

Automated pipetting made easy

Liquid Handling Station Pipetting Robot

The Liquid Handling Station is your personal pipetting robot, a compact robot that automates tedious manual pipetting without the complexity and cost of large-scale devices. This versatile robot streamlines all your pipetting tasks, freeing up valuable time for other responsibilities.

Whether you're dealing with small or mid-sized sample volumes, embracing automation proves its worth. From basic routines to intricate pipetting sequences, the Liquid Handling Station elevates your pipetting efficiency, particularly in tackling monotonous and error-prone tasks, showcasing its reliability and precision. Once your method is defined, the robot effortlessly replicates it to ensure consistent results time after time.

Typical applications

- Preparation of 'assay ready' plates
- Serial dilutions
- Replication of microtiter plates (96/96 and 384/384)
- Reformatting of plates (96/384 and 384/96)
- Cell cultures
- General liquid transfers in single vessels, strips, and plates in the ANSI/SLAS format
- Sample preparation for following analysis

PCR and qPCR

Accurately pipette even the small volumes for reproducible results.

ELISA

No more manual dilution series: Conveniently change and save fluid classes.

Enzyme assays

Quickly and accurately pipette, mix and define incubation times.

Cherry-picking

Flexibility is the top priority: Quick positioning of individual wells.

Intuitive: Simplest possible method creation in minutes – intuitive software, no programming knowledge needed. Simulation, e-mail and sound notification ensure easy workflow.

Versatile: Seven freely configurable work positions accommodate anything from individual vessels up to 384-well plates, solving nearly any pipetting need.

Compact: Just 60 x 49 cm, full power in eight stations – at a height of just 53 cm!

Quick: You save up to 70% time compared with manual pipettes.

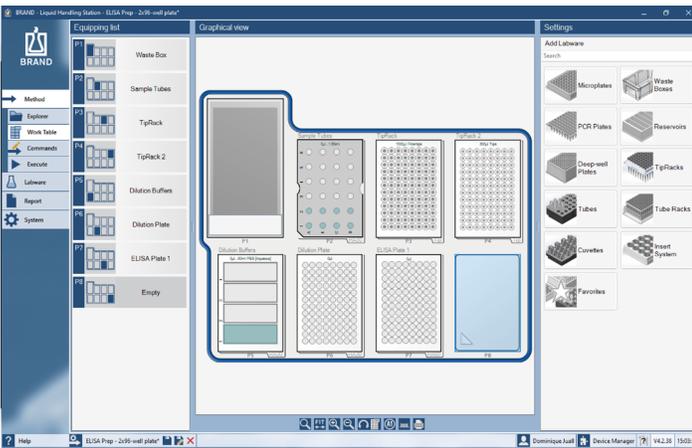


Automated Pipetting with the Liquid Handling Station

While the robot processes your pipetting jobs, you have time for other tasks. The Liquid Handling Station works quietly and can be easily adjusted to handle all applicable work steps. Using the intuitive software, you can define your methods quickly, with no programming knowledge required. If the data is already available in a spread-sheet, creating methods is even easier with the import function. Particularly for small and mid-sized sample volumes, the robot, which operates on the proven air-interface principle, is a cost effective introduction to laboratory automation.



Intuitive and Simple Method Development



Set up the work table

Simulate and execute method

Your compact clean room in the lab with the Liquid Handling Station flow

Do your samples have to be protected against exposure to particles and micro organisms? Then the Liquid Handling Station flow is the right pipetting robot for you. The FlowBox directs filtered air in a horizontal, laminar air stream through the work area, which prevents contamination. Primary applications are those in which the liquids must be free of particles and micro organisms. The ambient air of the Liquid Handling Station flow is exchanged more than four times per minute. The exhaust air escapes through openings in the front door. This technology conforms with the requirements of ISO 14644-1 (Class 5) and GMP Annex 1 (Class A). The inner compartment is free of particles in less than 5 minutes.



Pipetting, not programming

The Liquid Handling Station Software

With the Liquid Handling Station's intuitive software, defining your methods becomes easy and efficient. The graphical interface shows the work area of the pipetting robot, so you can quickly find your way around. Integrated instructions efficiently guide you through the creation of even the most complex methods. This way the Liquid Handling Station can do what it was made for: quickly and conveniently automating repetitive pipetting tasks, so that you can concentrate on more important things.

Standard workflow:

- Define the name for the pipetting method
- Set up the work table
- Define the transfer commands
- Start executing
- Done!

Functions:

- Professional user management
- Predefined liquid properties (liquid types) that can be changed or added at any time
- Disposable item (labware) database can be added to on a customer-specific basis
- Testing of inconsistencies by the software
- Automatic logging of procedures (customizable reports)
- Context-sensitive help function
- Data import/export
- E-mail and sound notifications
- Timeline
- Simulation of the programmed methods

Everything responds to your commands

Four main commands for your success:



Transfer: Specifies nearly all pipetting tasks; e.g. multidispensing, creating dilution series, pooling, etc.



Wait: Defines wait times, e.g. for incubation.



Mix: In order to efficiently mix samples.



Break: Interrupts the program sequence; e.g. in order to incubate samples externally.

Auxiliary Device Commands:



A clear design allows you to easily start and control the FlowBox as well as the heating and shaking module.





Liquid Handling Station

Included: motor control unit, control software, operating manual, power cable, USB cable, documentation, and on-site training for putting into operation.

Liquid Handling Station flow

Included: motor control unit, FlowBox filtration unit, control software, operating manual, power cable, USB cable, USB hub, documentation, and on-site training for putting into operation.



Liquid Ends

The basis for the pipette modules are components from the familiar Transferpette® S. Three single-channel Liquid Ends (SC) and three 8-channel Liquid Ends (MC) are available for contact-free liquid delivery. The volume testing of the pipette modules is carried out according to ISO 8655 part 6. Autoclavable at 121 °C, 20 minutes.



Racks for single tubes, plates and cuvettes

Different tip adapters, and racks ensure stable support and an even working height for the plates and vessels used.



Holder for Liquid Ends

(Liquid Ends not included).



Adapter

For plates and tips



Teleshake 95

Used for incubation from 20 °C up to 90 °C, and also to shake samples with rotation speeds from 100 rpm to 1,900 rpm. Items supplied: Heating/shaking module with centering plate, incl. universal flat-bottom adapter plate.



BRAND Cooling blocks

Passive cooler, for even cooling of the samples for up to 3 hours - regardless of the well position.



Liquid End	Volume range μL	Volume step μL	A ¹⁾ $\leq \pm \%$	CV ¹⁾ $\leq \%$	
1-channel	1 – 50	50	1.8	0.8	
		25	2.5	1.2	
		5	8.0	5.0	
	10 – 200	200	1.0	0.3	
		100	1.5	0.4	
		20	4.0	1.5	
40 – 1000	1000	1000	1.0	0.2	
		500	1.5	0.3	
	100	100	3.0	1.0	
		50	1.8	1.0	
8-channel	1 – 50	50	1.8	1.0	
		25	2.5	1.6	
		5	10.0	20.0	
	20 – 300	300	1.2	0.4	
		150	1.6	0.6	
		30	5.0	2.5	
	40 – 1000	1000	1000	1.2	0.3
			500	1.6	0.5
		100	4.0	2.0	

¹⁾ Final test values related to the nominal capacity (maximum volume) or the indicated volume steps indicated on the Liquid End, obtained when Liquid End and distilled water are equilibrated at ambient temperature within the Liquid Handling Station (20 °C/68 °F), according to DIN EN ISO 8655. A = Accuracy, CV = Coefficient of variation

* For full line of consumables go to <https://shop.brandtech.com/en/life-science-consumables.html>