

KRONES Sekamat

The high-precision container sorter



Selectivity at the running conveyor

KRONES Sekamat

The Sekamat sorter is installed directly at the conveyor and differentiates the containers passing by according to their type-specific criteria. The containers are inspected contact-free so that they will not be worn. Depending on the selected program, a CCD camera records specific characteristics like height, colour, contour, neck-finish, or cap. This multitalented system detects full containers or differentiates glass and PET without any problems.

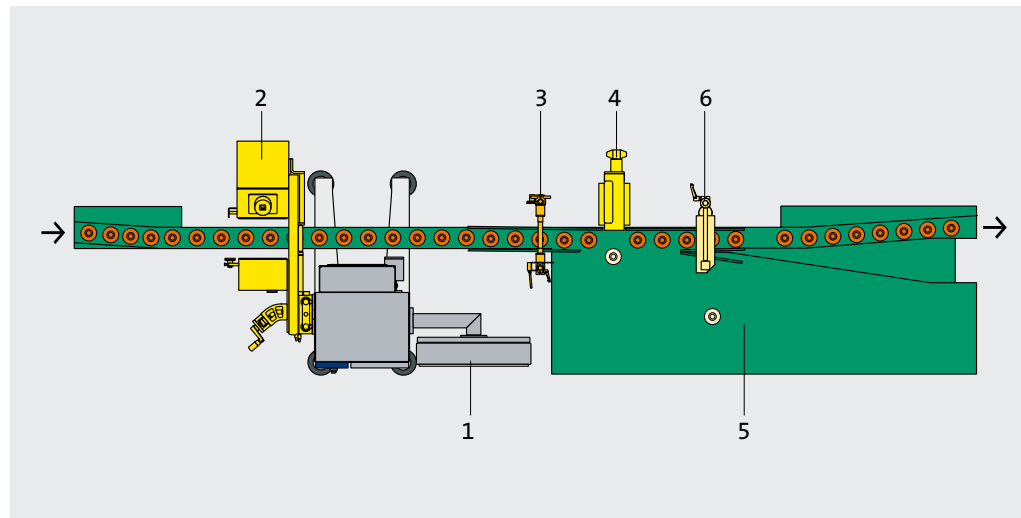
And, because this all is performed in a flow, the Sekamat can reach outputs of more than 72,000 containers an hour even with high-requirement sorting tasks!



Quick and precise: Sekamat container sorter

Method of operation

The Sekamat inspection and operating unit are installed directly at the conveyor. The containers pass through the inspection unit being close to each other. Depending on the set sorting program, a CCD camera checks the containers for characteristics. The camera signals are processed in real time and compared with the saved standard values putting production-based tolerances into account. Afterwards, the containers are separated by type and divided in up to five lanes.



Design features

- Linear machine
- Modular design made of a basic column with electronic control components, a camera and lighting unit, as well as a touch-screen.
- Bottle detection via CCD camera
- Data are processed to real time with the DART technology (Distributed Architecture for Real Time).
- Self-diagnostics feature
- Maintenance-free LED lighting
- Connection to production data acquisition system (PDA) or line data storage system (LDS)

Application

Sorting of empty glass and PET containers

Output range

Nominal output of up to 72,000 containers per hour

- 1 Touch-screen with housing and electronic analysis unit
- 2 Inspection unit
- 3 Acknowledgement trigger signal
- 4 Pusher
- 5 Rejection table
- 6 Rejection monitoring

Operation

- Touch-screen for data entry, monitoring, and malfunction display
- Memory space for 9,999 sorting programs
- The program displays how many containers altogether are to be sorted and distributed to the individual lanes.
- Quick and easy changes of the container tolerances – also during operation!
- Access to the user interface by means of an individual password or transponder
- Remote maintenance via tele-service possible



The Sekamat can be operated easily and safely via touch-screen.

Detection possibilities

- Container contour
- Neck finish contour: differentiates any neck finish shape such as crowns, screw cap, band neck finish, wide-neck, etc.
- Container height
- Container diameter
- Cap detection unit: detection of containers with metal caps, plastic caps, or corks
- Recognition of container colour
- Recognition of label colour
- Detection of container material: separates glass from PET containers
- Detection of partially filled containers

Additional equipment

- Bar code detection unit
- Recognition of ACLs
- Detection of residual liquid



Example of contour detection with different glass bottles

System expansions

Rejection systems

KRONES Sekamat



Linaglide

- Application: for the rejection and distribution of containers
- Rejection onto parallel conveyors
- Suitable for containers of different types and sizes; rejection of containers in upright position possible
- Modular design
- Rejection on up to five lanes
- Output: 72,000 containers per hour

Ecopush

- Application: for the rejection and distribution of containers
- Rejection onto a parallel conveyor, onto a rejection table, or onto a collecting tank
- Compact design
- Suitable for empty and full containers
- Cost-efficient system
- Very low maintenance
- Savings in energy, no air consumption
- Low noise level
- Output: 80,000 containers per hour



■ Thorough sorting

The well-coordinated team of CCD camera and DART technology works with high precision and provides optimum sorting results - bottle by bottle.

■ Large programming variety, short change-over times

The Sekamat can perform up to 9,999 different sorting programs. Changing from one program to the next is easily done and within very short time.

■ Small footprint

The compact modules are mounted directly to the conveyor and require only little space.

■ Many functions, high speed

Sekamat manages a large range of different detection patterns, and it achieves a continuously high performance also with very challenging sorting tasks.

■ Long service-life lighting unit

The LED lighting units only consume very little energy and have a long service life.

■ Remote diagnostics and maintenance via teleservice

The teleservice provides specialist consultancy and service around the clock. If required, a KRONES technician can access your inspector via a secured data line. This way, parameter settings, software updates, and malfunction analyses can be performed cost-efficiently and quickly.

■ Uniform operating concept

All KRONES machines are equipped with a uniform operating concept for maximum user friendliness.

