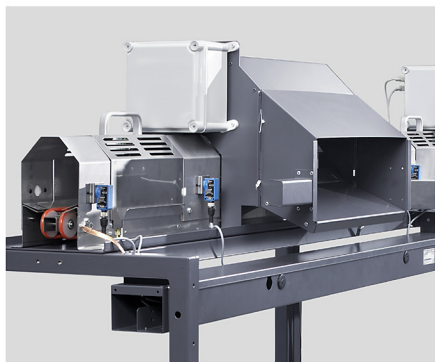
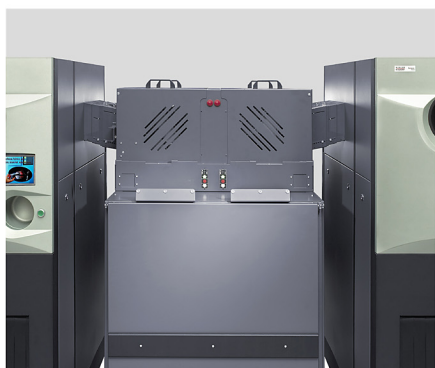


Backroom components

Reverse Vending Systems



Wincor Nixdorf's solutions for handling empties cover not only reverse vending machines themselves but also a variety of technically advanced components for use in the backroom section. This portfolio of components will meet all of a store's requirements, thus supporting flexible planning and enabling individualized and application-specific solutions from a single expert source.

Backroom components

Reverse Vending Systems

Wincor Nixdorf's components for the backroom section are extremely robust, and do not involve elaborate mechanical structures. The sorting and compacting solutions for non-refillable containers (cans, PET bottles) and refillable containers (glass and PET bottles) come in a wide range of customizable combinations that make the best possible use of the space that is available. When the system components have been specified, Wincor Nixdorf's planning department will plan the whole technical layout using a computer-aided design (CAD) program. Every installation in the backroom section is optimized for the store's specific conditions (available space, volume of empties and so on).

Our portfolio for the backroom section covers the following components:

- **Conveying technology to transport single bottles**
- **Conveying technology to transport crates**
- **Sorting line to distribute containers using intelligent control technology**
- **Compactors to reduce the volume of PET bottles and cans**
- **Bins and accessories to collect empties**

Wincor Nixdorf's components for the backroom section are capable of handling very large volumes of returned empties and meet the requirements of clearing organizations.



- ❶ ReVendo 8000
- ❷ Double compactor
- ❸ Sorting line without crate roller conveyor
- ❹ Control cabinet

Backroom components

Reverse Vending Systems

Conveying technology

Wincor Nixdorf's compact conveying assemblies are based on proven technologies, can be integrated easily in a store's overall concept, and support various installation options.

The conveyor belts are very sturdy and have no difficulty in coping with a heavy workload. The range of bottle tables provides a wide choice of options for collecting individual bottles and make optimal use of the space available.

If any problems occur, sensor technology automatically triggers messages indicating the cause for output on the reverse vending machine's display, thus ensuring ease of use.

Wincor Nixdorf uses gravity roller conveyors and conveyor belts to transport crates. The crates are moved down the built-in slope by their own weight. Our extensive range provides a wide choice of roller conveyor sections and curves to configure crate conveying lines optimally. Consequently, our systems are ideal when

it comes to planning for difficult space situations.

Stacker elevators and active conveyors are used to transport crates on two levels in a space-saving manner. Stacker elevators are conveyors that have a belt with a profile.

Individual containers are transferred from the reverse vending machine to an external bin via a discharge mechanism that has transfer and control functions. In addition, this discharge mechanism has a built-in sensor that monitors the filling level of the bins and generates a signal when the maximum level allowed has been reached.

Wincor Nixdorf's conveying technology is modular and reliable, and operates automatically with very short turnaround times.

Sorting line

Wincor Nixdorf's sorting line transports individual containers and places them in bins or optionally transfers them to compactors and bottle tables. The modularity of the sorting line allows up to three sorters to be combined with up to six compactors/bins and a bottle table. These lines give stores various options to meet their sorting requirements and lets them assign bins freely. Individual refillable containers can be conveyed along the sorting line to a bottle raiser and onto a bottle table where they are collected.

The sorting line is monitored and controlled via a bus system which is integrated in a central emergency shutdown concept. The sorting modules from Wincor Nixdorf can sort individual containers automatically thanks to their integrated control electronics.



Crate roller conveyor with end stop and bottle table



Crate roller conveyor



Bottle table with crate hook



Sorting line without crate roller conveyor



Sorting line with two sorting modules and a crate roller conveyor

Backroom components

Reverse Vending Systems

Compactors

Wincor Nixdorf's components for the backroom section include a variety of freely configurable compacting modules. To reduce the volume of empties, Wincor Nixdorf offers compactors featuring special high-speed, optimized cutters for cans, PET bottles and mixtures of the two.

The results of compaction are optimal, maximizing the volume of empties that can be handled.

A europallet-sized bin will hold up to 800 PET bottles or up to 3,000 cans when compacted, depending on the original size of the containers. Capacity like this optimizes the logistics of disposal.

The compactor has a built-in sensor so a signal is sent automatically when the maximum filling level has been reached. In the event of a problem, the compactor will automatically block, and output a message on the machine's display. The system's clear and simple messages make it especially user-friendly.

There are two chassis sizes for our compactors. One will hold a waste bin and the other a europallet-sized bin, allowing

retailers to choose the right configuration for their spacing situations. Our compactors are made exclusively from standard parts and are shipped as pre-assembled products.

Retailers have a choice of 15 installation versions to cope with the location and spacing conditions at a particular store. The cutter can be placed in one of three positions – on the right, on the left, or in the middle.

The flap to open the chassis is available with a short or a long side.

Wincor Nixdorf's portfolio includes a double compactor that has been designed specifically for cramped conditions. Its key feature is that it can receive empties from two reverse vending machines. The required floor space is only the size of a europallet.

Our compactors stand out thanks to their ease of use and the optimum way they reduce the volume of empties.

Bins and accessories

Wincor Nixdorf's bins enable empties to be collected in an optimum and easy manner. They are easy to use and can be emptied quickly and without any difficulty.

Up to 3,000 cans or about 800 compacted PET (depending on the original size of the containers) bottles can be collected in a europallet-sized bin truck. The bins are on wheels and can be moved easily for emptying through the side door opening. If the ReVendo 7000 reverse vending machine is used with a one-europallet chassis, retailers can alternatively operate with two half-europallet bin trucks to collect two sets of empties separately.

All the metal used in our systems has

been hot-dip galvanized and is extremely rugged.

For the chassis of a waste bin compactor, Wincor Nixdorf has standard waste bins (capacity either 240 or 340 liters) to collect empties. They are both easy to use and will fit in very small spaces.

Bins from Wincor Nixdorf will optimize the logistics of handling empties and can be exchanged effortlessly, thus saving retailers a lot of time.

Our accessories for bins – which include collection sacks, crate stands and crate hooks – facilitate day-to-day work with empties.



Waste bin compactor



Europallet compactor



Double compactor



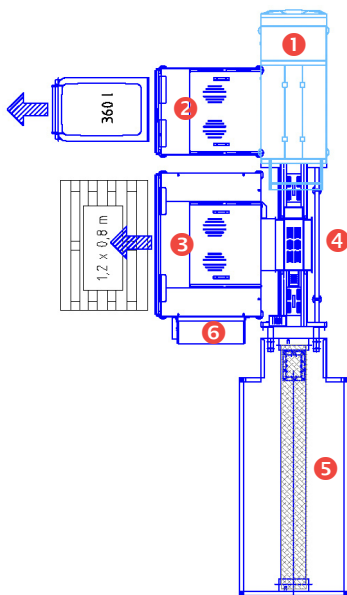
Crate stand

Backroom components

TECHNICAL DATA

Sorting line

- Dimensions (L x W x H in mm):
1500 x 600 x 1700
- Dimensions of optional raiser
(L x W x H):
400 x 550 x 770
- Weight: 80 kg
- Control box: 30 kg
- Conformity:
Machinery directive, EMC, CE
- Temperature: +10°C to +35°C
- Color:
Standard RAL 7015 slate gray
- Voltage:
230 V (control box)
- Nominal current consumption:
3 A (control box)
- Max. power consumption:
500 W



Single installation

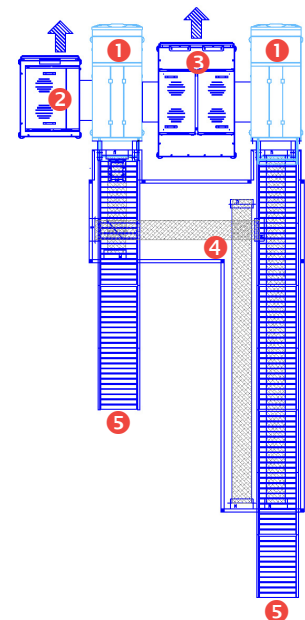
- ① 1x ReVendo 8000
- ② Waste bin compactor
- ③ Europallet compactor
- ④ Sorting line
- ⑤ Bottle table
- ⑥ Control cabinet

Compactors

- **Europallet compactor**
 - Dimensions (L x W x H in mm):
1320 x 950 x 1700
 - Weight: max. 250 kg
- **Waste bin compactor**
 - Dimensions (L x W x H in mm):
880 x 950 x 1600
 - Weight: max. 200 kg
- **Double compactor**
 - Dimensions (L x W x H in mm):
1320 x 950 x 1700
 - Weight: max. 320 kg
- Capacity:
One-europallet:
up to 800 PET bottles or up to
3,000 cans, depending on the original
size of the containers
- Conformity:
- Machinery directive, EMC, CE
- Temperature:
- +10°C to +35°C
- Color:
- Standard RAL 7015 slate gray
- Relative humidity:
- 5 – 85%
- Power supply:
(voltage / current / nominal frequency)
 - Cutter:
230 V – 10 A, 50 Hz
 - Double compactor:
2 x 230 V – 10 A, 50 Hz
- Power consumption
 - Cutter: 1500 VA
 - Double compactor: 2 x 1500 VA
- Max. power consumption of cutter:
 - 6.5 A
 - Double compactor:
- 2 x 6.5 A

Bins

- **Steel bin truck**
 - Dimensions (L x W x H in mm):
1200 x 800 x 870
 - Capacity: 0.69 m³
- **Half-europallet steel bin truck**
 - Dimensions (L x W x H in mm):
1200 x 399 x 870
 - Capacity: 0.34 m³
- **240 l waste bin**
 - Dimensions (L x W x H in mm):
735 x 580 x 1065
 - Capacity: 0.24 m³
 - Weight: 15.5 kg
- **340 l waste bin**
 - Dimensions (L x W x H in mm):
860 x 625 x 1095
 - Capacity: 0.34 m³
 - Weight: 23 kg



Dual installation

- ① 2x ReVendo 8000
- ② Waste bin compactor
- ③ Double compactor
- ④ Bottle table (cross-platform)
- ⑤ 2x crate roller conveyor

Backroom components

Reverse Vending Systems

Wincor Nixdorf's reverse vending components are precisely tuned to each other. And our extensive know-how of automation enables us to integrate these solutions in merchandise management and point-of-sale systems. Our reverse vending systems are administered remotely by Wincor Nixdorf's online service center. A wide range of individual components is available to complete our reverse vending portfolio – and every system can be configured to meet the retailer's precise requirements. Moreover, Wincor Nixdorf has bundled all its services for the entire product range in one organization: from rapid help at our call centers, to our spare parts and repair service, to upgrades and retrofitting.

Users of our reverse vending solutions can get all their technology from a single source. Our customers benefit from the continual enhancement of proven technologies and our ongoing development of efficient, innovative solutions. Wincor Nixdorf offers modular, scalable reverse vending solutions that cover the entire process from end to end. Wincor Nixdorf is the ideal partner for reverse vending systems – from initial contact and planning to commissioning and maintenance throughout the system's lifecycle.

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