



aim|Lab
Automation Technologies

PATHFINDER 350D DECAPPER SORTER

YOUR ANSWER TO PRE-ANALYTICAL
DECAPPING AND SORTING OF SPECIMEN TUBES



PathFinder 350D Decapper Sorter

The PathFinder 350D is a compact benchtop robotic workstation which consists of a Sorter Module and a Decapper Module for automating the decapping and sorting of incoming specimen tubes directly into various analyser or sample racks.

Incoming sample tubes are loaded onto the PathFinder 350D in one or more PathFinder automation racks. The tubes are moved sequentially from the input rack to a processing carousel in the Decapper Module, where the tube barcode information is read and relayed to a Laboratory Information System (LIS).

Based on the requested tests, each presented tube is selectively decapped and sorted to one or more destination racks. The decapping head can decap a wide range of tube closures including screw caps and push on caps.



When the destination rack is an analyser rack, the barcode label on the tube can be automatically aligned with the viewing window (if applicable).

The PathFinder 350D can also alert operators to samples for which data has not been correctly entered, saving time and improving Turnaround Time (TAT).

Without a LIS connection, all presented tubes are decapped and loaded into analyser racks. The in-built database records what tubes have been processed and when, allowing for easier tracking. On the PathFinder 350D, presented samples are processed at a throughput of 350 tubes per hour. Racks can be loaded or unloaded at any time without pausing the

instrument's operation and impacting throughput.

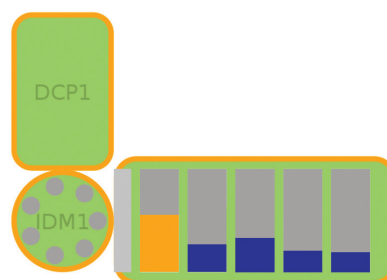
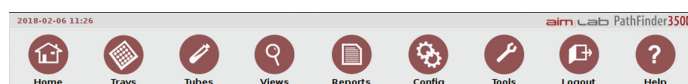
The PathFinder 350D is designed specifically to make automation accessible to small and medium laboratories. It provides a simple, space efficient and affordable solution for automating the receipt, decapping and loading of incoming sample tubes into analyser racks, ready for analysis.

Easy-to-Use Software

The relevant information for routine operation is displayed through the Graphical User Interface via a colour-coded schematic of the instrument's status, intuitive icons and message windows. More detailed information can be obtained as required by tapping a module graphic or icon. In the case of diagnostics, pop-up help menus guide the operator.

It is possible to search for the location of a specific tube, check the fill status of a rack or access a productivity report through the local touch screen monitor or anywhere on your network using a web browser.

Statistical reports and graphs on instrument productivity and tube distribution over a selectable time period can be generated at any time.



Applications

- Front end registration of incoming sample tubes
- Decapping and sorting serum tubes into one or more analyser racks
- Decapping and sorting of urine tubes into one or more analyser racks
- Distribution and selective decapping of incoming tubes to different departments/analysers
- Automating the decapping, placement and barcode alignment of tubes into linear analyser racks

Flexible

- Places decapped and/or capped tubes directly into a wide range of analyser racks
- Mixed diameter and height tubes in the same input rack
- Decaps a range of cap types including screw and plug caps
- Tube barcode alignment
- Upgrade path to increase both rack capacity and throughput
- Quick layout changes for different applications
- Choice of different languages
- Onboard tube tracking database
- Operates with or without a LIS

Lab Automation Made Easy

STEP 2

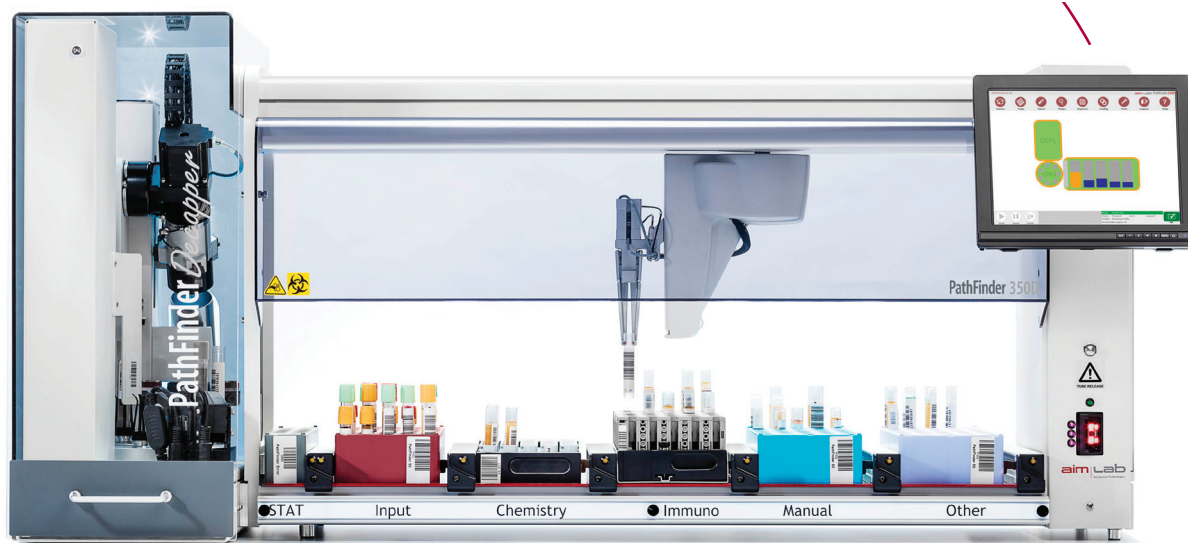
Tubes are transferred sequentially to a carousel in the Decapper Module where each tube barcode is read and relayed to the LIS.

STEP 1

Incoming sample tubes are presented in an input rack.

STEP 3

The LIS responds with processing commands. The sample tube is decapped and the tube barcode is orientated if required.



Standard version of the PathFinder 350D Decapper Sorter

STEP 5

The process is repeated for each sample tube until the input rack is empty.

STEP 4

The decapped tube is sent to the relevant destination rack. With analyser racks, the tube barcode is aligned with the viewing window in the analyser rack.

PathFinder 350D Plus Decapper Sorter



The PathFinder 350D Plus is an extended version of the PathFinder 350D with an additional Sorter Module. This has the advantage of doubling the deck space as well as increasing the sample throughput up to 600 tubes per hour. In this configuration, sample tubes are loaded on the right hand Sorter Module in one or more input racks and are then

selectively decapped and sorted to destination racks on either Sorter Module. For multiple input racks, racks are processed sequentially and empty input racks can be replaced when convenient.

Key Benefits

- Automates repetitive manual processing
- Takes away tube processing decision making
- Eliminates RSI injuries from manually decapping tubes
- Reduces manual handling errors
- Reduces biohazard exposure to lab staff
- Automatically records and distributes incoming tubes

The PathFinder family

Aim Lab Automation Technologies offer a complete range of laboratory automation solutions. From the PathFinder 900 Plus, a multifunctional Tube Management “island” automation workstation for pre and post analytical processing, to the smaller, more dedicated bench top systems. In addition to the PathFinder 350D and 350D Plus the latter also includes the PathFinder 350A Archiver for foil sealing tubes from analyser racks into low cost storage racks, and the PathFinder 450S for dedicated sorting applications.

One or more PathFinder systems (either 350D, 450S or 350A) can integrate with the PathFinder 900 Plus to provide a network of systems enabling error-free sample prioritising and tracking within the same site or between laboratories.



PathFinder 350A Archiver

Learn more about the range of instruments in the PathFinder family.

<https://www.aimlab.com/products/pathology-automation>

PathFinder 350D and 350D Plus Specifications

	PATHFINDER 350D	PATHFINDER 350D PLUS
SAMPLE THROUGHPUT	~350 tubes per hour	~600 tubes per hour
DIMENSIONS	126cm L x 52cm D x 56cm H	224cm L x 52cm D x 56cm H
	49.5" L x 20.5" D x 22" H	88" L x 20.5" D x 22" H
WEIGHT	57 kg (127 lbs)	86kg (191 lbs)

TUBE DIMENSIONS

Tube OD: 12 - 16mm

Tube Height: 80 - 120mm (capped)

TUBE TYPES

Screw and Plug type tubes

RACK TYPES

50 well PathFinder (PF50) sample racks

20 well PathFinder (PF20) sample racks

Choice of rack adapters for different analyser racks

DECK CAPACITY

Depends on analyser destination racks and deck layout, example:

PathFinder 350D: Specimen tubes ~ 265 (based on 5 x PF50 sample racks + 1 x PF15 Error/Stat rack)

PathFinder 350D Plus: Double the deck capacity of the PF350D

STAT LOADING POSITION

Yes

TUBE BARCODE ALIGNMENT

Yes

LIS INTERFACE

CLSI/NCCLS LIS1-A (ASTM1381-95) and LIS2-A (ASTM1394-97), bi-directional (TCP/IP or File Transfer)

POWER SUPPLY

100 - 240 VAC, 47-63 Hz, 280 W

OPERATING TEMP. RANGE

10° - 35° C, 8 - 80% RH

UTILITIES REQUIRED

Power

Network point

Compressed air



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Delivering Confidence

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