







# INNOSMART® MFS

Multi-Functional Fluid System

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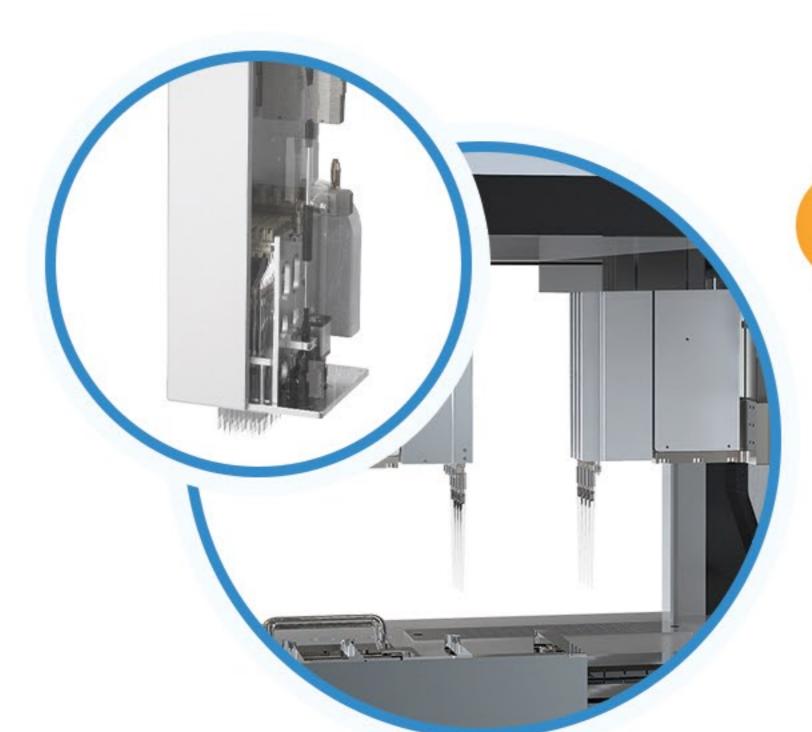
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### INNOSMART® Multi-Functional Fluid System (MFS)

### INNOSMART® MFS

INNOSMART® MFS is an innovative, modularized system that seamlessly integrates sample preparation automation with advanced analytical testing and analysis. Boasting flexibility, versatility, and full customization, it offers a comprehensive workflow solutions for many different scientific applications. MFS provides a comprehensive array of method and protocol libraries encompassing nucleic acid synthesis, genomics analytics, transfection, cell culture, purification, and numerous other applications.



### 8-channel and 96-channel Pipetting Modules

- Independent 8-channel spacing control for greater volume accuracy
- Advanced automatic liquid detection and tracking functions for superior performance



### Decapper Array

Compatible with:

- · 2-50mL centrifuge tubes
- 0.5–5mL cryotubes
- 2-50 R vials
- 1–2mL cryotubes
- Many more



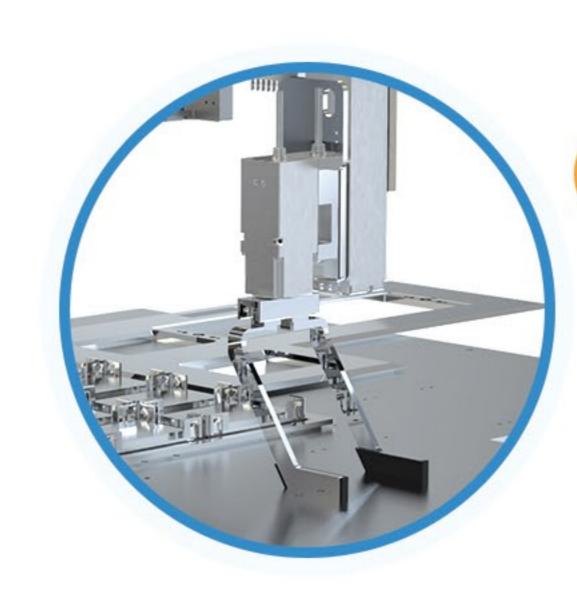
### Agile Robot

For highly efficient consumable transfer and operation



### Conveyor Module

- Easily integrates with the MFS module and a diverse array of devices and accessories
- Streamlined, automatic cleanup of consumables for enhanced efficiency
- Ensures a sterile environment, guaranteeing superior and reliable results



### Robotic Gripper

Agile and precise consumable transfer



### Shaker

0−1,500 rpm & 0−95°C temperature control



### Pumping Assembly

Precise and smooth automatic pumping and liquid control system



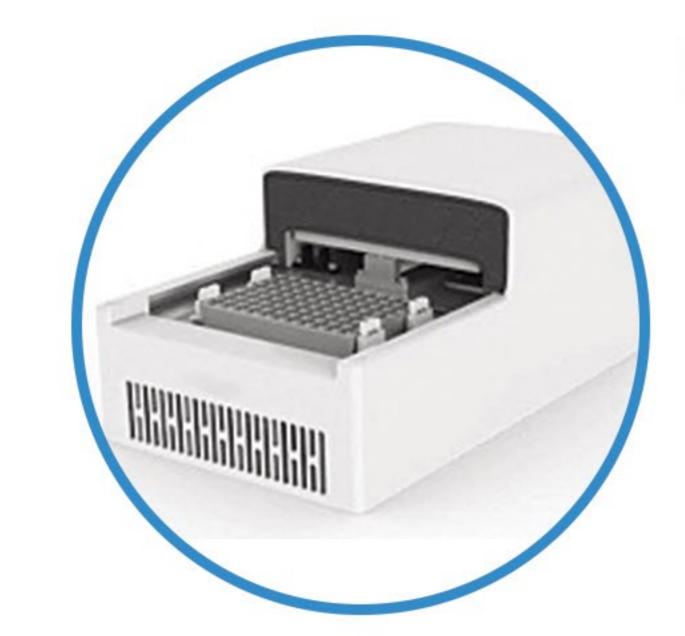
### Centrifuge

- Up to 4,000 g force
- High throughput of 16 tubes (50mL)
- Temperature control range of 4-40°C



### 0 Vacuum Filter

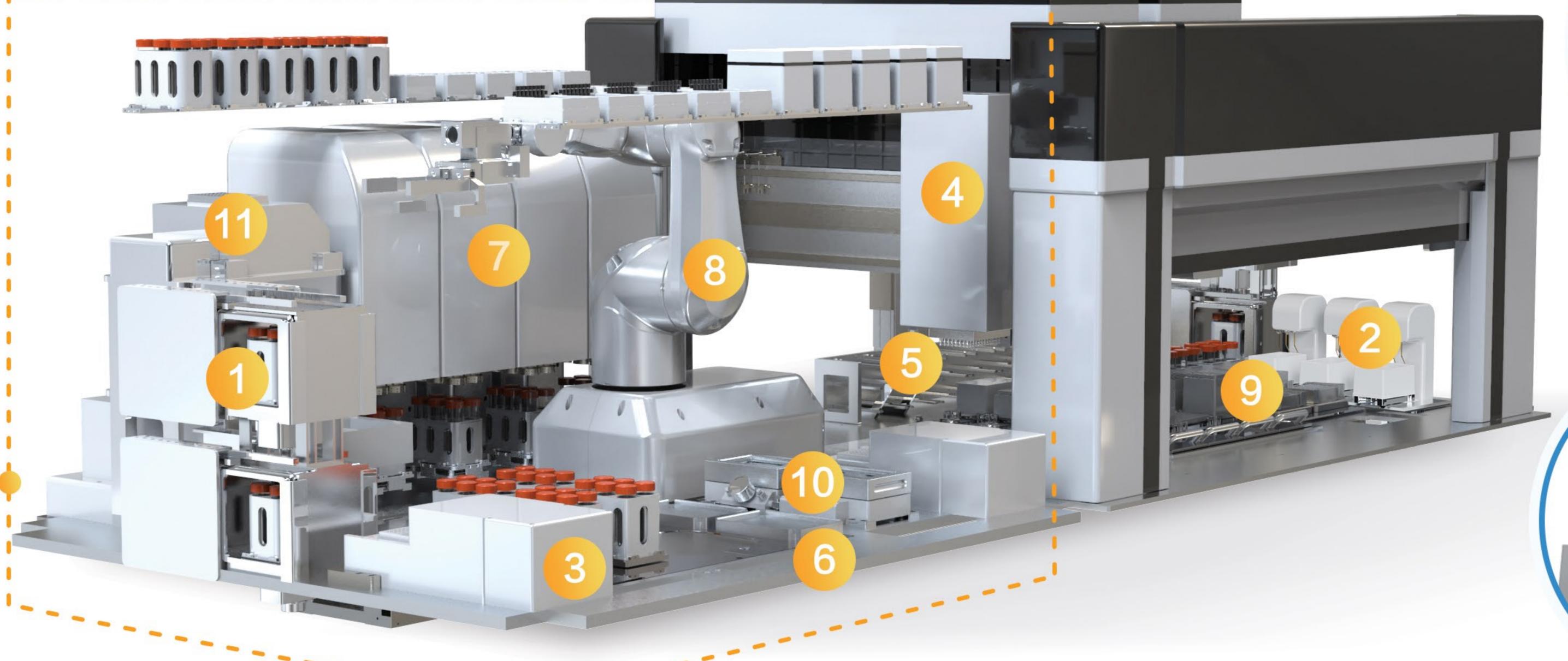
Vacuum operation of plates and tubes



### Instrumentation Modules

Compact footprint accommodates multiple miniaturized devices and analytical instruments, such as PCR machine, chip reader, cell imager, cytometer, protein assay plate reader, infrared and UV devices, and various other modules

Flexible configuration based on process needs.





### Metallic Bath

Well plate cooling between 2-8℃ and heating up to 95℃

# MFS System – Versatile and Customizable Modular Deck Configuration

#### Modules & Accessories



#### Over 20 Different Categories of Decappers

Centrifuge Tubes: 2mL / 15mL / 50mL

· Flasks: 125mL / 250mL

· Cryo & Sample Tubes: 0.5mL / 1mL / 2mL / 5mL

· Chromatography & Mass Spectrophotometry: All sizes

Eppendorf Tubes: 1mL / 2mL

· Vials: 2 - 50R



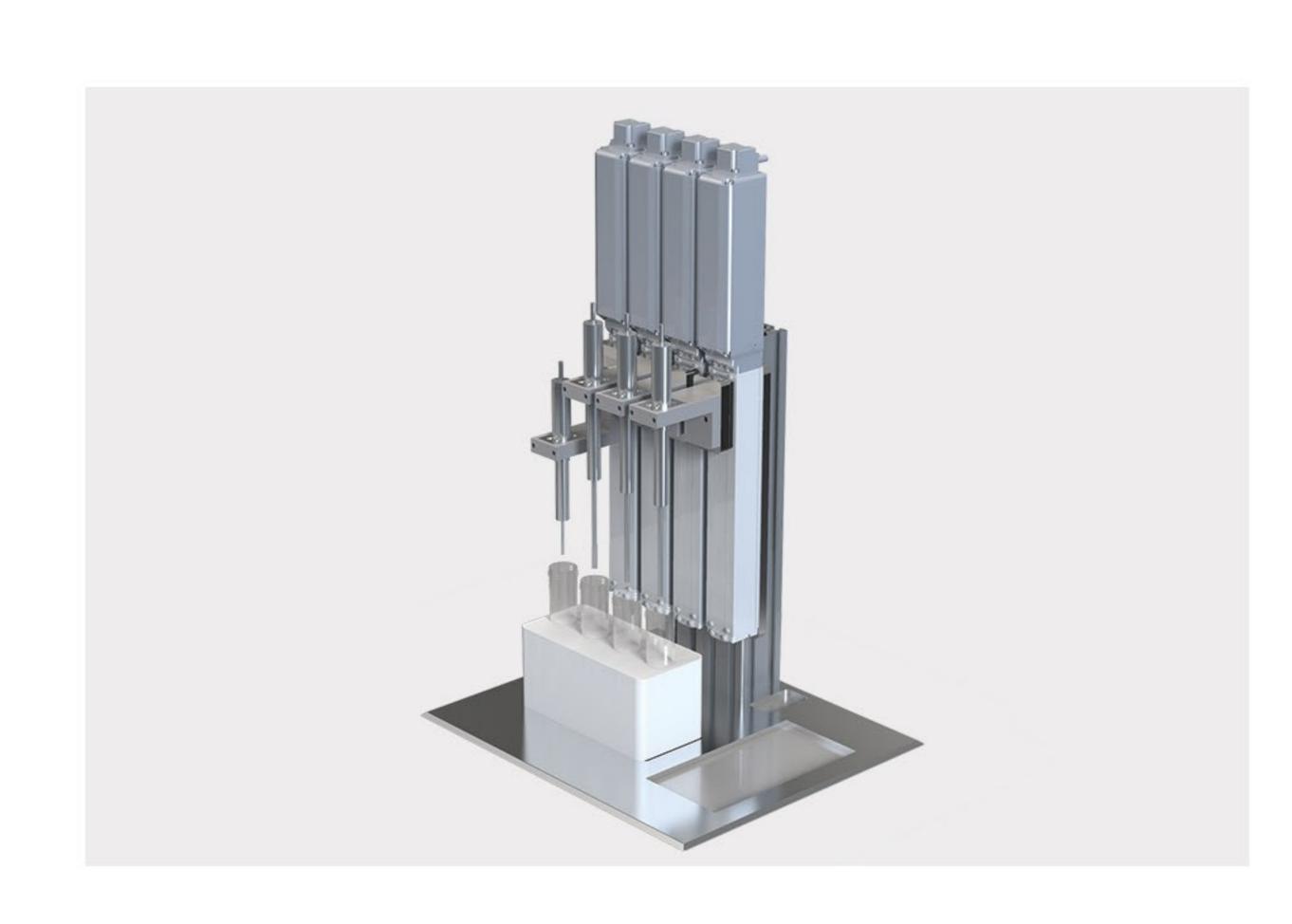
# High Viscosity Liquid & Solid Powder Dosing Module

- Accurate dispensing of solid powder within the range of
   1 5,000mg with an error margin of less than 3%
- Dedicated closed loop weighing system
- Independent solid grinding component
- Precise dispensing of high viscosity liquid with an error margin of less than 3%
- Environmental control system



### Over 30 Analytical Devices

- INNOMET Plate Reader or third party
- INNOMET Concentration Decive or third party
- INNOMET Cell Counter or third party
- INNOMET Cell Imager or third party
- INNOMET PCR or third party
- INNOMET UV or third party
- High-Content Imager or third party
- Integration capability with any automation ready instruments in the market



#### Flexible pH Detection and Calibration

- Multi-channel concurrent pH detection and calibration
- Automatic cleaning and dry-up of pH probes
- Automatic calibration of pH sensors



#### Multiple Methods of Filtration and Purification

- · Combined unit of injector and filter
- Chromatography unit
- Pressurized filter unit
- Gravity filter unit

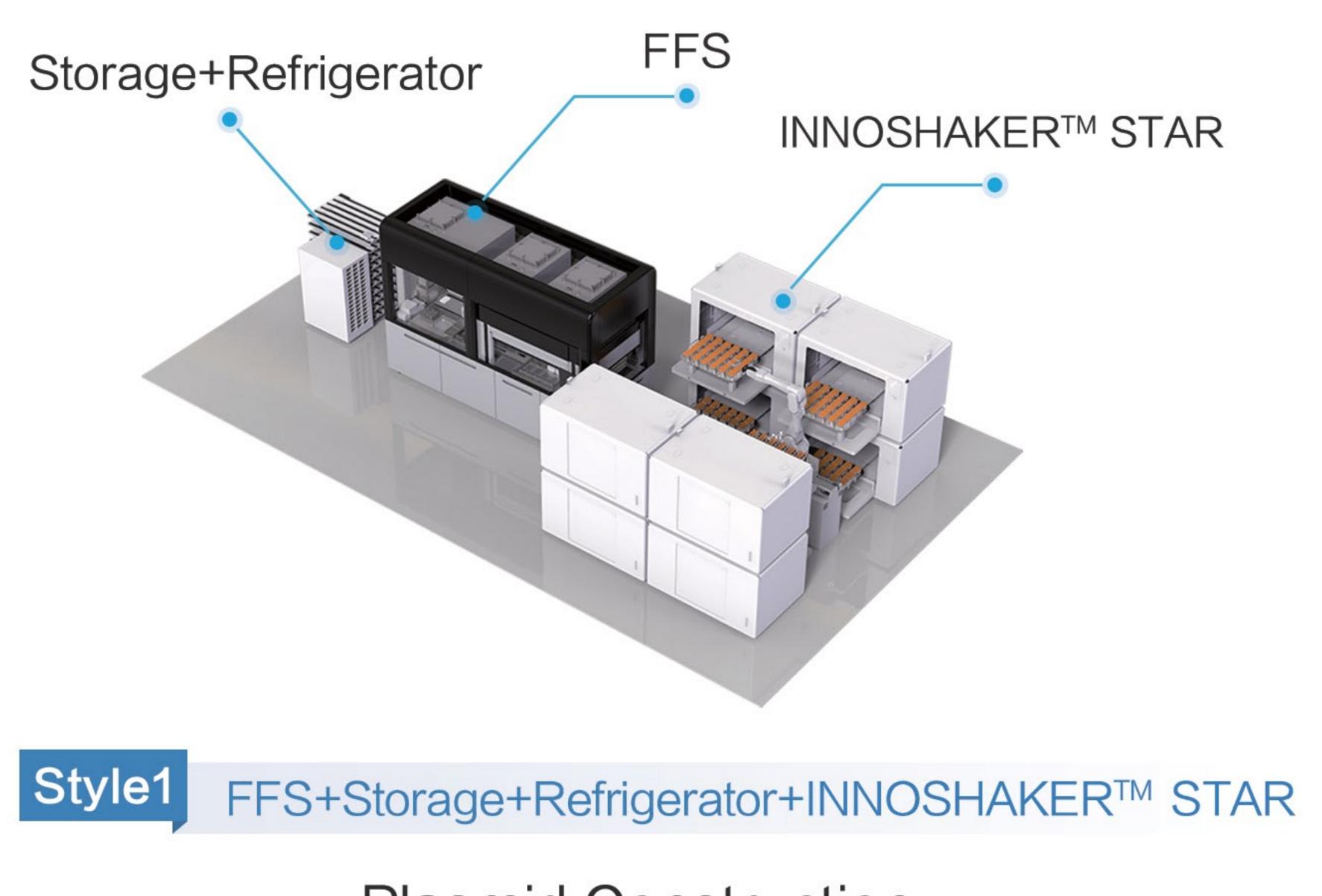


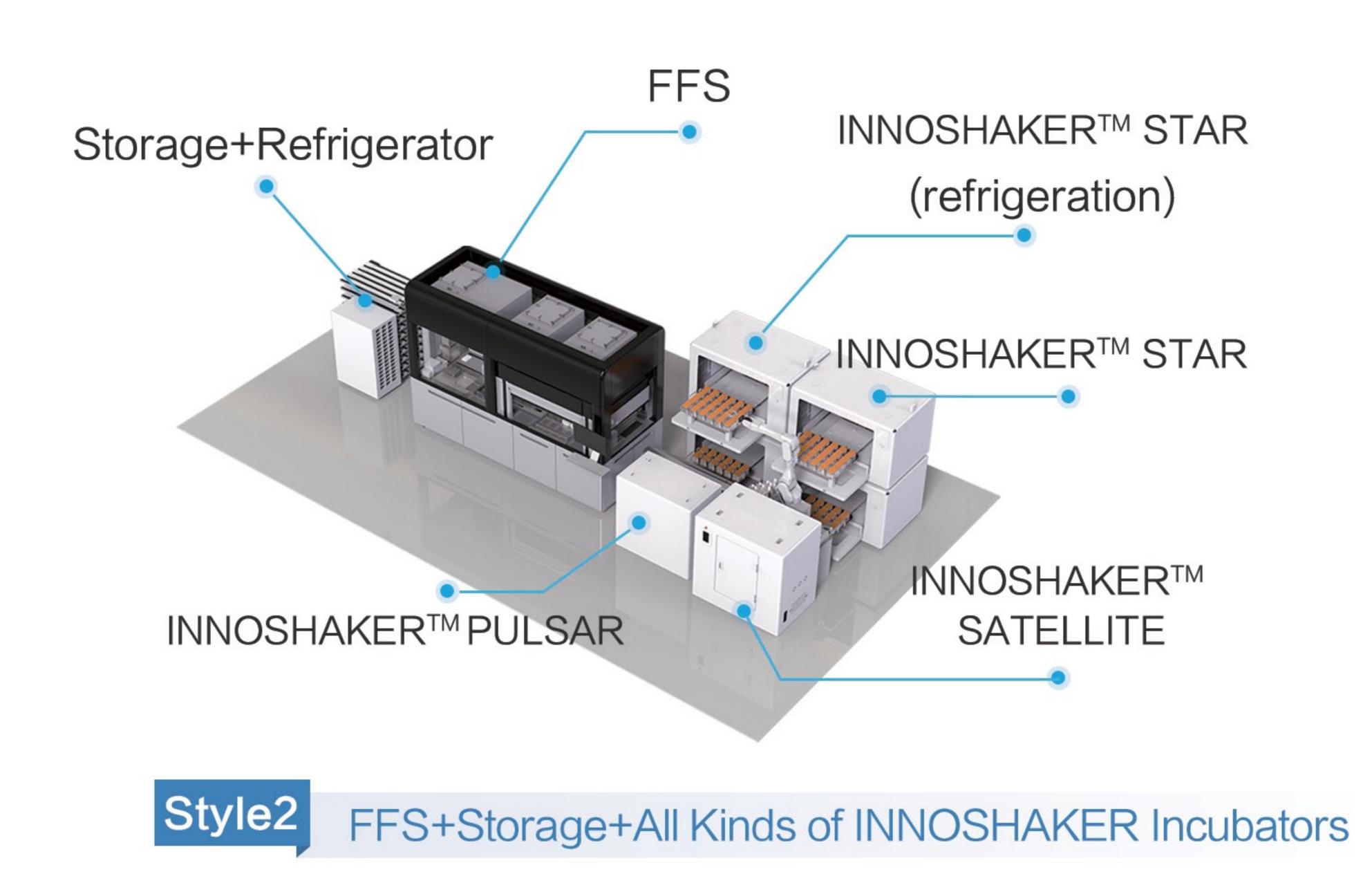
# Multiple Shaker Modules with Temperature Control

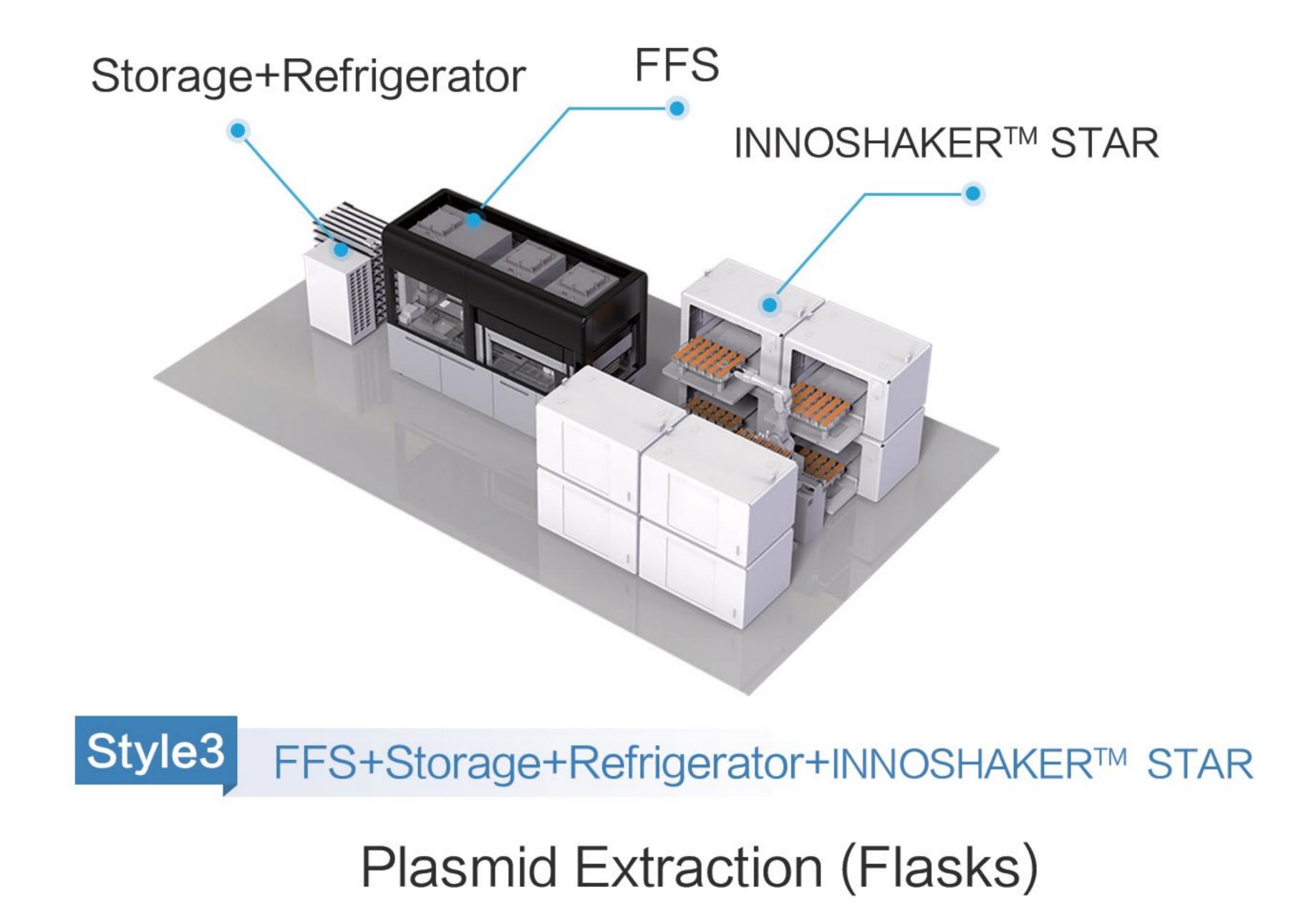
- Well plates
- Centrifuge and culture tubes of any sizes
- Flask sizes up to 250mL
- · Solid powder weighing up to 5,000mg

### Pre-Configured Application Systems

#### More than 30 applications







Plasmid Construction

Large Scale Cell Incubation

Storage+Refrigerator

INNOSHAKER™ STAR

INNOSHAKER™
SATELLITE

Vacuum Filter\*2
Metallic Bath\*2

Calliper
LC-MS Instrument
HPLC\*2

Style4

FFS+Storage+Incubators+Various Types of Analytical Instruments

Style5 FFS+Storage+Refrigerator+Analytical Platform

SATELLITE FFS

Cart for Liquid Storage

Storage

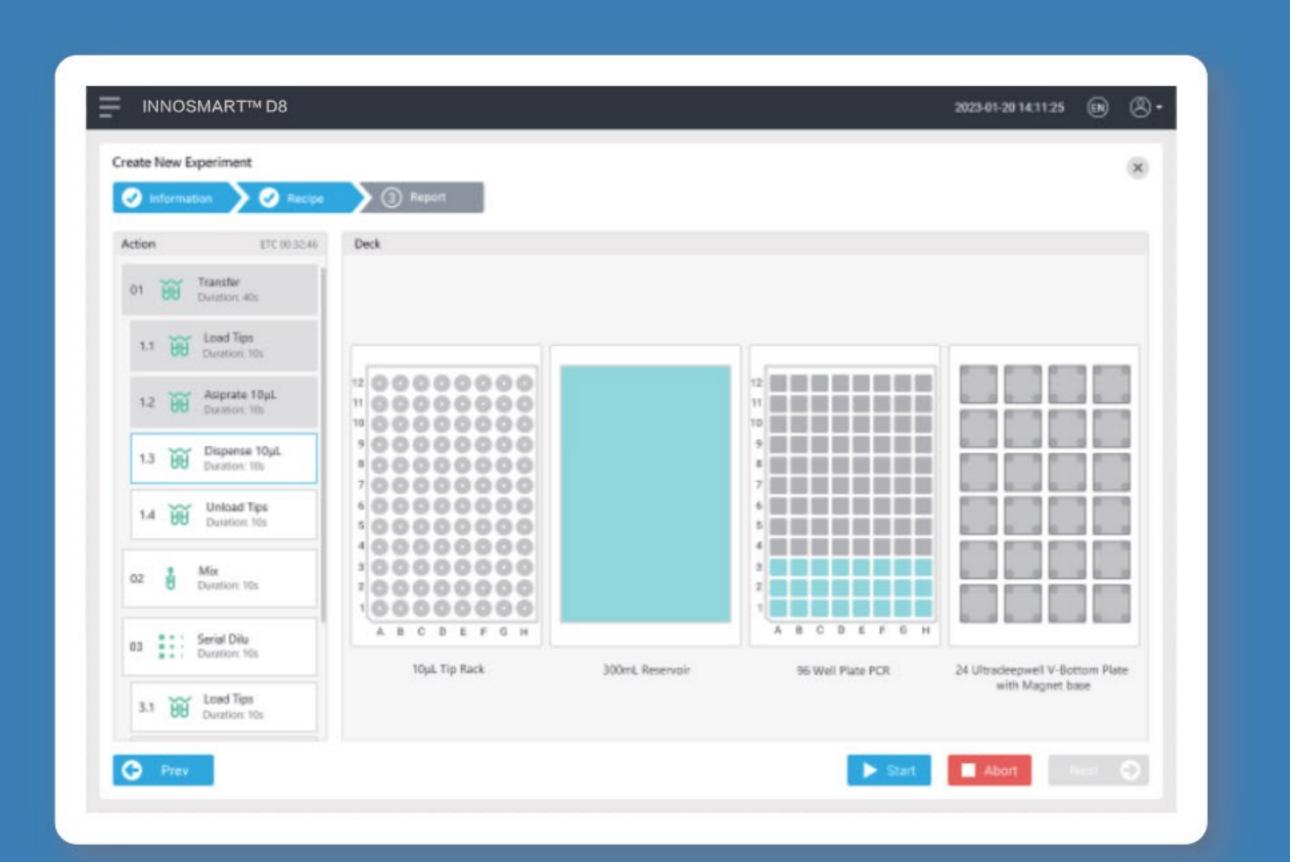
FFS+Storage+INNOSHAKERTM SATELLITE

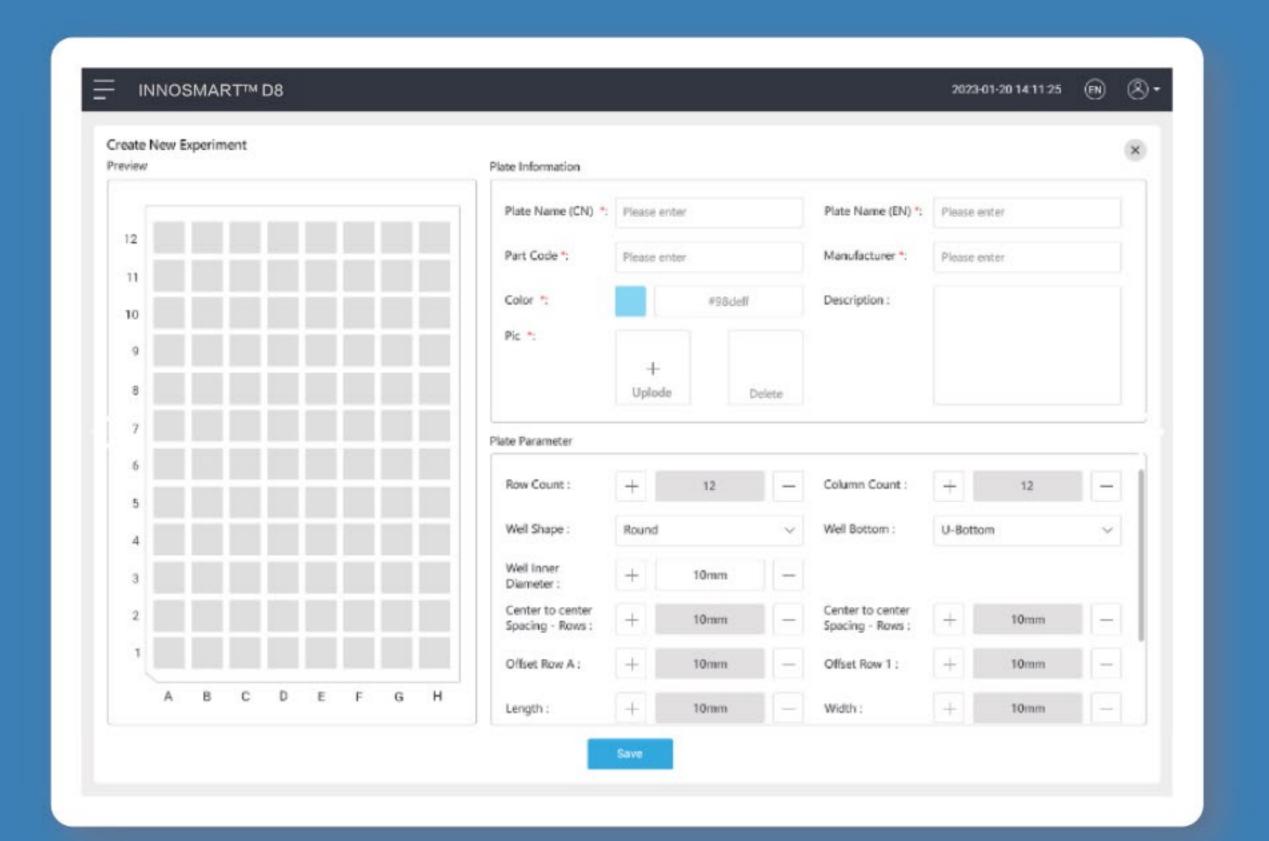
INNOSHAKER™

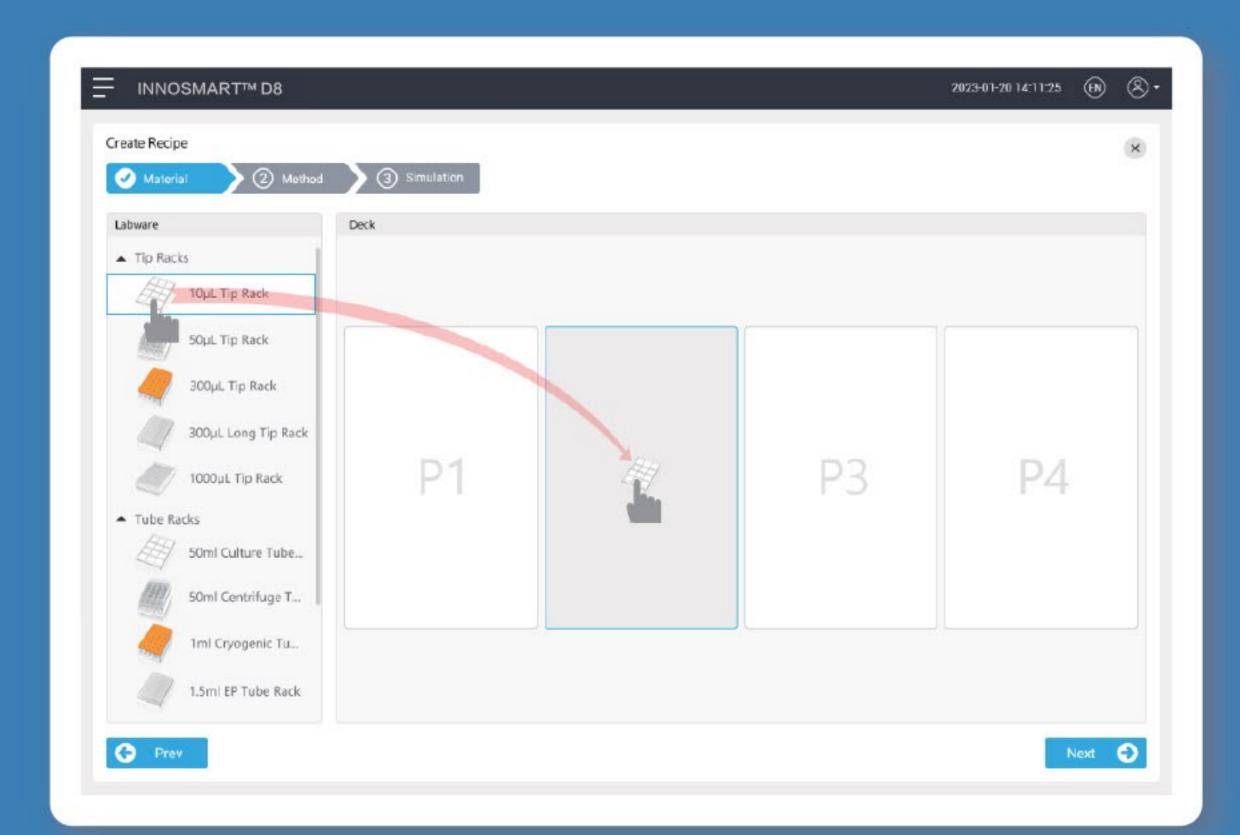
End to End Screening Platform

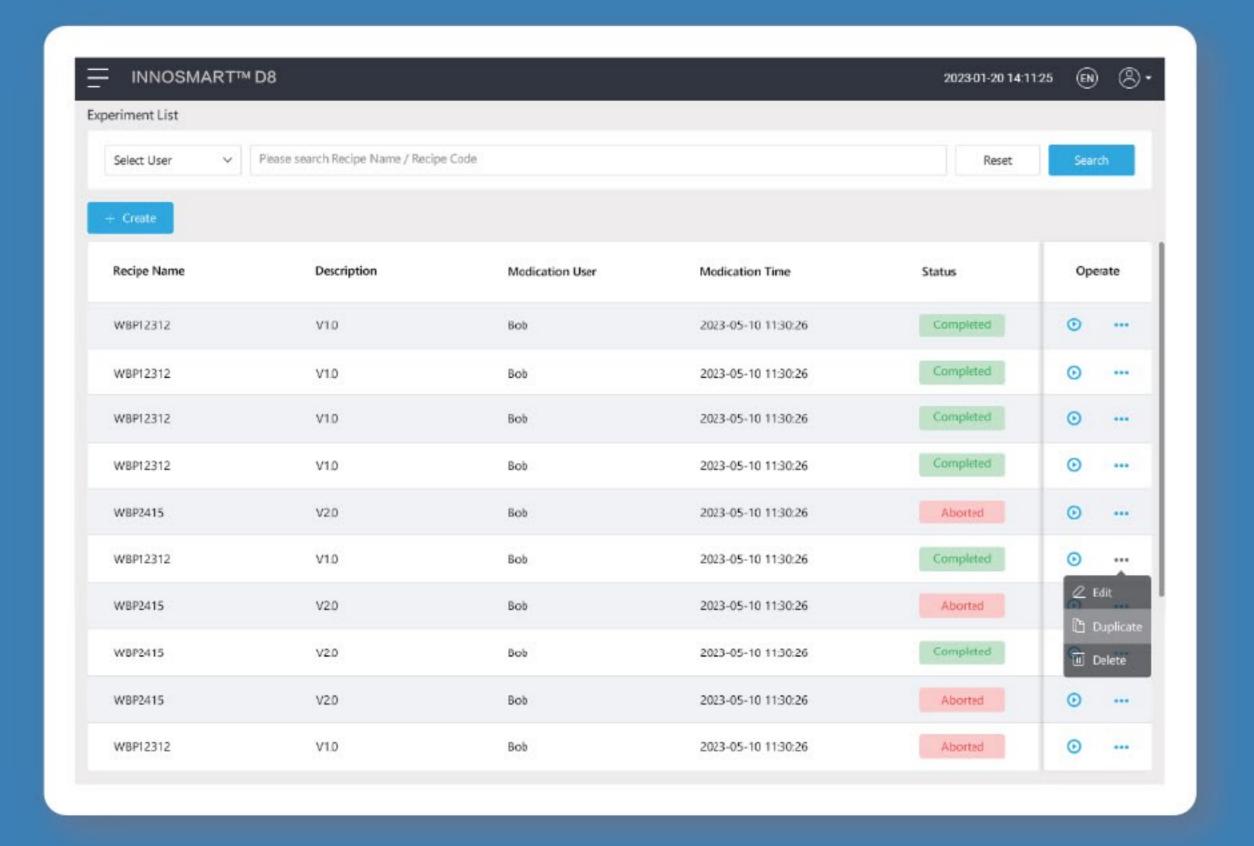
Integrated High-Throughput Analytical Platform Toxicology & Pathological Testing System

### Integrated Software System









### Workflow Editing

- Standard process library
- Graphical process editing and optimization
- Real-time process monitoring and control
- Agile evolution of new processes based on templates

# Equipment Monitoring and Operation

- Fluid material feeding
- Solid consumable feeding
- Consumable status management
- Historical liquid handling data
- Historical sample transfer data
- Module motion monitoring

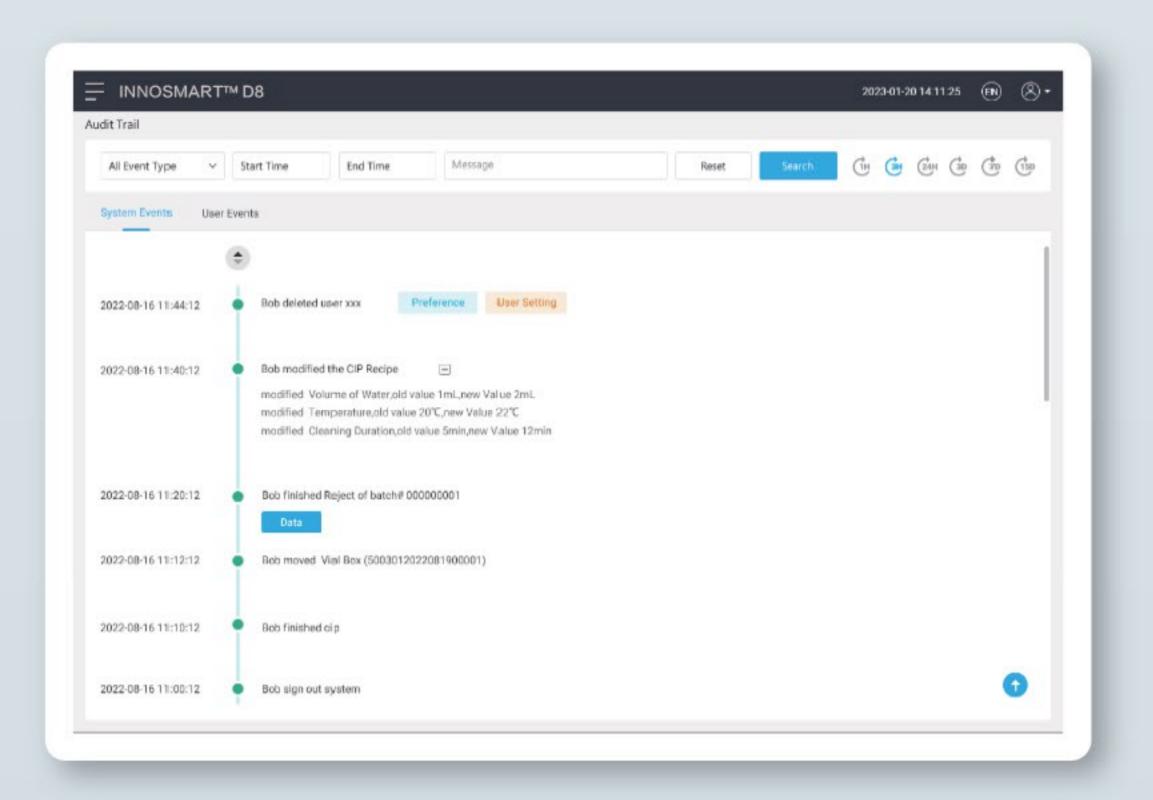
### Equipment Calibration(Manual)

- Fluid unit calibration
- Motion unit calibration
- Agile process test

### Data Storage

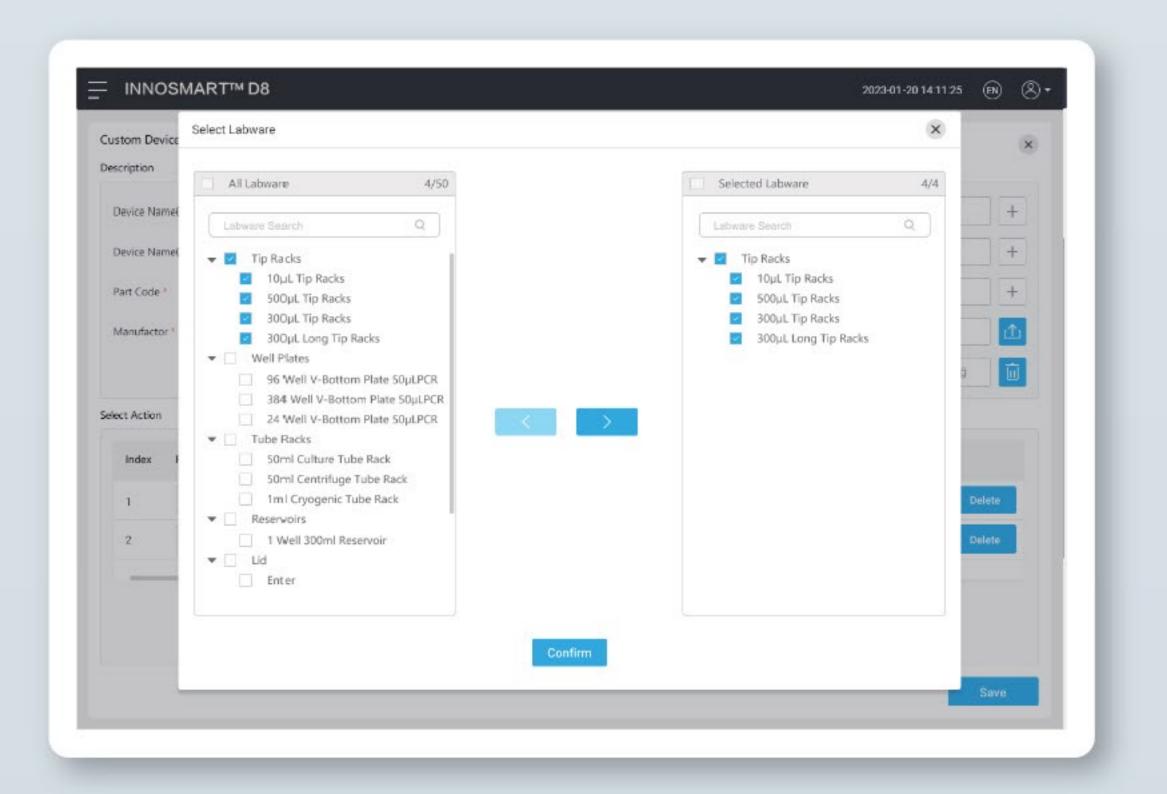
- Analytical sample data
- Operation data





### Log Notification

- Login Notification
- Consumable loading information
- Operation event information
- Equipment warning information
- Equipment error information



### System Setting

- · Personnel access control
- System parameter configuration