AUTOSORTER 1200 | AUTOSORTER 2000

Pre- and Post-Analytic Specimen Sorting

YASKAWA

AutoSorter 1200 and AutoSorter 2000 are multi-function instruments for specimen sorting, with the flexibility, productivity and reliability to meet the demands of large commercial labs. Optimized for throughput and flexibility, the AutoSorter 1200 processes up to 1,200 specimens/hour for rack-based pre-analytic sorting and post-analytic sorting/archiving. The AutoSorter 2000 processes up to 2,000 specimens/hour for bulk-handled specimens.

Nearly 100 years in robotics and automation, including over 10 years of experience in solving clinical laboratory automation needs went into the design of these systems, yielding a high-throughput, labor saving process improvement tool for your lab.

IMPROVED LAB OPERATIONS

Flexibility to process multiple specimen configurations

High sorting accuracy/specimen traceability

Robust design and industrial components provide high system uptime and reliability

Free your staff from non-value-added specimen processing tasks

DECK LAYOUTS

Standalone
• Drawer loaded/unloaded

Track Connected
• Configure as loader or output sorter

Bulk Sorter
• Hopper input/bulk output

Flexibility
• Accepts common tube sizes in mixed batches
• User-configurable; easily adapts to changing sort requirements
• Defined sort groups can be recalled for use
• Multiple sort deck configurations for standalone or connected installations
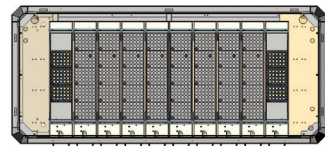• Efficient use of drawers/racks based on sort group size

Productivity
• Large deck provides extended walk-away times
• Loading/unloading through drawer access allows continuous operation
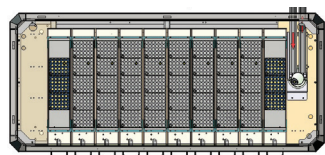• Special handling functions allow prioritized processing

Reliability
• The AutoSorter™ product line, featuring a high-speed robot, has performed for over 12 years in some of the highest volume commercial labs in the United States.
• The proven Motoman® robot provides high uptime with minimal maintenance and long life.
• Global service and support network including 24-hour hotline provides prompt technical assistance.
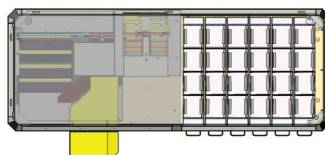
AUTOSORTER 1200
• High-speed sorting instrument for pre- and post-analytic specimen processing.
• Operates as "standalone" sorter or as one in a series of processing stations in a conveyorized line.
• Configurable deck features drawers and/or flow-through conveyors to feed specimens into sorter and to present racks for sort targets.
  – Standard drawers can accommodate various instrument-specific or generic racks and trays.
  – Ten drawers hold up to 1,380 tubes; higher capacity is available with flow-through conveyor rack handling.
  – Racks can be changed as necessary based on specimen mix, conversion to use of new instrument, etc.
• Puck-based, modular specimen transportation solution can be configured to meet lab requirements.

Specimen Loading/Processing
• Incoming specimens are randomly loaded into a generic or instrument-specific input rack.
• Each specimen tube is lifted from the rack to allow reading of the bar code. The specimen ID (SID) is compared to a database for processing instructions.
• Every specimen is sorted to a target output rack; racks can be accessed at any time to remove specimens. If the SID is not found, or the label is unreadable, the specimen is sorted to an "error" target for manual resolution.
• Traceability of each specimen is maintained throughout the system including the target rack, row/column location.

AUTOSORTER 2000
• Utilizing the AutoSorter 1200 platform, the AutoSorter 2000 addresses common requirements for high-volume commercial labs, such as bulk loading, various container types and data connectivity. It has the ability to maintain frozen specimens in a -20° C environment during the sorting process.

Specimen Loading/Processing
• Specimens are poured directly into an input hopper, and can be any type or size of compatible container. Loading can continue at any time during operation up to the fill limit of the hopper.
• Specimens are singulated and loaded to a nest where the barcode is read to determine the sort destination.
• The specimen is then picked up and dropped into the corresponding target bin. Each of the 24 target bins hold up to 200 specimens, but can be configured to signal for clearing at any established number or elapsed time.

UP TO
2,000
SPECIMENS/HR

SPECIFICATIONS

AUTOSORTER	1200	2000
Height [mm]	1,869	1,850
Width [mm]	2,040	2,352
Depth [mm]	889	893
Weight [lbs]	2,000	2,500
Throughput [tubes/hr]	1,200	2,000

UTILITY REQUIREMENTS

Pneumatic	1 SCFM at 80 PSI
Electrical	208 VAC, 3-phase, 20 Amps
	110 VAC, 5 Amps

SPECIMEN FORMATS

Tube diameter [mm]	12-16
Tube height [mm]	75-100
Mixed formats	Yes

YASKAWA