

# liquid handling

making the essential exceptional



 **sptlabtech**

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SPT Labtech's liquid handling portfolio provides you with accurate and repeatable nanolitre to microlitre pipetting, every time, irrespective of liquid viscosity or environmental conditions.

Each of SPT Labtech's disposable micropipettes has its own individual piston - not an air gap or system liquid - offering true positive-displacement pipetting with no risk of cross-contamination.



**range of low volumes** - robust performance from nanolitres to microlitres



**high speed** - dispensing and when required, tip exchange



**accurate and precise** - using positive-displacement pipetting technology



**cost savings** - from optimised sample use and reduced waste



**zero cross-contamination** - using disposable pipettes



**ultra low dead volumes** - maximising reagent use and preserving precious sample



**more than just dispensing** - our instruments are true pipettors, able to aspirate, dispense and even mix



**ease-of-use** - proven in multiple-user labs; just walk up and use it

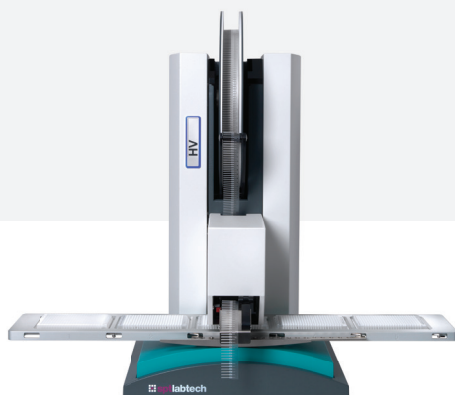


## mosquito<sup>®</sup> LV

### cost-saving miniaturisation

mosquito LV offers an accurate and easy to use solution to miniaturising any assay within an automated, high throughput setting. Volume range is 25 nL – 1.2  $\mu$ L, which can be expanded to cover 25 nL – 5  $\mu$ L in conjunction with mosquito HV. This can lead to significant savings on precious reagents and time, especially as dead volumes are minimised to under 0.3  $\mu$ L.

- preparation of “assay ready” plates for compound screening
- serial dilutions in miniaturised volumes
- plate reformatting, including transfer between different microplate types (96, 384 and 1536 well plates)
- plate replication
- molecular biology and genomics applications such as: NGS library preparation, DNA quantification and cDNA amplification



## mosquito® HV

### effortless serial dilution

mosquito HV bridges the gap between nanolitre and microlitre pipetting. It provides highly accurate liquid handling for low volume serial dilutions and assay plate preparation across the intermediate volume range of 500 nL – 5 µL.

- serial dilutions for the determination of concentration response curves
- assay ready plates can be stamped directly from compound dilution plates
- molecular biology and genomics applications including: NGS library preparation, cDNA amplification, magnetic beads cleanup, PCR and qPCR setup
- cell or bead-based assays
- enzyme kinetic assays
- immunoassays



## mosquito® X1

### automated low volume hit picking

mosquito X1 is single tip nanolitre hit picking system designed for hit confirmation and secondary profiling. It offers true walk-away cherry picking from any individual well in any type of plate with high throughput. Researchers can quickly select 25 nL – 5 µL volumes of hits from primary screening plates and transfer them directly to the next stage without further dilution.

- rapid, automated hit picking for validation and secondary profiling
- integration into cherry picker 2 robotic hit picking system for 'off the shelf' automation
- integration into larger screening systems to offer true walk-away hit selection at high throughput
- cherry picking onto glass slides or chips for microarray assays
- DNA or library normalisation and pooling
- DNA assembly setup for synthetic biology



## dragonfly® discovery

### revolutionary non-contact dispensing

dragonfly combines non-contact, positive displacement pipetting with disposable tips (ensuring zero cross-contamination) to automate the assay development, screening and hit to lead process. Each pipette can dispense any volume (from 200 nL - 4 mL) of any liquid into any well of the plate, allowing complex DoE experiments, assay gradients or optimisation screens to be rapidly prepared. Reliable and repeatable dispensing at high speed also provides a robust solution for HTS reagent dispensing - eliminating issues of clogging and blocking.

- 96, 384 and 1536 well plate compatible
- assay development and validation
- design of experiment (DoE)
- LV
- lead optimisation/hit to lead screening

	mosquito® LV	mosquito® HV	mosquito® X1	dragonfly® discovery
<b>pipetting range</b>	25 nL – 1.2 µL	500 nL – 5 µL	25 nL – 1.2 µL or 500 nL – 5 µL	200 nL – 4 mL
<b>primary SBS plate format</b>	96, 384, 1536	96, 384, 1536	any type including slides	96, 384, 1536
<b>applications</b>	miniaturises screening applications e.g. assay-ready plate preparation, reformatting and serial dilutions, PCR, qPCR	serial dilution, reformatting, PCR, qPCR, cDNA synthesis, NGS library prep, magnetic bead cleanup	provides walk-away “hit picking” from any individual well or location, assays on slides, DNA normalisation and pooling, DNA assembly	assay development and optimisation screening without contamination or liquid classification
<b>throughput</b>	2 mins/ 96 well plate, 3 mins/ 384 well copy 5 mins/ 4 x 384 plate stamp out	2 mins/ 96 well plate, 3 mins/ 384 well copy 5 mins/ 4 x 384 plate stamp out	6 seconds average cycle time to: aspirate, move, dispense, change tip	high speed dispensing (fill 384 well plate in < 30 sec or 1536 well plate in < 90 sec) irrespective of viscosity
<b>accessories</b>	active humidity chamber	active humidity chamber	fully integrated 'Cherry Picker' plate processing system	
<b>consumables</b>	Visit <a href="http://sptlabtechstore.com">sptlabtechstore.com</a> for more information on our consumables range!			

## get in touch

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