

Revento 8000

Reverse Vending Machine



Revento 8000 – the allround solution for returning single one-way and refillable bottles as well as cans and crates. This PC-based reverse vending machine uses advanced camera technology and image processing to recognize containers accurately, and can store an almost unlimited number of records in its database. Futureproof and powerful – that’s the Revendo 8000.

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Recognition

Using advanced, pioneering camera-based recognition technology, this RVM examines the shape and color of single bottles and cans, and weighs them at the same time (full container recognition). Key features for clearing one-way containers are the optional barcode scanner to perform fully automated comparisons with the empties database and the optional security mark reader to prevent fraud.

The data that is captured is compared with pattern records in the database, and a fuzzy logic engine assesses whether the container should be accepted or rejected, depending on the defined assortment. As a result, only empties that are actually in the assortment will be accepted and refunded. An almost unlimited number of records can be stored as the machine is based on PC technology.

Beverage crates are scanned with a 3D laser system, and the logic then generates a full 3D crate model. This exact method identifies the type of crate, how many bottles it contains, and which ones. Our innovative logo recognition option processes the entire logo on the side of the crate, ensuring that crates of the same shape and color can be recognized and differentiated even more accurately.

Revento 8000 ensures a fully automated, time saving empties return.

Backroom

When empties have been accepted, they need to be moved and stored. This is handled by Wincor Nixdorf's modular backroom technology. Refillable bottles are collected on platforms; alternatively, one-way PET bottles can also be disposed of in more compact bins, thus saving valuable storage space. Beverage crates are moved fully automatically into the backroom via roller conveyors and crate transport systems.

There is a wide range of sorting and compacting options for one-way PET bottles and cans, and they can be tailored to the store's specific situation.

Our compacting technology is capable of handling very large volumes of returns and meets the requirements of clearing organizations (destruction of the security mark, etc.).

Every Wincor Nixdorf backroom installation is optimized for the best performance under the individual store conditions (available space, volume of empties, ratio of one-way to refillable containers).

IT integration and service

The Revendo 8000 has a standard XML-based interface. Consequently it can be easily integrated in point-of-sale and merchandise management systems. The advantage: Transaction receipts prevent tampering, and inventory discrepancies related to empties are reduced on a lasting basis. Clear inventory management is available by simply transferring the daily reverse vending transactions to a POS system. And the open, freely available interface has been optimally prepared for future applications such as central assortment control.

Another advantage lies in the comprehensive online serviceability of the Revendo product family via ISDN or LAN. Most service cases can be resolved online, saving time and expensive visits by technicians.

And if a fault needs to be fixed on site, Wincor Nixdorf's highly flexible service logistics ensures that spare parts are supplied as fast as possible.

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BASIC DATA

- **Dimensions:** (L x W x H)
1420 mm x 600 mm x 1690 mm
- **Weight:**
216 kg
- **Power:**
230 V, 50 Hz for the machine
- **Power consumption:**
235 W full load
141 W standby
- **Conformity:**
Machinery directive, EMC, CE
- **Temperature:**
+15° C to +35° C

RECOGNITION DATA

- **Camera-based image processing with a resolution of over 400,000 pixels**
- **Full container recognition**
- **Crate recognition:**
3D laser scanning, optional logo recognition
- **One-way empties:**
Up to 27 containers/minute (depending, among other things, on the number of characteristics to be recognized, such as barcode, security mark, ...)
- **Refillable empties:**
Up to 35 containers/minute (depending, among other things, on the number of characteristics to be recognized, such as barcode, shape, ..)
- **Crates:**
Up to 15 crates/minute (depending, among other things, on the number of characteristics to be recognized, such as size of the crate, logo, weight, ...)
- **Number of records:**
Almost unlimited

OUTPUT DATA

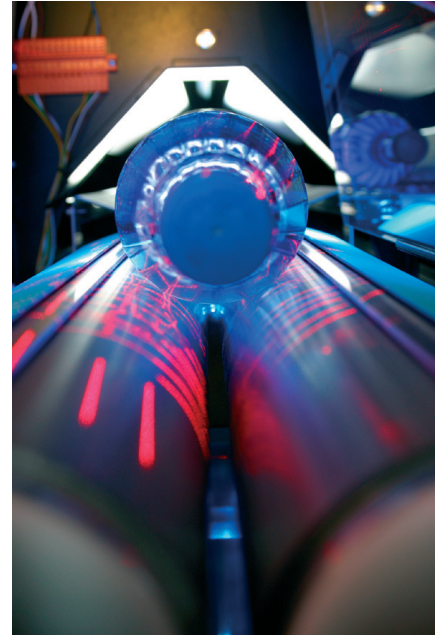
- **Printer:**
Thermal printer with cutter,
60 mm wide
- **Receipt roll:**
330 m long
- **Paper:**
WN security paper, specification available
- **Interfaces:**
 - Standard XML data interface via Ethernet LAN
 - Ethernet LAN connection for online service
 - BUS interface to control Wincor Nixdorf backroom components

STANDARD FEATURES

- **Door color:**
Wincor Nixdorf Green metallic
- **Chassis color:**
RAL 7015
- **Protection against fraud**
- **Full-graphics TFT display, 640 x 480**

OPTIONS

- **Custom door color (RAL)**
- **ISDN adapter for online service**
- **Additional signals in the field of vision to guide users**
- **Second button for additional functionality (e.g. donation button)**
- **Barcode scanner to accept one-way containers**
- **Security mark reader for one-way container deposits**
- **Crate recognition**
- **Logo recognition for crates**
- **Integrated sorting unit**
- **Side ejector with fill-level sensor**
- **Variable installation frames**
- **System administration software (empties control™)**
- **Call module to report faults by voice messages via telephone**
- **Warning signal system**



Advanced camera recognition plus weighing and barcode scanning – all at one point in the machine.



The ergonomic user interface supports high volumes of returns.

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