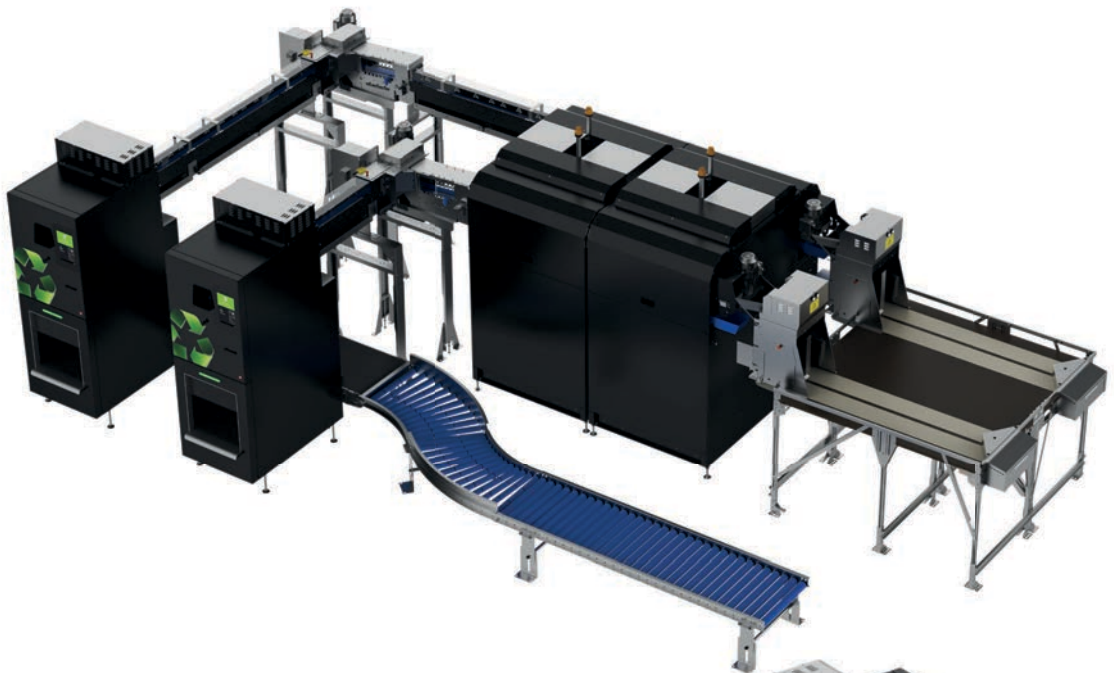
The Sialfa principle enables modular use in all housing types – whether MonoSort, MonoSort Short or DualSort. The module can be positioned in front of or behind the housing and above the crate route and can also be free-standing.

### Optimal use of space

The CrossMove 90 transports containers in 90° a curve to the right or the left. The excellent flexibility enables optimal use of the available space. Solutions for angled or narrow spaces are available and possible conversions avoided. As less space is required, more is available for storage or sales.

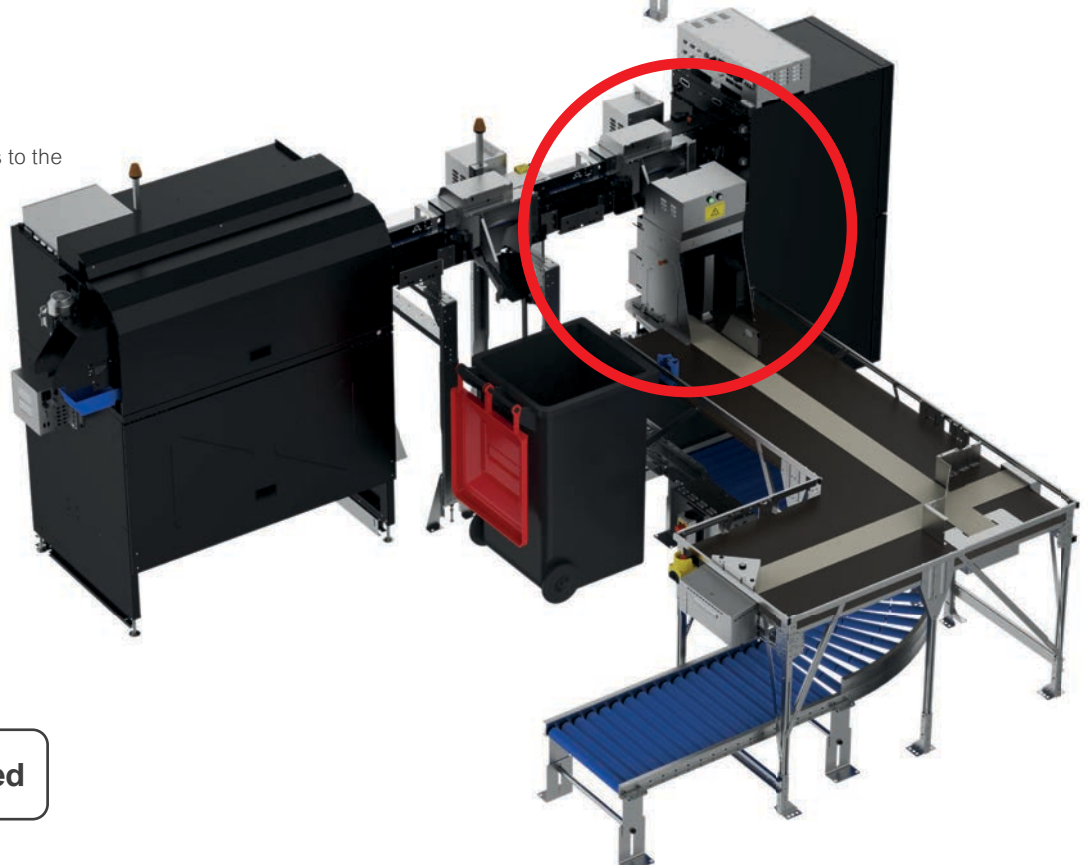
### Features

- 90° deflection to the right or left
- Flexible and modular use in all enclosure systems
- Can be positioned before or after the enclosure and above the crate route, as well as free-standing
- Optimal use of space
- Solutions for angled or narrow spaces
- In planning



### Features

- Optimised use of space thanks to the position of the bottle table
- Service-friendly, the containers can be variably sorted and transferred from the CrossMove table to the bottle table
- Cost-optimised design (regardless of the plans)
- Diagram: CrossMove Table



DPG certified



### CrossMove variants

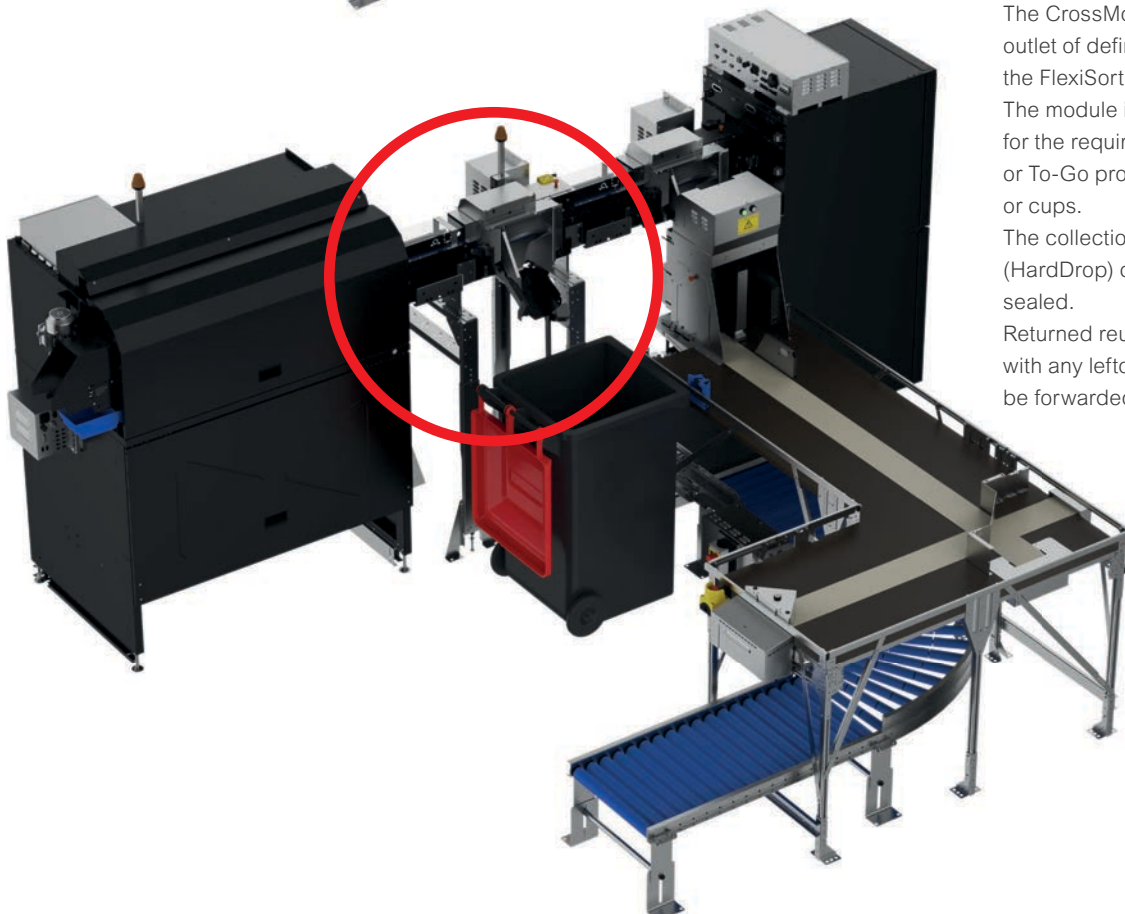
- **CrossMove Drop**  
Discharge of non-fragile containers into a large container e.g. a HardDrop
- **CrossMove table**  
Transfer of containers from the FlexiSort to the bottle positioner
- **CrossMove T**  
Thanks to the CrossMove module, the FlexiSort can be expanded from one to two sorting routes
- **CrossMove 90**  
Container deflection at a 90° angle to the right or left

### CrossMove

The CrossMove comes with additional partitions, deflection and switch functions for more flexibility in compact spaces.

Combining the variants enables a wide variety of applications.

The right solution for the safe sorting of many different packs or reusable containers.



The CrossMove Drop enables the outlet of defined containers from the FlexiSort.

The module is perfectly designed for the requirements of reusable or To-Go products such as bowls or cups.

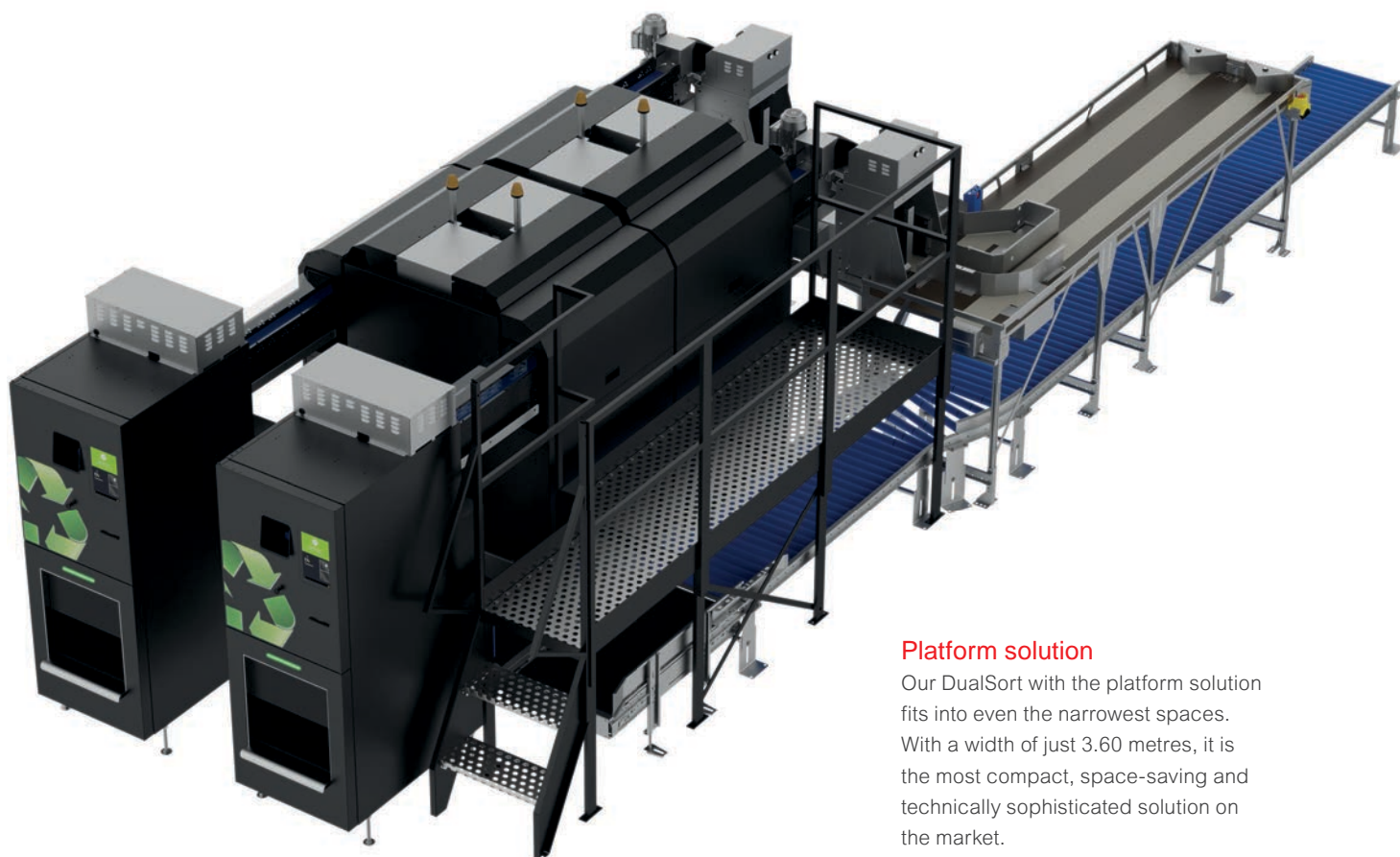
The collection container (HardDrop) can be transported sealed.

Returned reusable containers with any leftover contents can be forwarded hygienically.

# Accessories

Platform solution – compact, narrow, space-saving

MADE  
IN  
GERMANY



*DualSort reverse vending machine with platform solution*

## Platform solution

Our DualSort with the platform solution fits into even the narrowest spaces. With a width of just 3.60 metres, it is the most compact, space-saving and technically sophisticated solution on the market.

In addition to these advantages, while one compactor is being serviced, the opposite side and crate acceptance continue to operate as usual. Modular structure for individual adaptation of the platform solution.

## The SafeCrush compactor

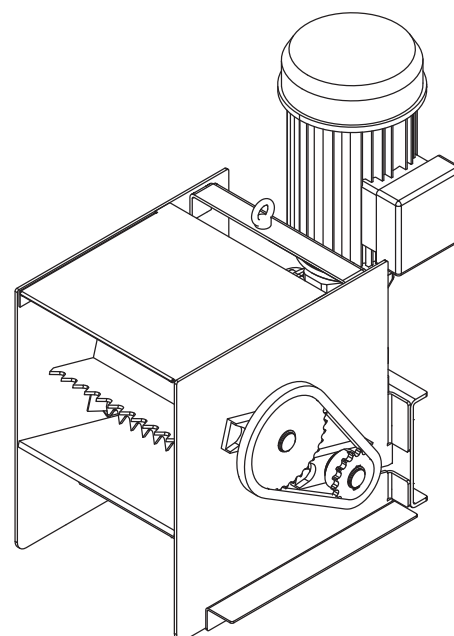
Sielaff's proprietary SafeCrush compactor draws in PET bottles, cans and even thick-walled containers easily and guarantees reliable disposal.

A special glass compactor is available as an option.

A special steel alloy and the sturdy construction guarantee the outstanding durability of the impact-resistant SafeCrush.

The SafeCrush was developed in-house by Sielaff and therefore is synonymous with quality "Made in Germany".

Its processing speed is outstanding compared to other compactors.



# Accessories

## Omega 360° recognition unit, FlexiSort and crate separator



### Omega 360° recognition

When inserting the container, barcodes along with 2D codes such as data matrix and DPG safety labels are recognised safely, quickly and reliably without any rotation. The speed is set by the customer themselves to ensure a pleasant return experience. The non-rotating return process reduces leakage of residual liquids and prevents contamination. Containers are reliably identified thanks to the Omega 360° recognition – even if they have lost their cylindrical shape or become deformed.

You will therefore be ideally equipped for future packaging forms.



Omega 360° recognition unit

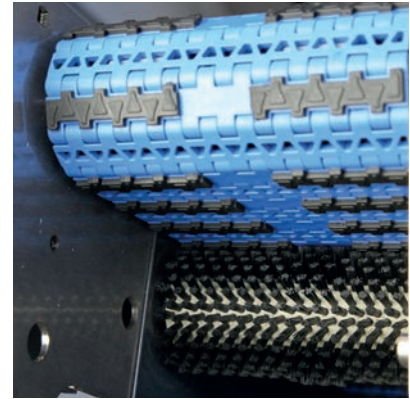
### Our unique combination of FlexiSort and switch

The FlexiSort is fitted with a link conveyor belt that transports the empty beverage containers to the compactors and the bottle table. The FlexiSort technology enables all containers to be transported safely. Active deflection of the containers into the compactors using separately driven switches ensures a reliable compacting process. Due to the high speed of the switch, the containers reach the SafeCrush as quickly as possible.

The Sielaff modular principle enables standard adjustments of the FlexiSort length, depending on the structural circumstances – for maximum flexibility and functional reliability.

### Avoidance of extensive cleaning

Dirt and foreign bodies are transported directly away by the cleaning brushes, minimising the cleaning workload. The brushes clean the belt automatically during operation.



Cleaning brushes on the bottom of the link belt



The crate separator actively deflects the empties

## SiWash 2020 – Hygienic and touch-free thanks to sensor technology

### The SiWash 2020 – for cleanliness and hygiene next to the reverse vending machines!

The washing module is the practical addition to your reverse vending machine. Bottles with remaining liquid can be drained easily and returned, the hands cleaned afterwards and thus the hygiene conditions improved.

Your customers will thank you.

### Maximum hygiene standards

The sensor-controlled equipment enables contactless hand washing and minimises the risk of infection.

### Features

- Fully integrated, joint-free sink ensures easy cleaning with rounded transitions
- Sensor-controlled tap
  - Water supply corner valve with 3/8" External thread for cold or premixed water
- Sensor-controlled soap dispenser

- High-quality paper towel dispenser with hygienic stainless steel surface
- Large waste paper basket with a capacity of 38 litres
- Keyless door opening with Tip-On
- Wall installation with installation panel

### Highlights

- Integrated LED light tube
- High-quality stainless steel components
- Various optional features available
- Modern concrete look with easy-care surface
- Contactless hand-washing

### On-site preparations

- Water connection (cold or premixed)
- Wastewater connection or via lifting system
- Shock-proof plug 230V, 50Hz, 16A

Available in stainless steel finish or in black as an option





# Accessories

## Bottle raiser



### Quick, clean processing

Adapted to the respective requirements, two-way sorting can be set for each bottle raiser depending on the container type. This processing is always quick, clean and safe.

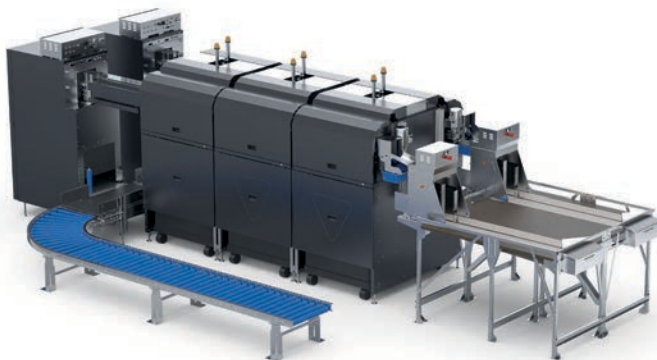
### Features

- Processing speed of bottle raiser: Up to 35 containers per minute
- Optional: 2-way sorting function per raiser
- Optional: Backup in the event of tears in the bottle table belt

The redesign of the bottle raiser offers store staff better accessibility at all times, making it easier to perform necessary work while cleaning.

This improved accessibility is also a key advantage when dealing with jammed containers.

The presorting of the accepted containers enables time savings of up to 30% when clearing the bottle collection table.



## Bottle collection tables

### Bottle collection table – straight

- Approx. 150 bottles pro m<sup>2</sup> standing space depending on bottle size



### Bottle collection table DualSort – double table

- Approx. 150 bottles pro m<sup>2</sup> standing space depending on bottle size
- Completely variable lengths, capacity and position
- Other table shapes available on request

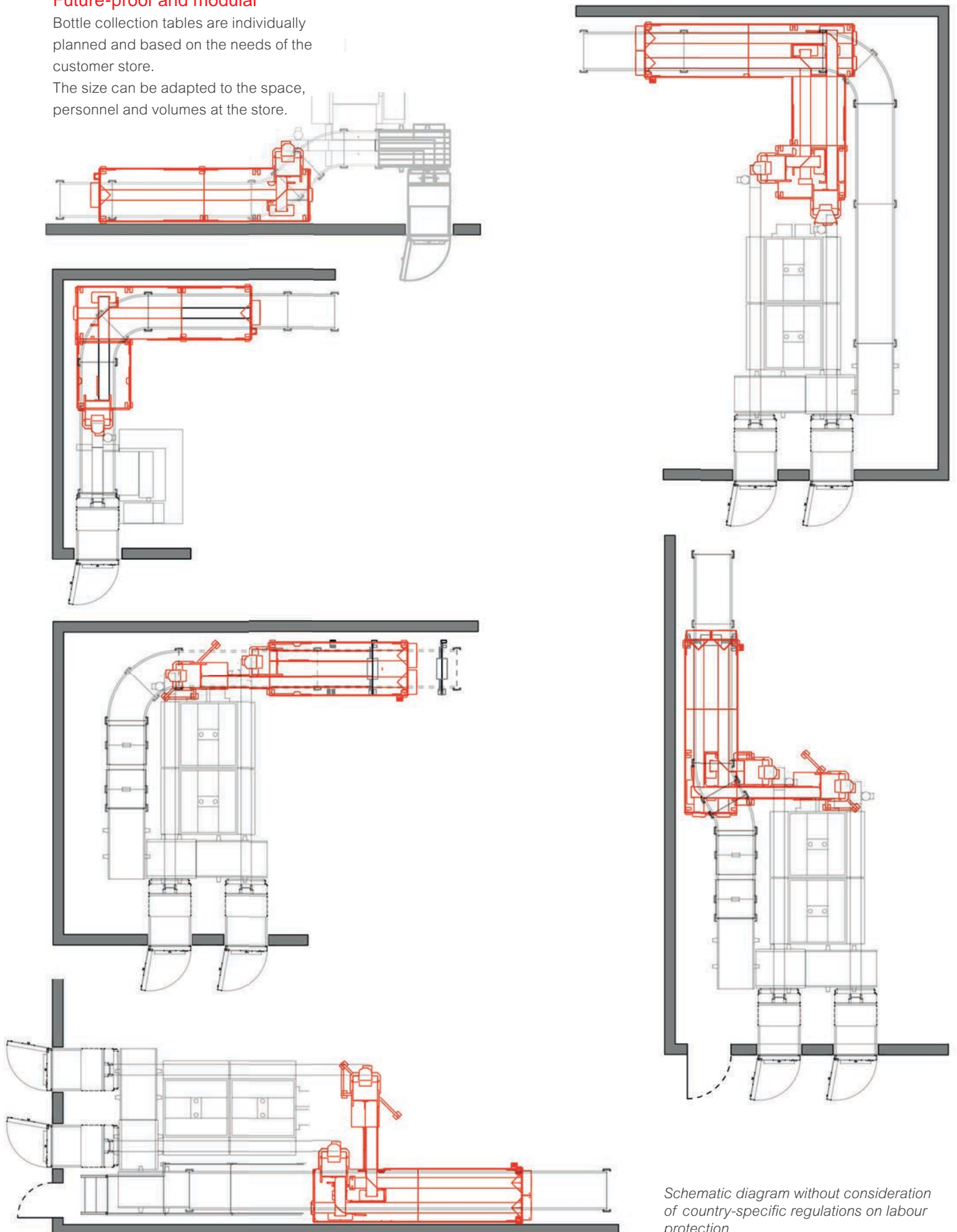


# Bottle collection tables, as variable as your space

## Future-proof and modular

Bottle collection tables are individually planned and based on the needs of the customer store.

The size can be adapted to the space, personnel and volumes at the store.



*Schematic diagram without consideration of country-specific regulations on labour protection.*

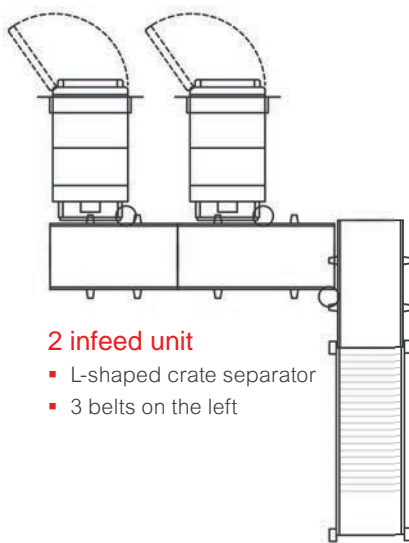
# Crate separators

Individual and diverse

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IN  
GERMANY

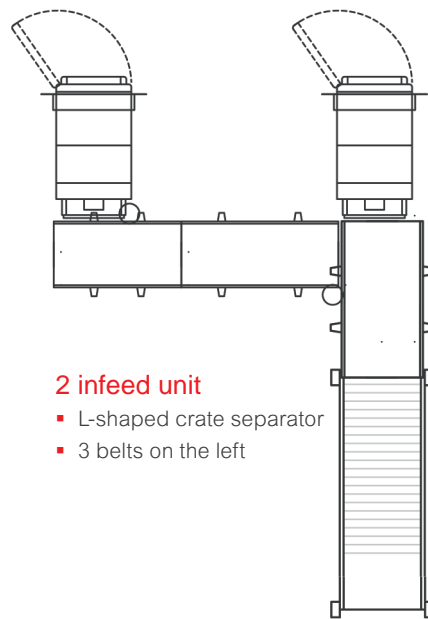
The Sielaff modular system is just as versatile as the spaces at your premises. Crate separators are adapted individually to the space situation in each store.

All crate separator configurations can also be planned in mirrored pairs and with different crate belt lengths.



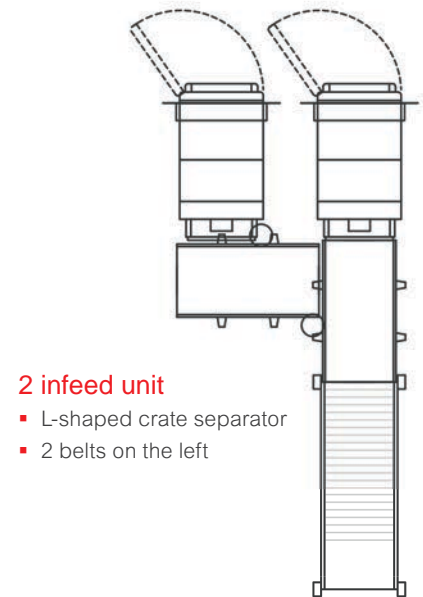
## 2 infeed unit

- L-shaped crate separator
- 3 belts on the left



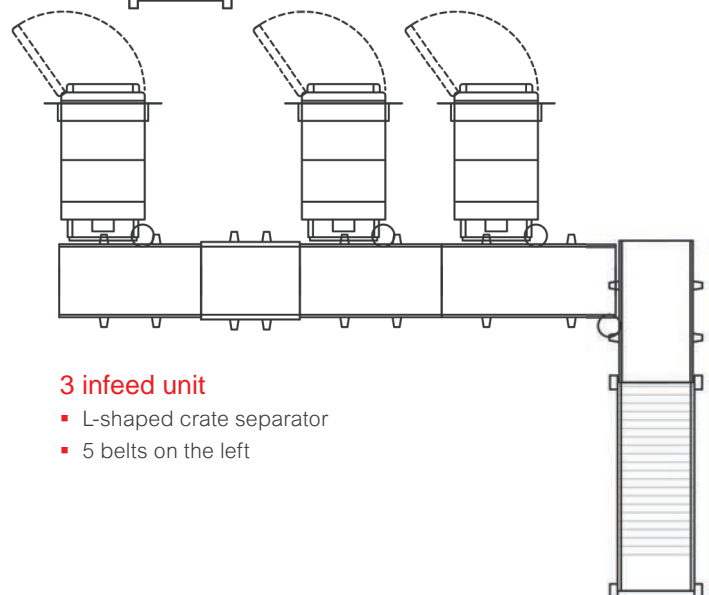
## 2 infeed unit

- L-shaped crate separator
- 3 belts on the left



## 2 infeed unit

- L-shaped crate separator
- 2 belts on the left



## 3 infeed unit

- L-shaped crate separator
- 5 belts on the left

Figure: One 4-part crate separator





# Everything from a single source

## End-to-end solutions

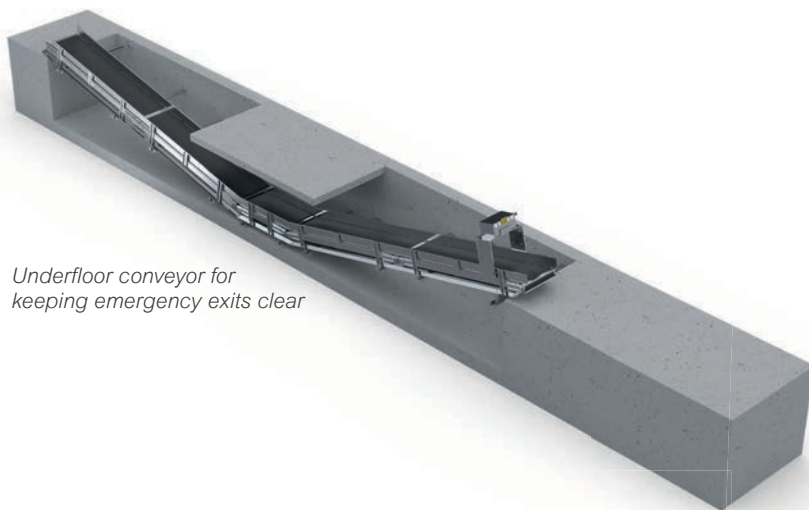


We are able to implement an end-to-end solution for your reverse vending machine.  
From consulting and planning to implementation and servicing – everything from a single source.

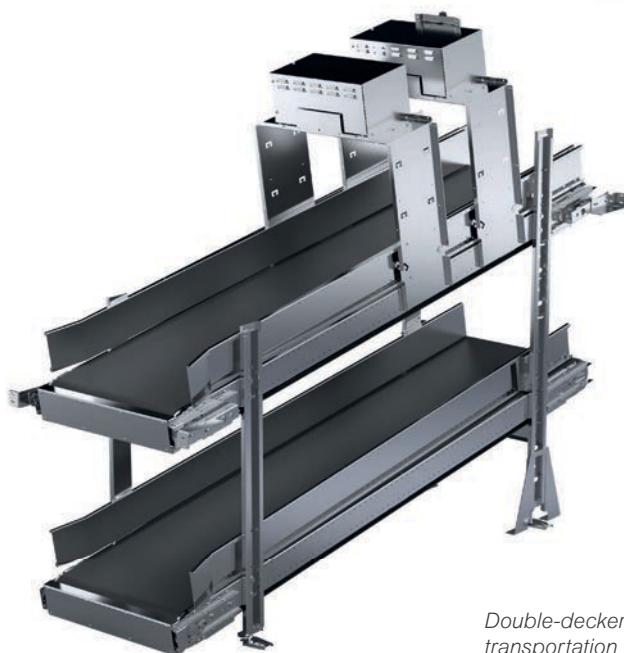
### We also offer solutions for complex background situations:

- Intersection of roller conveyors (gate, transfer plate, bridge)
- Platform solutions
- Conveying at all heights (elevated conveyor)
- Transportation on two levels (double-decker roller conveyor)
- Driven conveying (driven belt conveyor or crate belts)
- Transfer to other storeys (helix conveyor, ejector shaft)
- Solutions for fire protection areas (fire protection door, fire protection gate)
- Emergency exits kept clear (solution using conveyor system through tunnels or overhead passages)
- Implementation of ergonomic pick-up heights

Just ask us – we can combine different components and will put together a suitable offer for you  
free of charge and without obligation



*Underfloor conveyor for  
keeping emergency exits clear*



*Double-decker conveyor for  
transportation on two levels*

*Helix conveyor for transportation  
with large height differences*



# After-Sales Service

## Supply and customer service network

### Telemetry and diagnostics centre

- Sielaff Software & Service GmbH & Co. KG  
Ziolkowskistr. 8  
98693 Ilmenau

We are always there for you, even after the purchase.

With Sielaff's in-house telemetry and diagnostics centre, range adjustments, software settings, proactive system monitoring and data adjustments within Europe can be performed directly via remote access.

We minimise technician call-outs thanks to our integrated explanatory videos and online solutions.

### Sielaff service perspective

Original parts that are developed and produced by or for Sielaff guarantee extremely high durability and reliability. Comprehensive service and technical advice are ensured even after the purchase. We also offer training and support service as well as maintenance and professional on-site cleaning.

### Europe-wide network of service technicians

If you require on-site support, our Sielaff service technician network offers skilled support just a short journey away.

Who knows more about how your systems work than the people that built them?

Rely on the experience and know-how of our experts in-house or at your premises.







# Sielaff – stands for “Made in Germany”



Sielaff is among the world's leading brands for sustainable and successful vending machine systems. You are probably familiar with our products already – from vending machines for hot and cold beverages to snacks. Since 1886 we have been developing and manufacturing state-of-the-art vending machines that are used around the world, day in, day out, and that are able to cope with high customer volumes autonomously. The quality claim “Made in Germany” applies without exception to the whole product range at Sielaff.

First class products, expert service and personal customer focus are our strengths.

## See for yourself.



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Technical data are subject to change without notice. Errors excepted.  
All images shown are examples and may include optional extras.  
\* Machine dimensions may vary due to add-on parts and accessories