

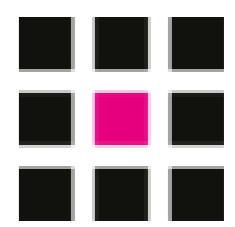


Apricot Designs Product lines introductory training



sptlabtech





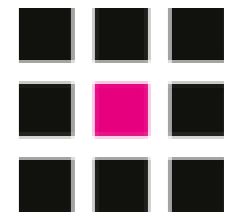
DESIGNS THAT MAKE SENSE



Automated Liquid Handling

Innovation • Accuracy • Precision

Apricot Designs

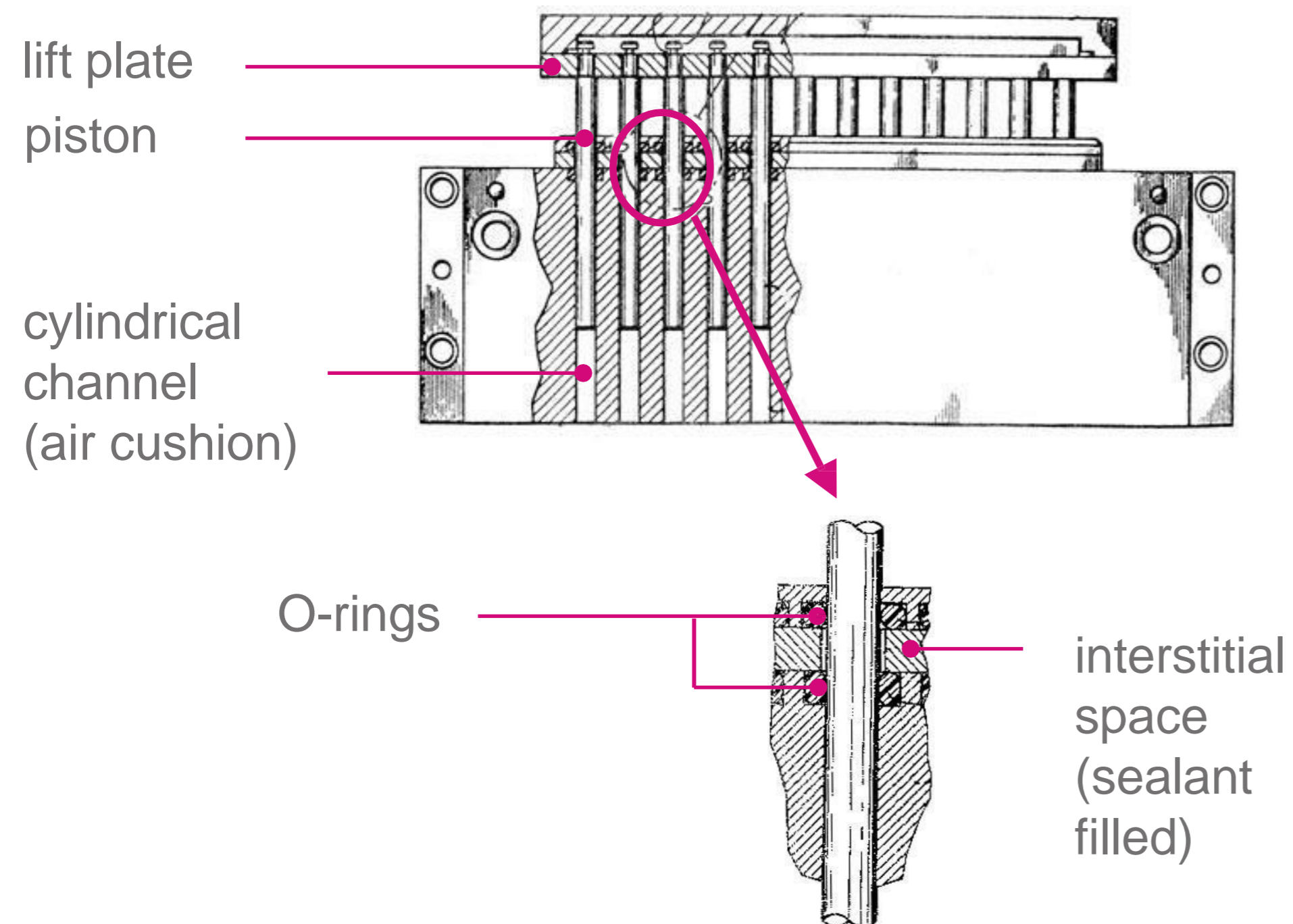


- **Established in late 1980's** serving pharmaceutical industry with custom built laboratory equipment and accessories
- **We specialize in accurate and precise liquid handling technology that is easy for everyone to operate**
 - Multi-channel micro-volume pipetting systems
 - Solid phase extraction and sample preparation devices

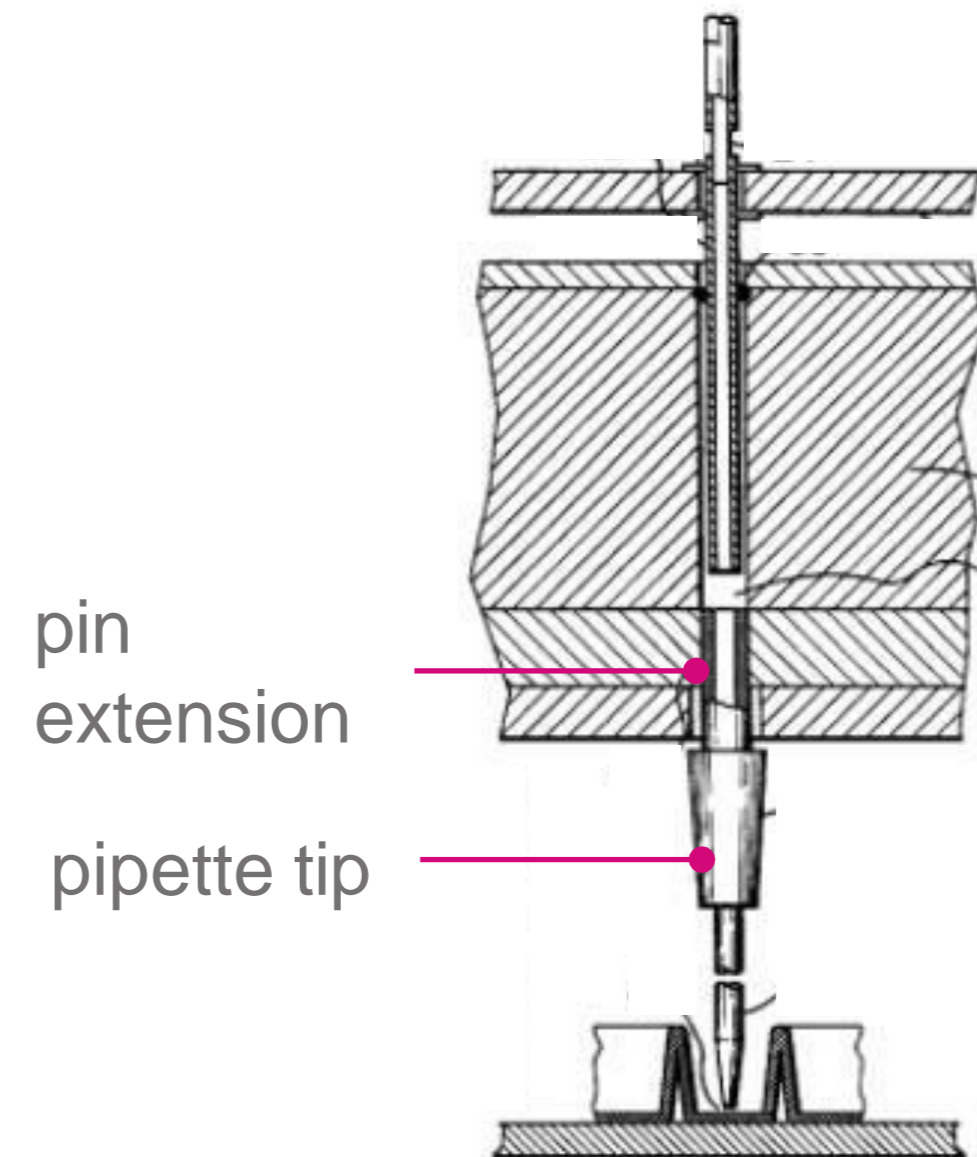
unique apricot pipetting technology





pipetting core (96/384)



pipette tip coupling

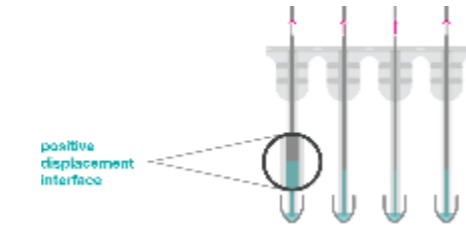


Market positioning


mosquito[®]
 AUTOMATION+ *miniaturisation*= *AUTOMiniaturis*ATION

1 / 8 / 16 channels automated
 nano-micro volume
 Liquid Handling
 by positive displacement
 ALL LIQUID CLASSES



positive displacement interface

Positive displacement makes miniaturization possible!

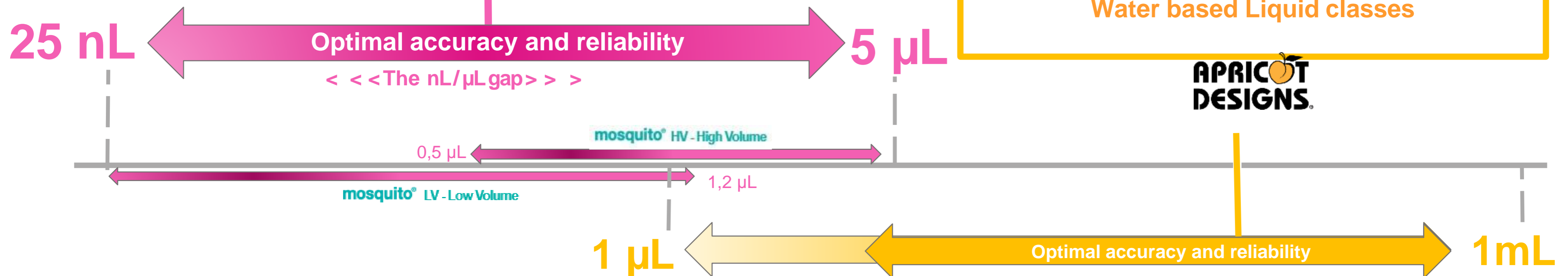


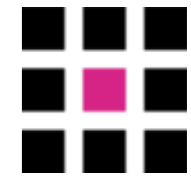


S-PIPETTE

PERSONALPIPETTOR

96 / 384 channels automated or semi-automated
 micro volume Liquid Handling
 by air displacement
 Water based Liquid classes

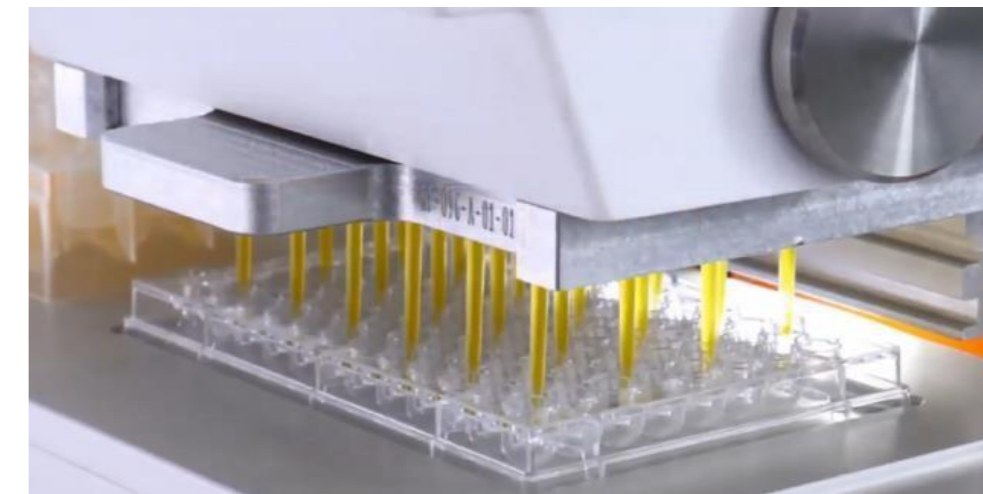
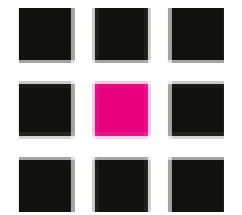




Pipetting Head & Volume Range	<ul style="list-style-type: none"> •96-channel volume options: 0.5-125 µL, 1-550 µL, or 10-1000 µL •384-channel volume: 0.5-125 µL 	<p>MODELS</p> <ul style="list-style-type: none"> •384 0.5-125µL •96L 0.5-125µL •96H 1-500µL •96E 5-1000µL 	<ul style="list-style-type: none"> •96-channel volume options: 0.5-125 µL, 1-550 µL, or 10-1000 µL •384-channel volume: 0.5-125 µL <ul style="list-style-type: none"> •384 0.5-125µl •96L 0.5-125µl •96H 1-550µl •96E 5-1000µl
Liquid Handling channel versatility	Liquid Handling feasible through 8,16, 96, 384 channels	Liquid Handling feasible through 8,12,16, 24, 96, 384 channels	Liquid Handling feasible through 1, 8,12,16, 24, 96, 384 channels
Pipetting head interchangeable	✓	✓	✓
Deck positions	2	3	5+1 Positions
Deck Automation		✓ X & Y & Z	✓ X & Y & Z
SBS plate format	24, 48, 96, 384, 1536, reservoirs	24, 48, 96, 384, 1536, reservoirs	24, 48, 96, 384, 1536, reservoirs
Tubes compatibility	24 x 1,5 ml tubes (Rack)	24 x 1,5 ml tubes (Rack)	24 x 1,5 ml tubes (Rack)
EZ Load Tips	✓	✓	✓
Controlling	Integrated touch screen	Surface Pro tablet controller	Surface Pro tablet controller
Extras	24 channels adapter ???	???	Integrated tips washing station Bare code reader ?????
Size/Weight	W= 292mm x D=330mm x H=521mm 20 kg	W= 457mm x D=406mm x H=584mm 27 kg	W= 711mm x D=483mm x H=607mm 45 kg
Applications	<ul style="list-style-type: none"> • Plate replication • Plate reformatting • Reagent addition • Compound addition • Crystallography Matrix addition 	<ul style="list-style-type: none"> • Plate replication • Plate reformatting • Reagent addition • Compound addition • Serial dilution by column 	<ul style="list-style-type: none"> • Plate replication • Plate reformatting • Reagent addition • Compound addition • Serial dilution by row or column • Purification • PCR Prep • ELISA • NGS library preparation • Cell-based assay

Pipetting Tips

- couple directly and reliably to elastomer mat at core bottom
- no error prone pipette mandrel/O-rings couplings
- fixed angle of tip engagement
- even load force distribution & tip length
- frees up deck positions (no tip boxes)
- no risk of dispense head crash damages
- load full or partial heads of tips (8/16/24/96/384)



24 tip array



96 (or 384) tip array

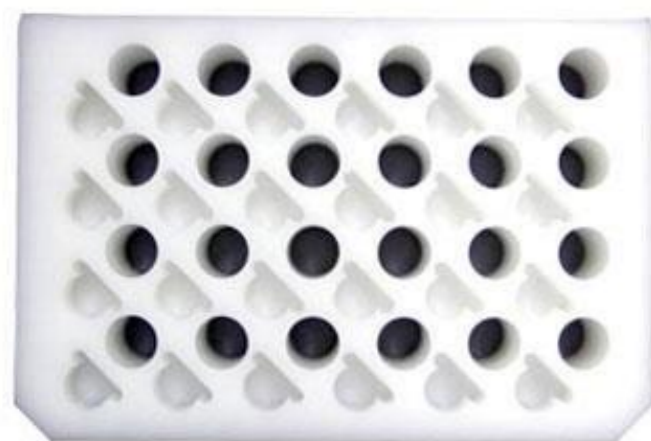


8 (or 16) channel tip strips

Labware compatibility

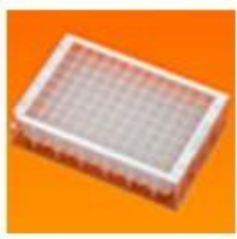

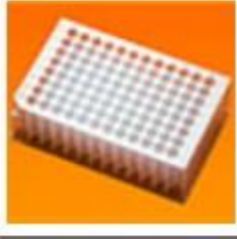

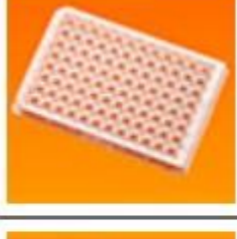

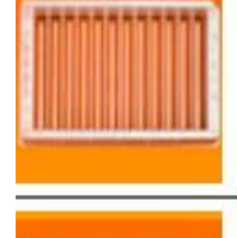
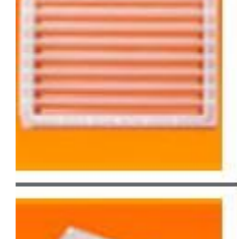
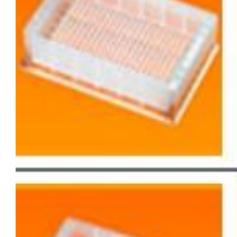



APRICOT
DESIGNS

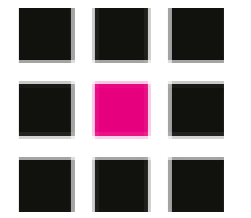


096-A-28



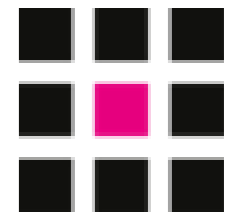
	DWP-16-96-SQ-U-C	1.6 ml	96	Square	U	
	DWP-22-96-SQ-U-C	2.2 ml	96	Square	U	
	DWP-46-48-SQ-U-C	4.6 ml	48	Square	U	
	DWP-360-96-RD-V-C	360 ul	96	Round	V	
	DWP-360-96-RD-U-C	360 ul	96	Round	U	
	RES-180-12W (low dead volume reservoir for 12 channel pipettor)	180 ml	12		V	
	RES-180-8W (low dead volume reservoir for 8 channel pipettor)	180 ml	8		V	
	RES-185-384-SW (low dead volume reservoir for 384 channel pipettor)	185 ml	1		V	
	RES-195-96-SW (low dead volume reservoir for 96 channel pipettor)	195 ml	1		V	

Successful approach in US Market



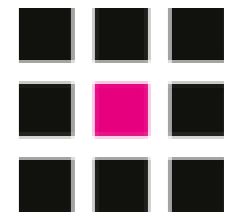
- **Supply a simple, easy to use, fun system.**
- **Fearless programming – You can't break it**
- **Consultative approach, focus on end users and word of mouth**
- **Expand functionality/applications**

Applications/Usage

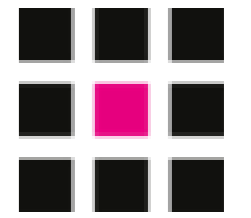


- **Genomics, cell culture, crystallography**
- **Small spaces like BSL2 hoods, crowded benches**
- **General use for a whole team (Manual → Auto)**
- **Step up from handheld**
- **Dilution curves**
- **Automation Buddy/step down from complex automation**

Where are our instruments?



- **All Major Pharmaceutical and Biotech Companies**
- **Leading Academic Institutions**
- **Start Ups to Mid Sized Companies**
- **Small to Large Equipment Suppliers (OEM)**



Easy to use multichannel automated pipetting

- ***Manual head load/eject***
- ***Manual indexing***
 - 24 to 96
 - 96 to 384

Options

- 96-channel volume options: 0.5-125 μL , 1-550 μL , or 10-1000 μL
- 384-channel volume: 0.5-125 μL
- 2 Shuttle/Plate Elevators available
- Disposable tip heads with 8, 16, 96 or 384 channels for Apricot high volume 250/500/1000 μL tips or Apricot EZ-Load 15/50/125 μL tips



S-PIPETTE TM

Features & benefits!



OPEN HOOD



EASY EXCHANGE CORE / EZ LOAD TIPS

Innovative, Accurate, Precise

A high-performance machine that makes sense in terms of efficiency, functionality and performance reliability

Interchangeable Pipetting Core

Innovative approach to precise 96 and 384 channel pipetting. You determine the configuration that best matches your applications



Adjustable Split Level Plate Elevators

Individual sampling you can control – using multiple plates and a variety of liquid handling labware

Quick Access Keys

Quick access to most common functions: Aspirate, Mix, Dispense, and Empty/Blowout



Trusted Brand

Apricot Designs specializes in high quality multi-channel pipettors developed to help you get the best results

Touch Screen

Easy and intuitive pipettor operation

Flexibility

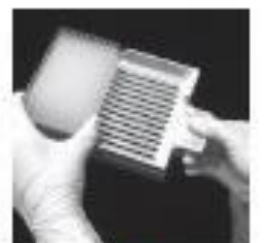
Options for pipettor control with **S-PIPETTE APP** on Apple® iPod or iPhone 

EZ-Load Tip Technology

Load disposable tips into the head quickly and easily, without tools



1



2



READY!

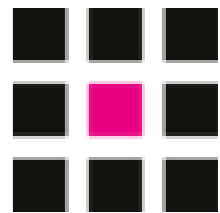
In summary: Easy !

S-PIPETTE ™

- Plate replication
- Plate reformatting
- Reagent addition
- Compound addition
- Serial dilutions by Column 8ch
- Crystallography Matrix addition



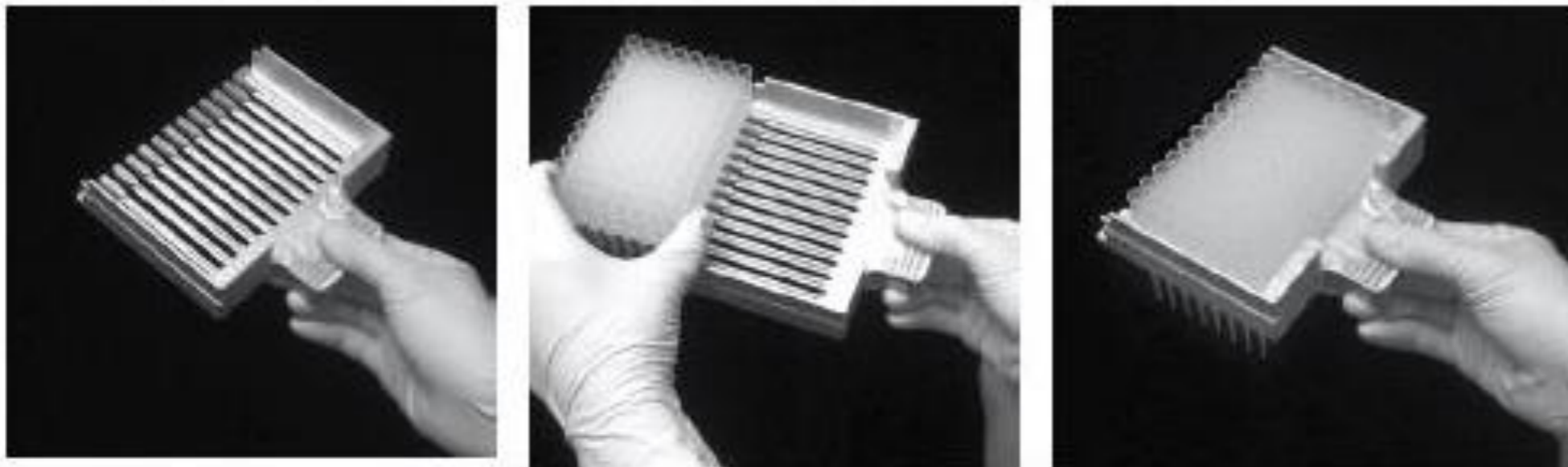
EZ Load Tip Technology



EZ-Load Tip Technology

S-Pipette uses the exclusive EZ-Load tips to simplify pipettor operation with disposable tips. This patented technology from Apricot Design is the only system using disposable tips that do not need to be "pressed on" with excessive downward force in order to create a reliable seal.

Load disposable tips into the head quickly and easily. No tools required for a consistent seal!

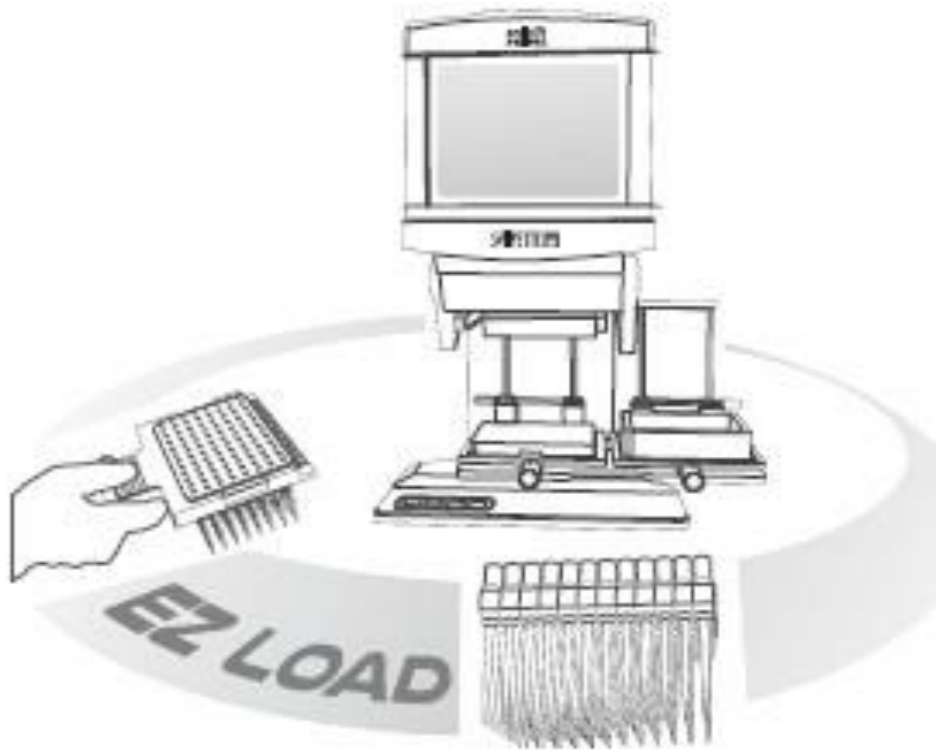


EZ-Load = EZ-Change

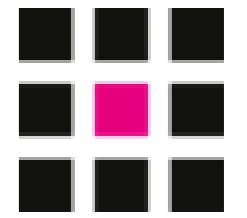
The "pipette head" is separate from the pipetting mechanism, allowing easy and economical reconfiguration in the lab.

Changing heads only takes a few seconds – so easily reconfigure as needed!

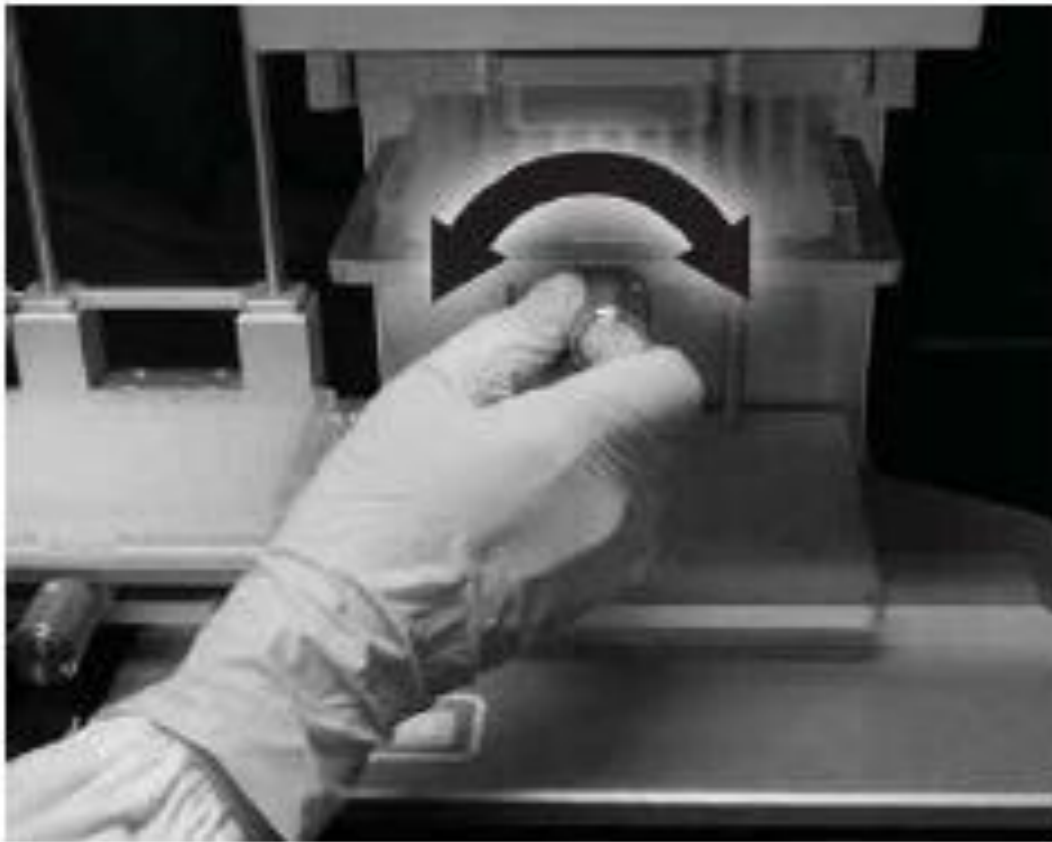
For best pipetting results – consider pipette tip selection along with the "pipette head" that will be used.



Manual Labware Handling

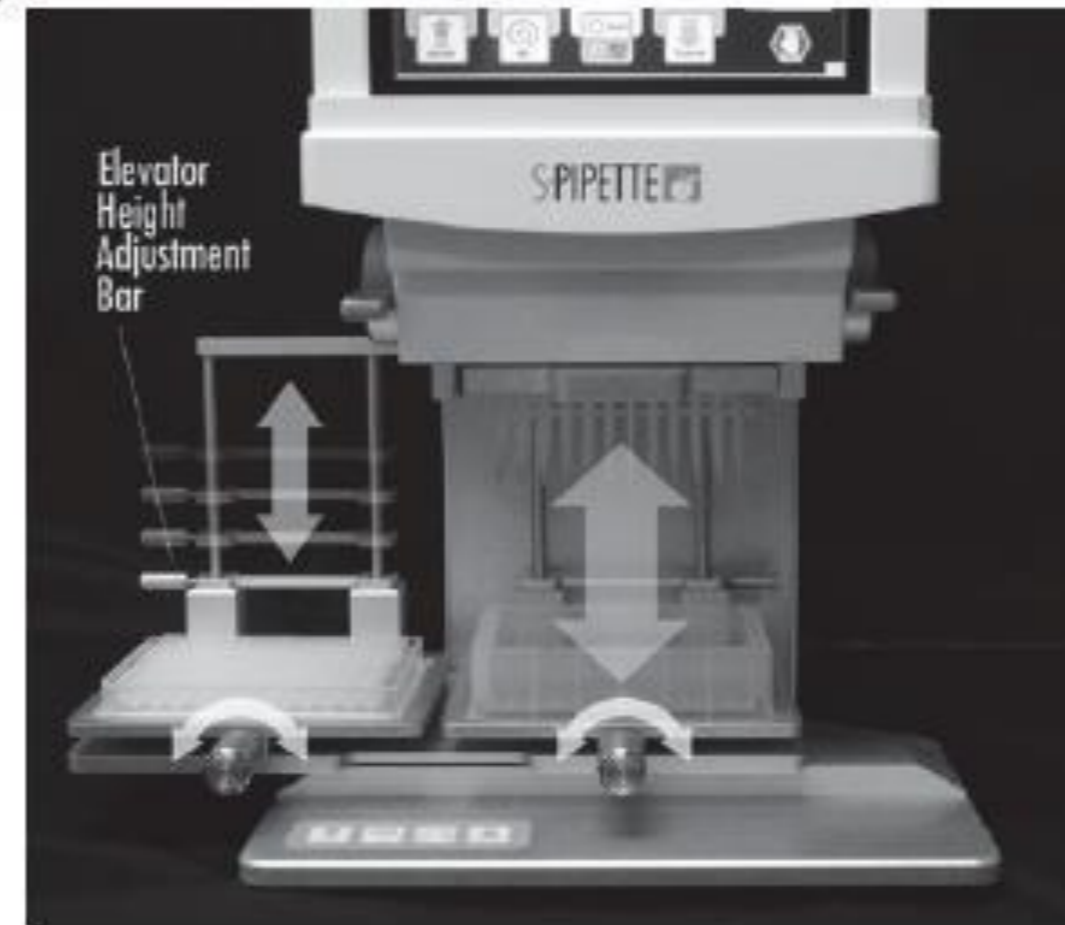


Adjustable Plate Elevators



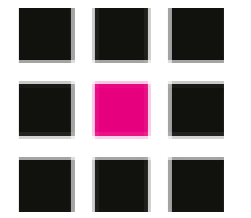
Individual sampling you can control – 2, 3 or 4 Plate Elevators available for individual sampling using multiple plates and a variety of liquid handling labware.

Adjustable Split Level Shuttles



Additional flexibility and even greater sampling control – 2, 3 or 4 Split Level Shuttles available for individual sampling using multiple plates and a variety of liquid handling labware.

Unique interchangeable pipetting core system



Accessing the Core

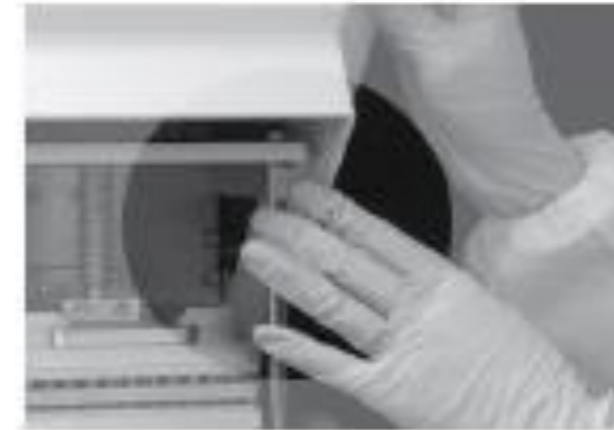
To access first remove the lock screws, raise the hood and set the hood on the support rod.



Remove Lock Screws



Raise Hood



Set Hood Support

Loading a 96 or 384 Channel Core

Determine the pipetting configuration that best matches your application. Load a 96 or 384 channel core into the S-Pipette.



Release Fasteners

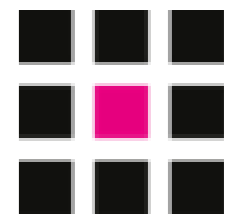


Lift Out the Core



*Exchange 96/384
Channel core*

Easy programming after 1 h of training !



Pipettor control at your fingertips, or in the palm of your hand. No external computer needed.

• Intuitive Touch screen



• Quick Access Keys



• Apple® iPod or iPhone Interfaces with Free S-Pipette App.



Aspirate:

Tap Aspirate button to execute the aspirate function.



Mix:

Tap Mix button to execute the mix function.



Empty/Blowout:

If remaining volume is greater than zero, the empty command is executed.
If the remaining volume is zero, the blowout command is executed.



Dispense:

Tap to execute the dispense function.



Technical Specifications

Dispensing Precision	(96-500/1000) <3% CV at 5 μ L, <3% CV at 10 μ L (96/384-125) <3% CV at 1 μ L
Dispensing Accuracy	(96-500/1000) +/- 2% error at \geq 10 μ L, +/- 5% error at <10 μ L (96/384-125) +/- 2% error at \geq 1 μ L
Resolution	(96-500) 1 μ L (96/384-125) 0.1 μ L
Volume	Max channel capacity (96) 500 μ L, 1000 μ L (96/384) 125 μ L
Dispense range	96-1000) 10–1000 μ L (96-500) 5–500 μ L (96-125) 0.5–125 μ L (384-125) 0.5–125 μ L
Dimensions	11.5"W x 13"D x 20.5"H (292W x 330D x 521Hmm)
Weight	Approx. 44lbs. (20kg)
Power	100 to 240 VAC, 50/60Hz
Operating Temperature	50 -100°F

AVAILABLE TIPS

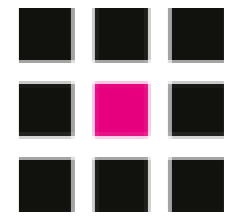
Tip Volume	Channels
250/500/1000 μ L	8, 12, 96
125/50/15 μ L	8, 12, 16, 24, 96, 384

APPLICATIONS

- Plate replication
- Plate reformatting
- Reagent addition
- Compound addition
- Serial dilution

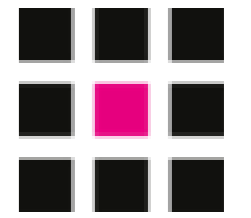


S-PIPETTE in motion



[Video DEMO Click Here !](#)





Easy to use multichannel automated pipetting

- ***Auto head load/eject***
- ***Auto indexing***
 - 24 to 96
 - 96 to 384

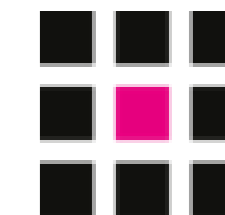
Options

- 96-channel volume options: 0.5-125 μL , 1-550 μL , or 10-1000 μL
- 384-channel volume: 0.5-125 μL





Features & benefits!



Innovative, Accurate, Precise

A high-performance multi-channel liquid handling system – easily configured for a variety of applications

Touchscreen

Easy and intuitive pipettor operation via Microsoft Surface Pro™ Tablet

Greater flexibility – use the removable WiFi-enabled tablet to operate the instrument from outside the fume hood

Automated Plate Elevators

Automated plate sampling – automatically raise or lower plate/reservoir to programmable height

Optional Configurations

Automated X, Y, Z positioning
2, 3, or 4-position shuttle.



Trusted Brand

Apricot Designs specializes in high quality multi-channel pipettors designed to help you get the best results

EZ-Load Tip Technology

Load disposable tips into the head quickly and easily without smashing tipboxes!



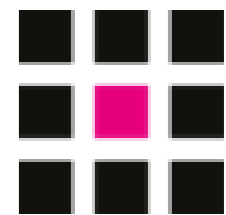
OPEN HOOD



EASY EXCHANGE CORE / EZ LOAD TIPS

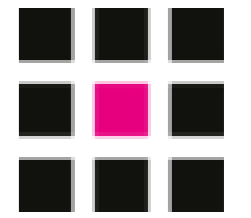
In summary: Easy !

S-PIPETTE S3 ™



- Plate replication
- Plate reformatting
- Reagent addition
- Compound addition
- Serial dilutions by Column 8ch





- **High-performance multichannel pipetting**
- **Easy operation via Microsoft Surface Pro Tablet**
- **EZ-Load Tip Technology**
 - Load tips quickly and easily, without tools!

EZ-Load Tip Technology

Load disposable tips into the head quickly and easily without smashing tipboxes!



- **Interchangeable pipetting cores 96/384**

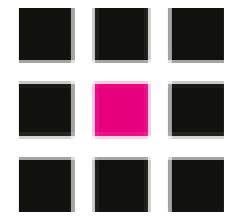
Interchangeable Pipetting Core

Precise 96 and 384 channel pipetting. Choose the dispense range to match your application needs.*



*No Tools needed!

Easy programming after 3 h of training !



MAIN SCREEN OVERVIEW

Plate/Stage Positions

Active Protocol Steps

Selected Head

Simulation/Operation Mode

Core Format

Transfer

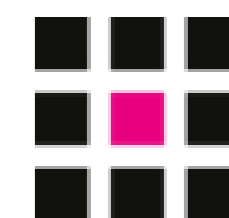
Source

Transfer

Target



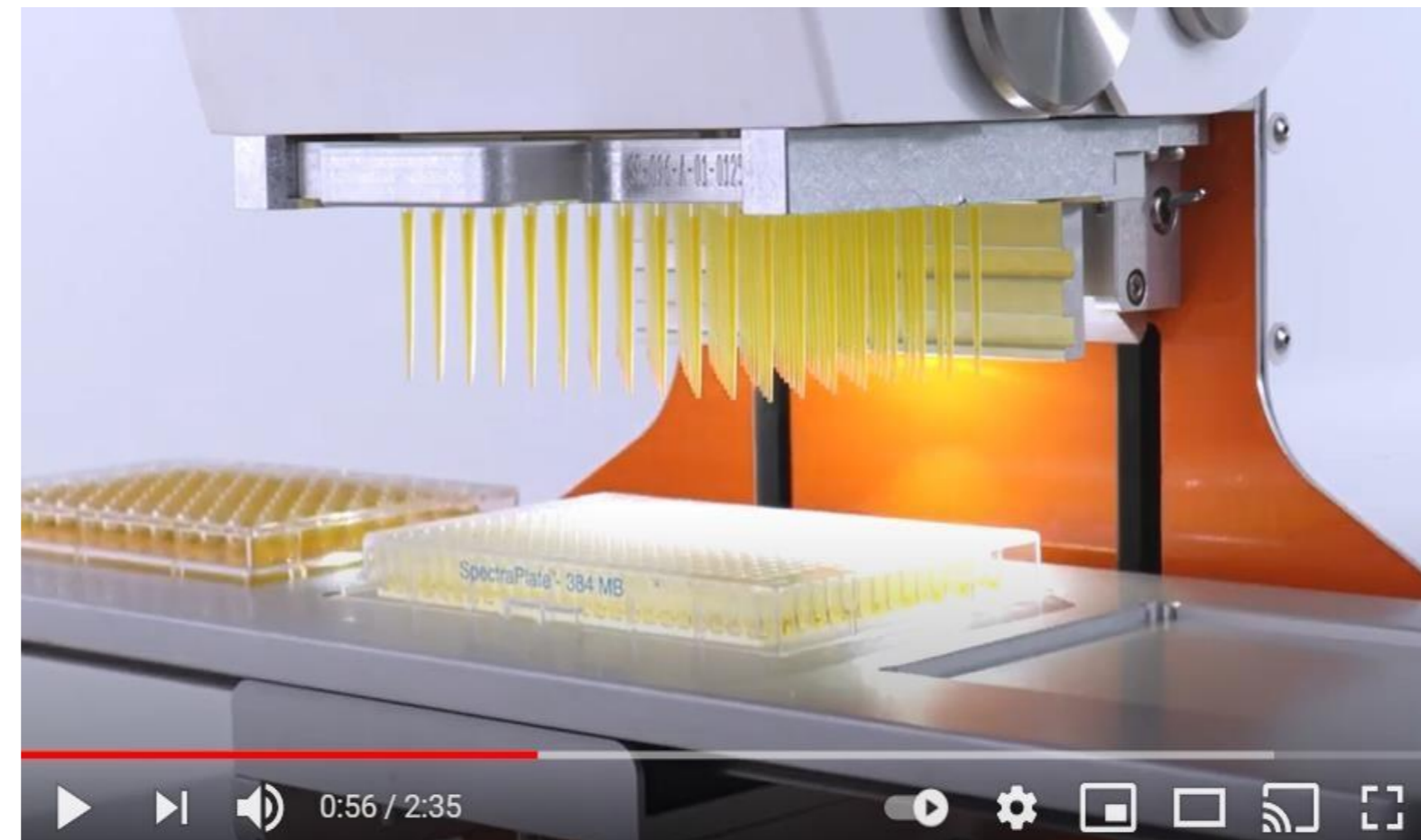
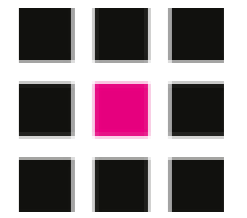
Technical Specifications



SPECIFICATIONS

<p>Dispensing (96-1000) <3% CV at 10μL</p> <p>Precision (96-500) <3% CV at 5μL (96/384-125) <3% CV at 1μL</p>	<p>Volume</p> <p>Max channel capacity (96) 500μL, 1000μL, (96/384) 125μL</p> <p>Dispense range (96-1000) 5-1000μL (96-500) 1-500μL (96-125) 0.5-125μL (384-125) 0.5-125μL</p>	<p>Power 100 to 240 VAC, 50/60 Hz</p> <p>Operating Temp. 50-100°F, 10-37.8°C</p> <p>Dimensions 18"W x 16"D x 23"H 457mm W x 406mm D x 584mm H</p> <p>Weight Approx. 60lbs (27kg)</p>
<p>Dispensing (96-1000) +/-2% error at 10μL</p> <p>Accuracy (96-500) +/-2% error at 5μL (96/384-125) +/- 2% error at 1μL</p>		<p>Available Tips</p> <ul style="list-style-type: none"> • Volume: 250/500/1000μL Channels: 8, 12, 96 • Volume: 15/50/125μL Channels: 8, 12, 16, 24, 96, 384
<p>Resolution (96-500/1000) 1μL (96/384-125) 0.1μL</p>		

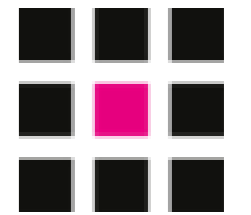
S-PIPETTE S3 in motion



[Video DEMO Click Here !](#)



PERSONALPIPETTOR



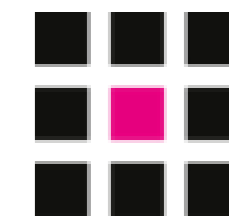
Easy to Use Versatile Multichannel Automated Pipettor

MODELS

■ 384	0.5–125 μ l
■ 96L	0.5–125 μ l
■ 96H	1–550 μ l
■ 96E	5–1000 μ l



PERSONAL PIPETTOR



- Plate replication
- Plate reformatting
- Reagent addition
- Compound addition
- Serial dilution by row or column
- Purification
- PCR Prep
- ELISA
- NGS library preparation
- Cell-based assay



Multi-channel pipetting

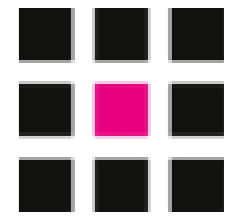
Manual tip loading

5 positions, 1 static

**Automated X,Y,Z
positioning**

PERSONAL PIPETTOR

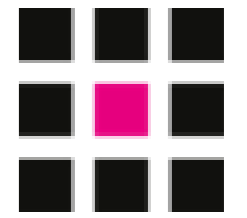
: FEATURES / Benefits



- **5 linear stations +1 Tip wash/Reservoir station integrated** / allows walkaway operation. Complete multi-step assays on non-similar tip formats
- **1, 8, 12, 16, 24, 96, 384 channel automated pipetting in 3D** / Flexible design for liquid transfer in every format and serial dilution in rows or columns. Minimize repetitive tasks and eliminate manual pipetting errors
- **Unique, easy-change dispense head developed by Apricot Designs** / Cover all volume range with one unique versatile instrument
- **Automated tip changes** / Unique and flexible EZ-Load tip technology
- **Intuitive graphical use interface using iPad® controller or PC controller option** / for quick start up and fast programming
- **Small footprint** / Conserves bench space and fits easily into suitable sized hoods
- **Microplate stacker and robotics ready** / Readily integrates into an automation work cell

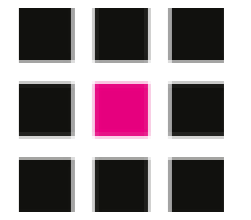


PERSONALPIPETTOR in motion

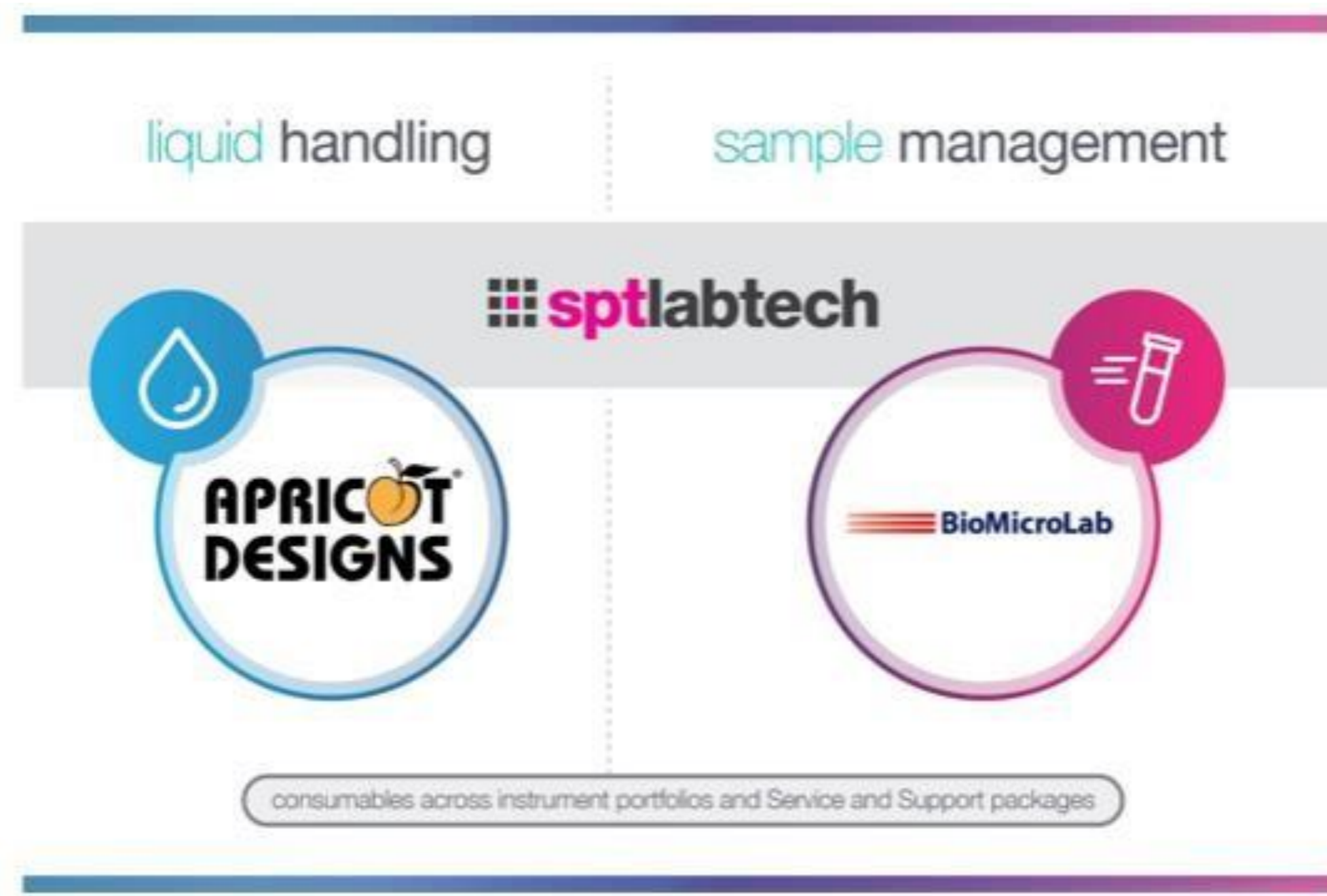


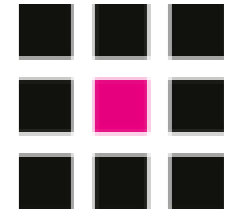
[Video DEMO Click Here !](#)



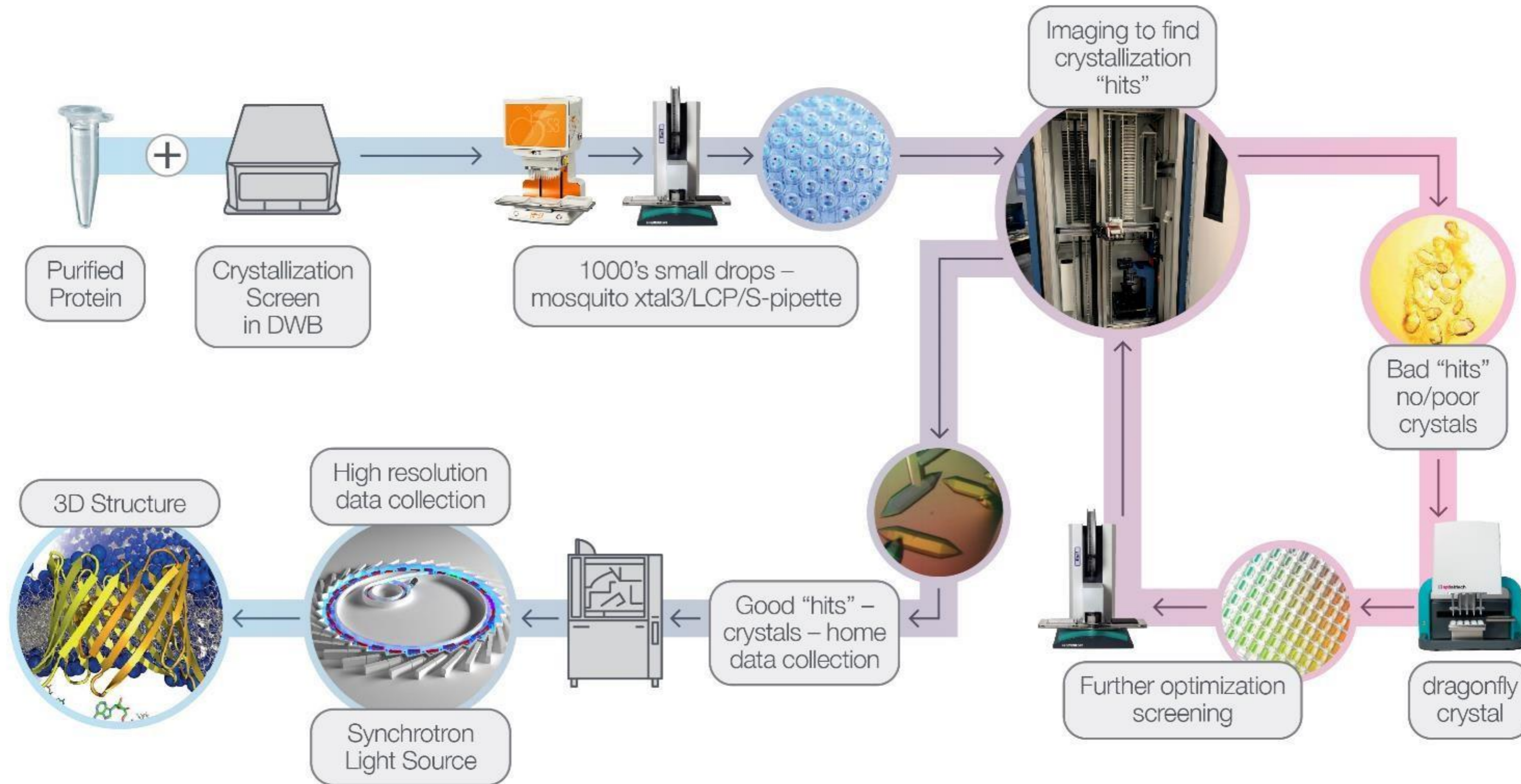


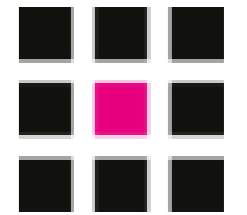
WORKFLOW SOLUTIONS



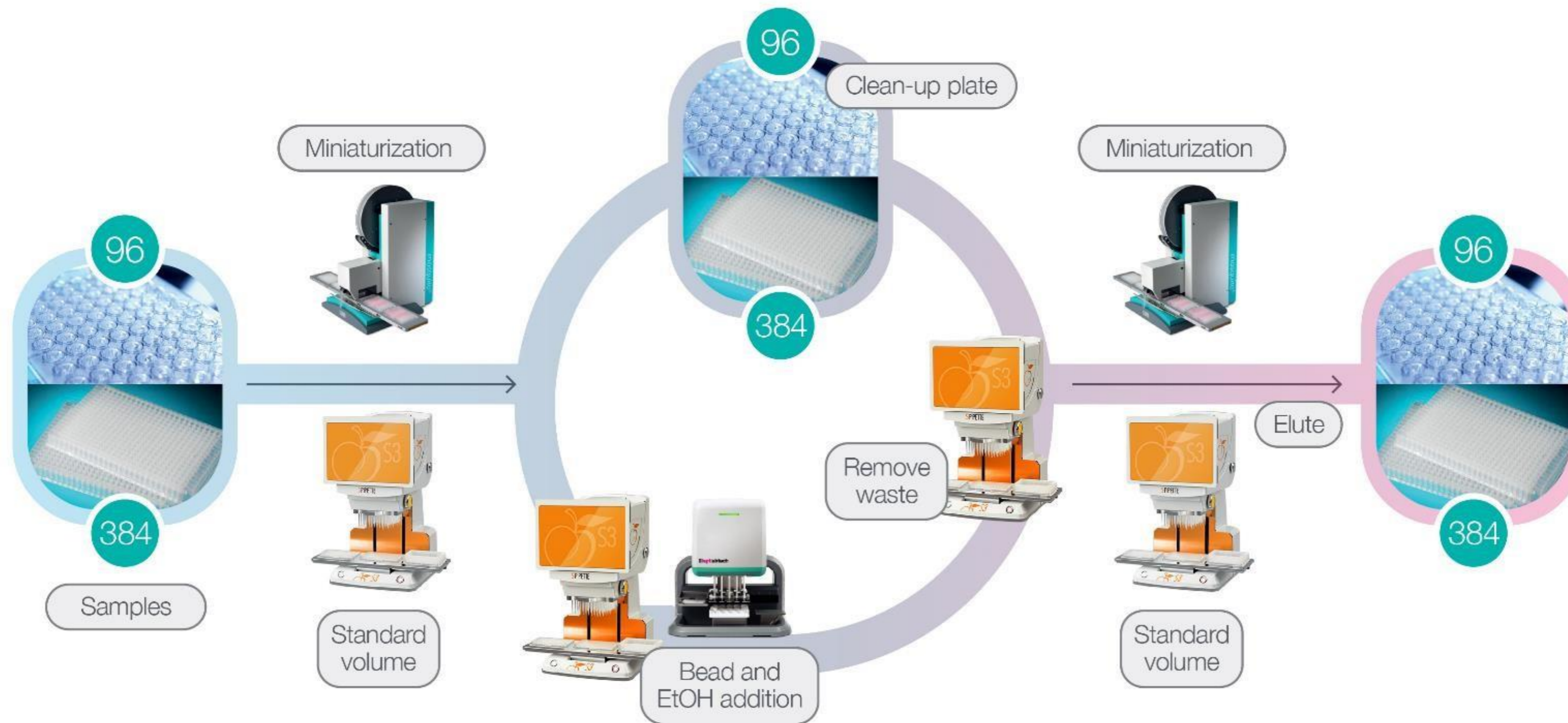


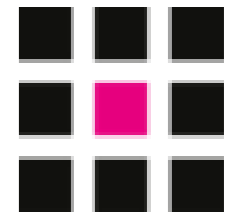
how do we fit your crystallography workflow?



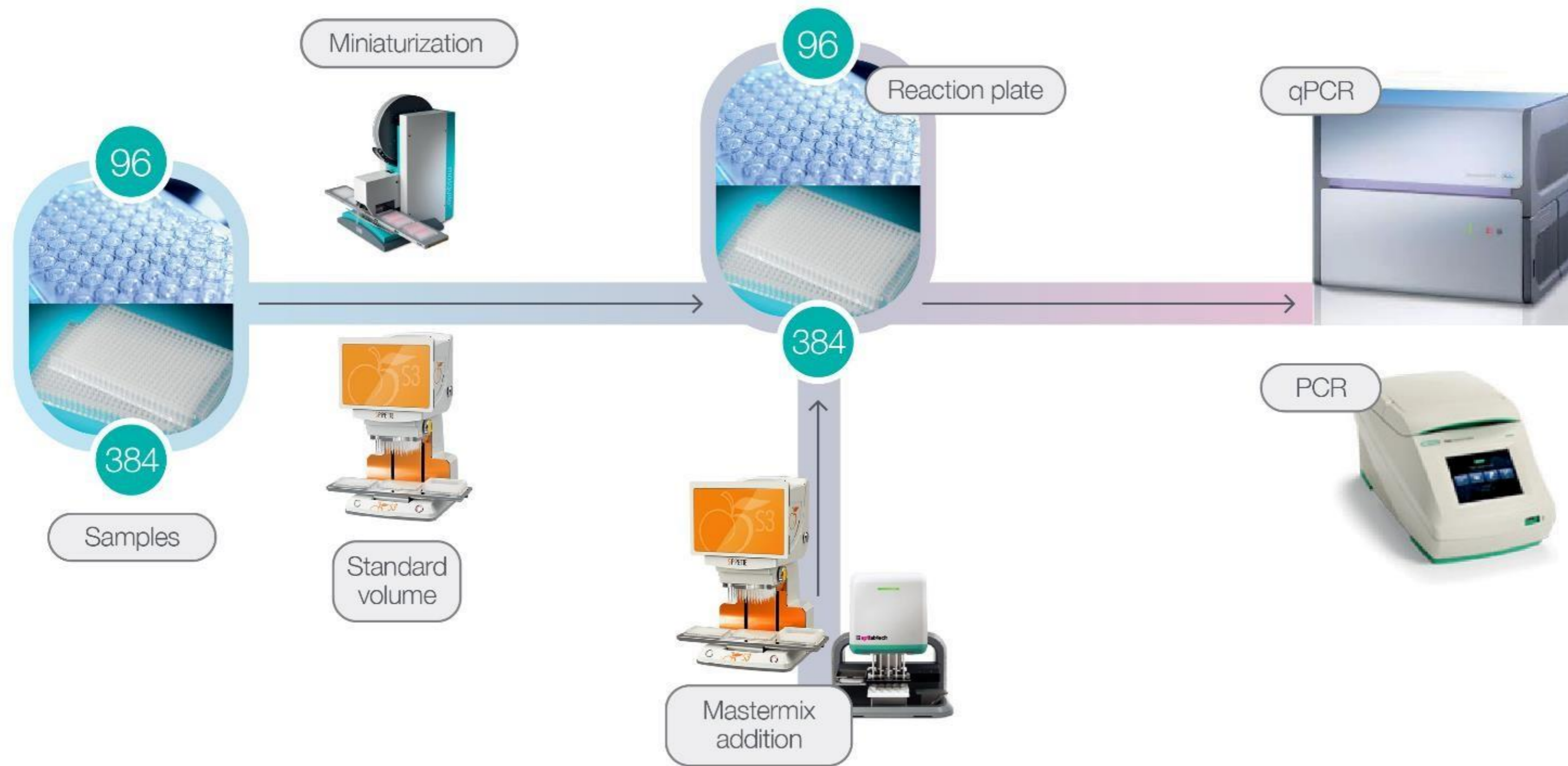


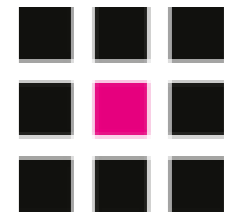
genomics Bead clean up



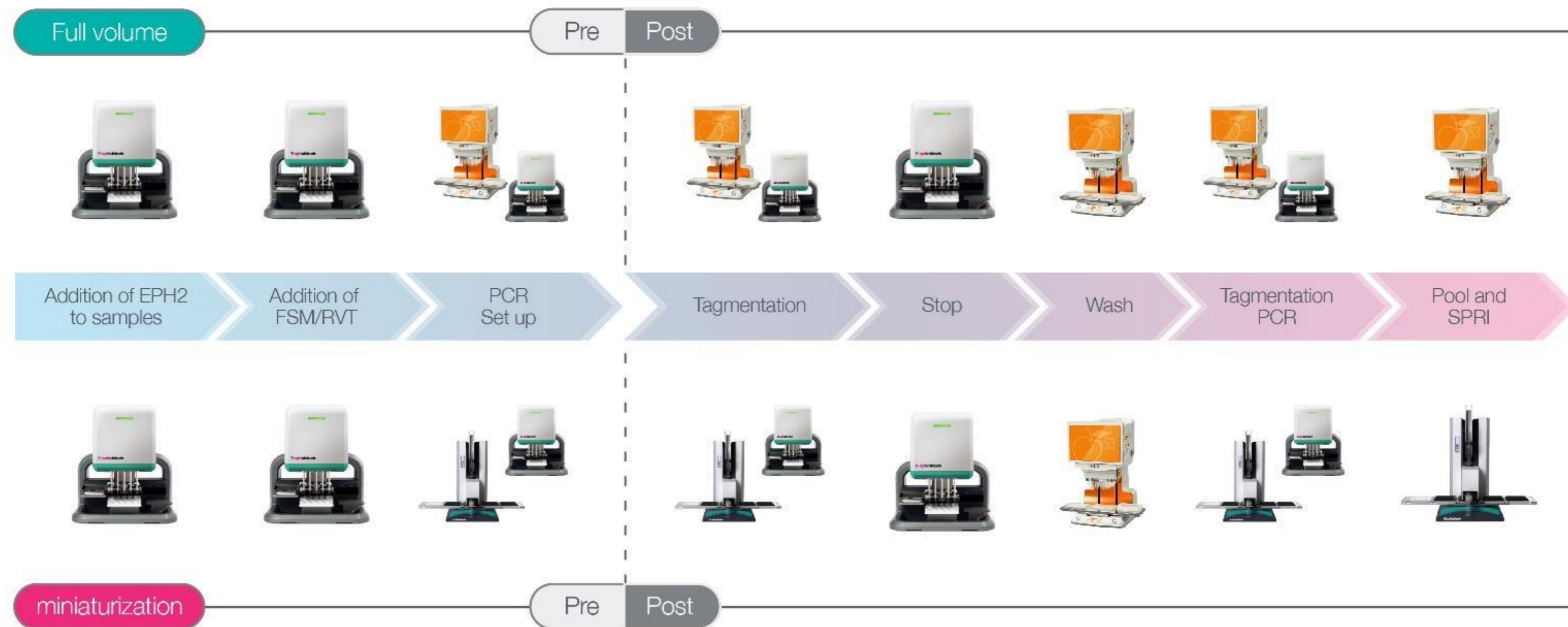


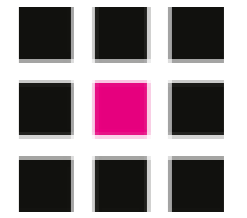
genomics PCR/qPCR



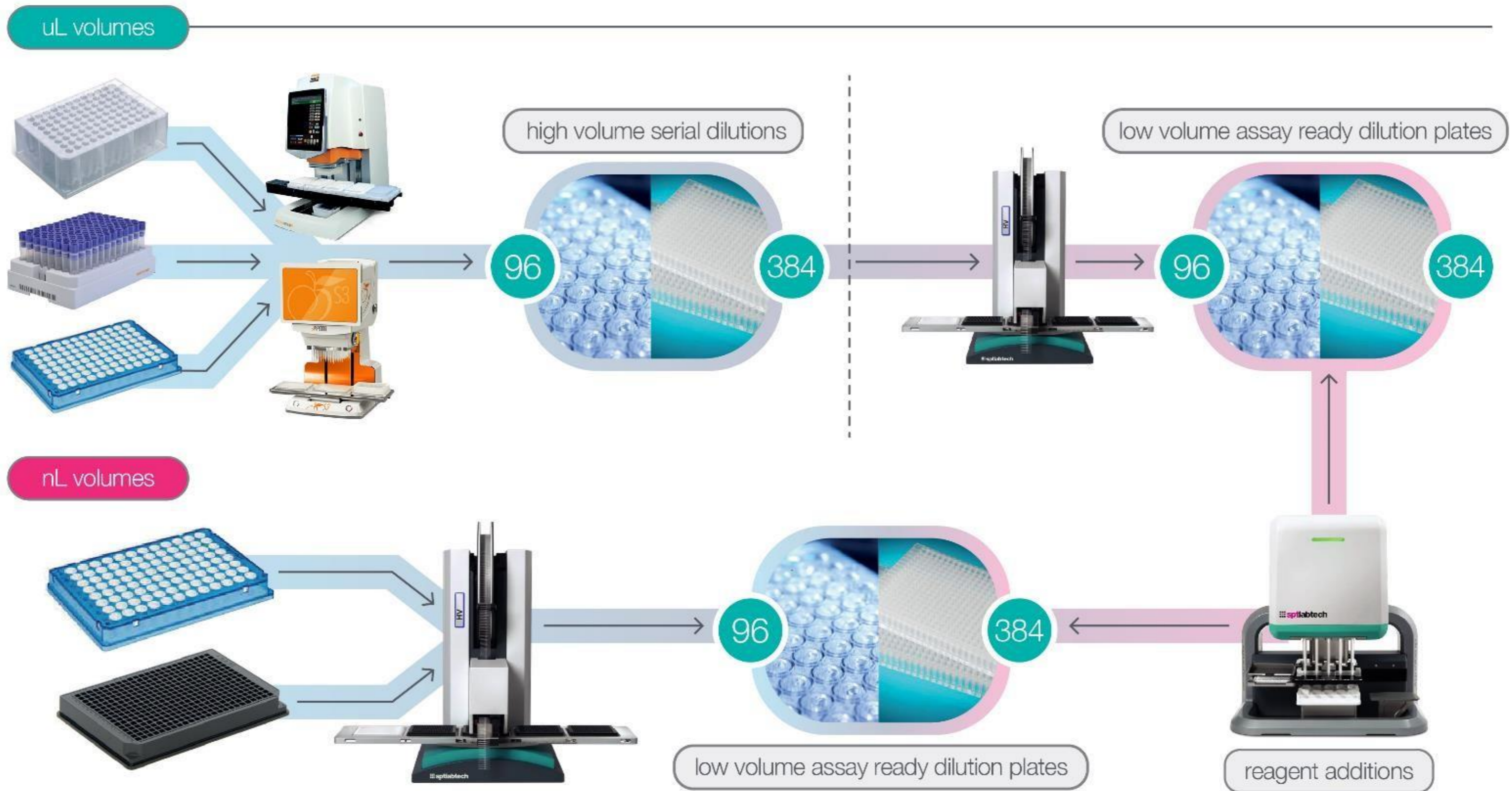


NGS COVIDSeq Workflow

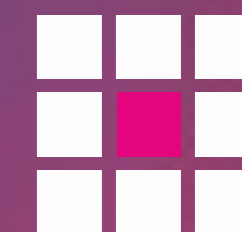




Serial dilution



Questions?



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