HCTS2000 MK2

Fast sample detection and sorting

The ideal solution for bulk-to-bin sorting

- Automatic sample accessioning
- Simple set-up – easy to maintain
- Simple operation – flexible sorting logic
- Suitable for all standard tube types

SARSTEDT

Optimization of sample accessioning process

The MK2 in pre-analytics

- Each tube is accessioned automatically; no need for manual scanning
- Samples are sorted into groups for immediate further processing
- Error samples (no barcode or barcode cannot be read etc.) are sorted out
- Process reliability is improved and turn around time (TAT) is shortened
- Simple use ensures acceptance by laboratory staff
- Options to extend the range of functions ensure a complete solution

Functional principle

The HCTS2000 MK2 (High Speed Closed Tube Sorter) solution is ideal for use in the sample accessioning area of medical laboratories.
It structures and optimizes workflows.
The device sorts all standard tube formats in bulk (see Technical data) and groups them to enable immediate further processing. It accessions each sample automatically.

Process optimization

Use of the HCTS2000 MK2 reduces the risk of errors during the accessioning and sorting. Samples will no longer 'inadvertently' end up in the wrong departments and laborious searches for samples will no longer be necessary. Error samples, e.g. without a barcode or with barcodes that cannot be read, do not undergo analysis.
The HCTS2000 MK2 can be used as a stand-alone solution with sorting rules created by the user or, if there is an LIS connection, perform sorting according to the tests required. The frequency of errors will be reduced in each case, improving process reliability.

Simple operation

Operation of the HCTS2000 MK2 is straightforward and intuitive, controlled via the touch pad, which is used to begin operation after the sample tubes have been poured in.
Sorting stops when one of the collection compartments is full. These compartments can be emptied at any time.

Standard device's range of functions

All currently available standard makes and sizes of sample tubes (see Technical data) are sorted at a throughput of up to 2000 tubes per hour. The sample tubes are detected and sorted using barcodes.
On the standard design, the target compartments are closed with sliding doors during the sorting process. To remove the tubes that have collected in the target compartment, a container is held below the opening before the sliding door is lifted. Alternatively, an external target container is attached in front of the target compartment. The door can then stay open and the external target container receives the tubes as they sort.

SARSTEDT

Options/accessories

Extension modules

Many laboratories need primary distribution to more than seven targets. Each extension module enables you to add five more target compartments. Furthermore, up to three modules can be connected to the basic device, increasing the number of target compartments to 12, 17 or 22.

Easy handling

Connecting extension modules does not affect the system's sorting speed. On the main unit, the new target compartments can be added to the sorting logics. Connection to the LIS will open up further sorting options for the operator. The additional target compartments are operated in the same way as the main unit; one option is to equip the extension modules with removable target bins (see below).

Installation on the HCTS2000 MK2

The extension module is installed to the side of the main unit. The main unit and extension module(s) are fully synchronized. Extension modules may be installed along with the HCTS2000 MK2 main unit or added later as needed.

Tube type recognition via camera module

Using this option, it is possible to use the color of the caps on the sample tubes as an additional sorting criterion. The system can distinguish between up to 20 different single-colored caps.
The geometry of the sample tubes is also detected. It is this combination which enables the system to determine the exact tube type. If the barcode also provides information about the preparation of the tubes, it will be possible for a plausibility check of the tube type and information to take place. In the event of any discrepancies, the tubes will end up in the error compartment.

Removable target bins

One option is to equip the device with removable target bins instead of standard sliding doors. This will make it easier to access samples while the machine is in operation. Once collected, the tubes are highly visible in the removable target bin. Target bins containing sorted tubes can be removed at any time. Sensors guarantee that the machine stops when a target bin is being removed or is completely full. If the emptied target bin is re-inserted, the device will restart without the operator having to take any further action.

SARSTEDT

Options/accessories

Signal light

The device's signal light illuminates when one of the target bins is full or when an error occurs. You can see when action is required, even from a distance, and can avoid losing time. The display shows detailed notifications.

Barcode scanner

The device is fitted with a 1-D Scanner as standard, but it is also possible to install a 1-D Barcode Scanner High Density or a 2-D Scanner when required.

Technical data

HCTS2000 MK2

Sorting	
Speed	Up to 2000 tubes per hour
Sorting criteria	Linear barcodes consisting of up to 30 digits: Query with the LIS, up to 25 requirement profiles 2D barcode (optional) Cap color (optional) Ten sorting logics, freely editable and storable

Sample handling	
Primary tubes	Cylindrical, various makes 75 mm – 120 mm in length (with cap) 11 mm – 19 mm in diameter (with cap)
Tube inlet	Funnel-shaped container with capacitiy for approx. 600 tubes (depending on tube size)
Tube outlet	Seven target compartments, each with capacity for around 200 tubes

General	
Operation	Built-in processor with touchscreen PC software panel for editing the sorting logics
Mains connection	110 – 230 V, 50 – 60 Hz
Interfaces	LIS connection, purely ASCII-based protocol Standard RS 232C interface with 9600 baud Ethernet interface, RJ45 (optional)
Dimensions	1,520 mm x 1,210 mm x 830 mm (W x H x D)
Weight	160 kg

HCTS2000 extension module

Speed	1500 – 2000 tubes per hour, depending on the unit configuration
Tubes	Cylindrical, various makes 75 mm – 120 mm in length (with cap) 11 mm – 19 mm in diameter (with cap)
Target compartments	Five target compartments, each with capacity for around 200 tubes
Cascading	Maximum of three modules per basic device
Control unit	HCTS2000 basic device
Mains connection	Power supply 110 – 230 V, 50 – 60 Hz
Dimensions	865 mm x 1,060 mm x 820 mm (W x H x D)
Weight	35 kg

Additional information and video

https://www.sarstedt.com/en/products/laboratory-automation/clinical-laboratory/bulk-loader/

Scan QR Code or go to

SARSTEDT, Inc.
1025 St. James Church Road
P.O. Box 468
Newton, NC 28658 - 0468
Toll free: +1 800 257 5101
Fax: +1 828 465 4003
customerservice.us@sarstedt.com
www.sarstedt.com

SARSTEDT