VELSSON
AN INNOVEL COMPANY

Empower Laboratories.
Inspire Innovation.

Tailored Workflows

Accelerated Breakthroughs

Reliable & Compliant

Uncompromising Precision

Optimized Value

Partner-Driven Success and Integrity

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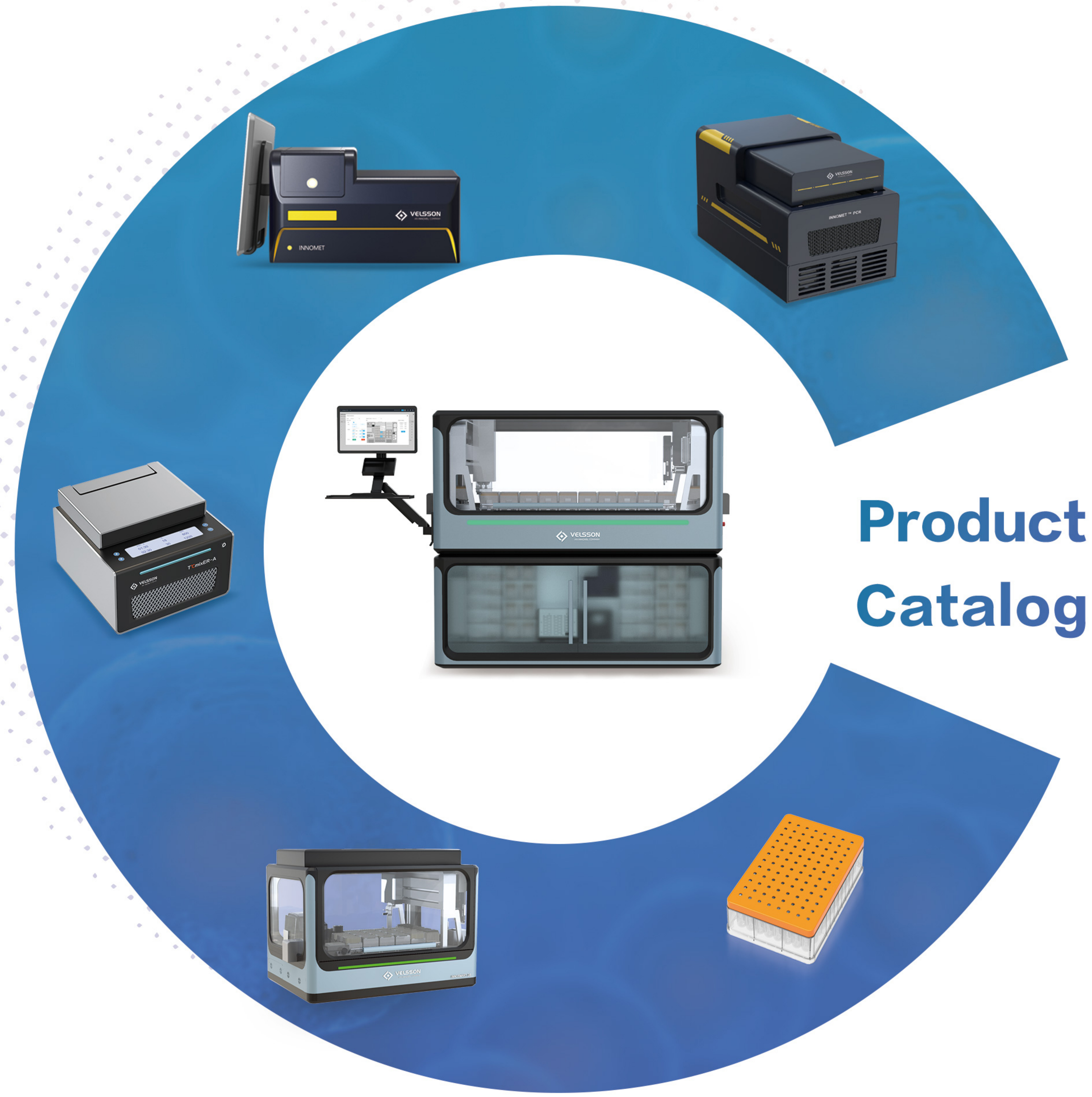

Product Catalog

VELSSON

END-TO-END SOLUTION PROVIDER

VELSSON
AN INNOVEL COMPANY

Velsson

Lab automation solutions provider

Mission

Making Laboratories Smart and Simple

Vision

Become the top tier sustainable and collaborative enterprise.

150+
Global Team Members

400+
Patents

20,000+ m^2
Suzhou Headquarters (Area)

6,000+ m^2
Shanghai Science & Application Center (Area)

COMPANY INTRODUCTION

Velsson Technology is a high-tech company committed to providing intelligent and automated solutions across industries worldwide, helping partners overcome bottlenecks in production scale, quality consistency, and cost-effectiveness.

Velsson adheres to a path of specialization and continuous innovation, striving for excellence to lead the industry. With in-house R&D and fully owned core technologies, it has successfully launched 30+ standardized products.

Velsson delivers high-performance standard products and highly customized solutions in fields such as drug discovery and development, synthetic biology research, cell and gene therapy, and clinical diagnostics.

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Applied Scope

Application scope

Traditional laboratories in life sciences and pharmaceuticals often face practical problems during R&D and production:

Velsson has built a core technology system with fully independent intellectual property through in house R&D and launched end to end intelligent and automated solutions that cover the entire life science and pharmaceutical industry chain.

These solutions drive a revolutionary leap for traditional laboratories, delivering significant results in three key areas: scale up, consistency, and cost reduction with efficiency improvement.

Drug discovery & development solutions

End to end preparation system INNOSMART® MFS
Integrates expression amplification, purification, analytical testing, sample preparation, and library construction (genes, cell lines) to enable full process operation.

Intelligent liquid handling system INNOSMART® SFS–Plus
Integrates expression amplification, purification, and gene sequence assembly, enabling full process operation.

Monoclonal picking system INNOSMART® MONOCLONE
Integrates plating, culture, and picking into a single workflow.

Incubator series INNOSHAKER™
For large scale, fully automated, efficient, and safe unattended culture of flasks, tubes, and plates.

General instruments and consumables
Protein purification systems, benchtop liquid handling workstations, chip based concentration meters, imaging systems, and routine lab consumables.

Bio applications & synthetic biology solutions

End–to–end preparation system INNOSMART® MFS
Same integrated capabilities for full process operation in bio applications and synthetic biology.

Intelligent liquid handling system INNOSMART® SFS–Plus
Integrates expression amplification, purification, and gene sequence assembly for full process workflows.

Incubator series INNOSHAKER™
For large scale, fully automated culture of flasks, tubes, and plates with high efficiency and safe, unattended operation.

General instruments and consumables
Protein purification instruments, benchtop liquid workstations, chip based concentration meters, imaging instruments, and routine lab consumables.

Cell & gene therapy, diagnostics

End to end preparation system INNOSMART® MFS
Integrates expression amplification, purification, analytical testing, sample preparation, and library building (genes, cell lines) for full process operation.

Incubator series INNOSHAKER™
For large scale, fully automated, high efficiency, safe, unattended culture of flasks and screening plates.

Cell culture vessel series INNOVESSEL™
For cell expansion in early R&D screening, process optimization, and later stage scale production.

General instruments and consumables
Sterile dispensing systems, temperature controlled shakers, protein purification systems, and routine lab consumables.

Clinical diagnostics research

Intelligent liquid handling system INNOSMART® SFS–Plus
Integrates expression amplification, purification, sequence assembly, library construction, and sample prep for detection, enabling full process operation.

General instruments and consumables
PCR instruments, chip based concentration meters, automatic labeling and barcode reading devices, and routine lab consumables.

Smart Management System software platform

Standard software

Customized software

- Create an integrated lab layout to break down physical barriers
- Device driver management, offering unified interfaces for device control and data capture
- Process/formula management enabling standardized workflow and rapid optimization
- Batch scheduling and monitoring for with end–to–end, experiment–lifecycle data, and audit trails.

Smart-Automation System

Smart Fluid System (8-Channel Workstation)

INNOSMART® D8

Product Overview

INNOSMART® D8 is a flexible 8-channel automated liquid handling workstation that integrates multiple functions for complex fluid workflows.

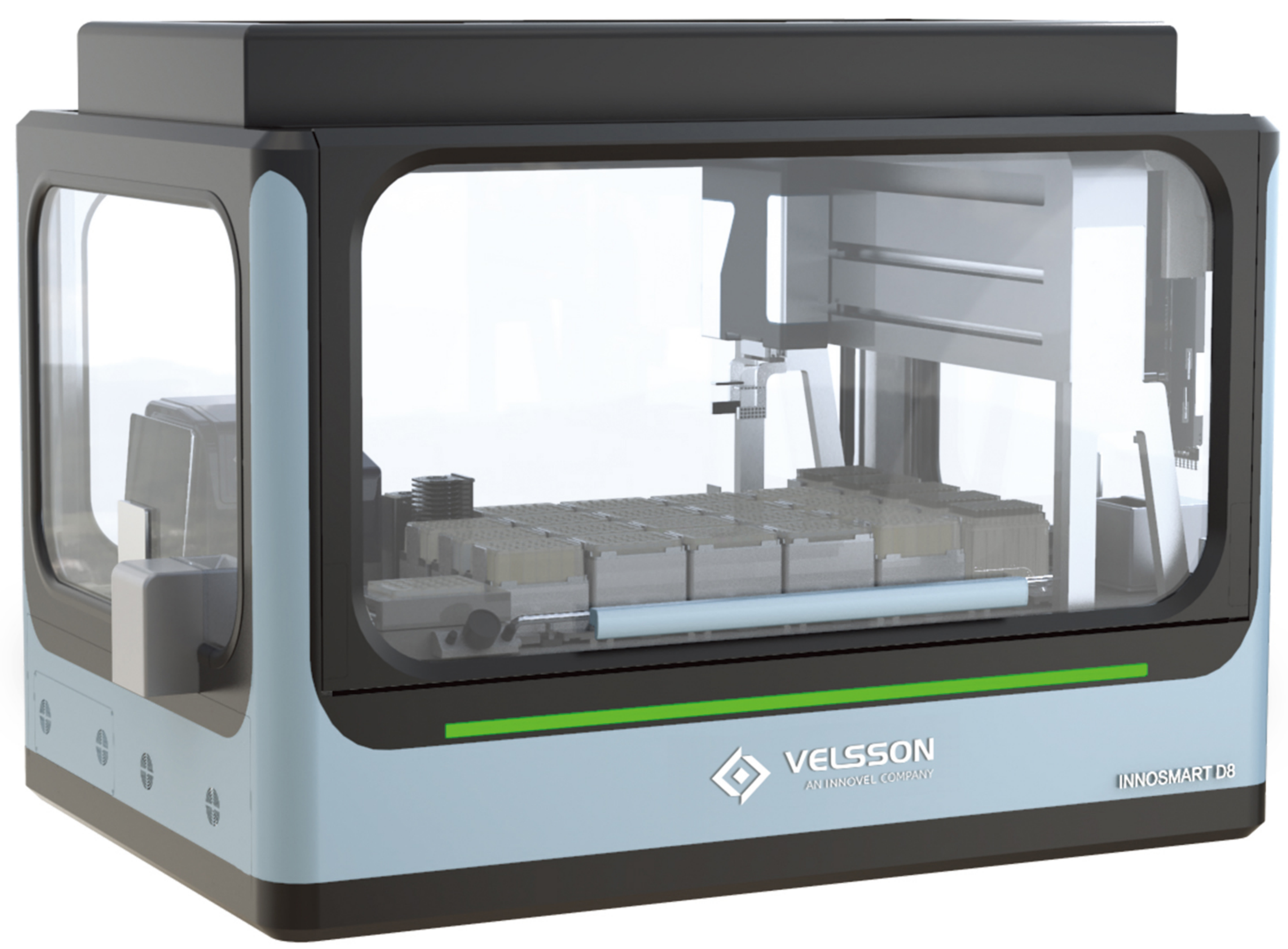
Specifications

Without a laminar flow hood,
1430 mm (W) × 990 mm (D) × 950 mm (H)   56.3" (W) × 39.0" (D) × 37.4" (H)

With a laminar flow hood,
1430 mm (W) × 990 mm (D) × 1070 mm (H)   56.3" (W) × 39.0" (D) × 42.1" (H)

Features

- **Small Footprint:** Compact system.
- **Modular Design:** Integrated modular design supports end-to-end workflow automation.
- **Durable Build:** Enhanced durability with stainless steel or ceramic surfaces on critical components.
- **Standard Axes:** Features standard X - Y - Z motion axes and high-precision pipetting units, mainte-nance-free operation.
- **Flexible Workflow:** Allows flexible workflow editing for easy operation and validation of processes.



VEL-BP-001013

Smart Liquid Handling System

INNOSMART® SFS–Plus

Product Overview

INNOSMART® SFS–Plus is an efficient, multi–station, high throughput intelligent liquid handling work platform. It builds on this product series' advantages in modular expansion and flexible configuration, enabling long duration, low intervention automated operation. It supports multiple process configurations and combinations, meets different users' various experimental needs, and provides users with a one stop intelligent process solution.

Specifications

Without a laminar flow hood,
2000 mm (W) × 990 mm (D) × 1780 mm (H)   78.7" (W) × 39.0" (D) × 70.1" (H)

With a laminar flow hood,
2000 mm (W) × 990 mm (D) × 2000 mm (H)   78.7" (W) × 39.0" (D) × 78.7" (H)

VEL–BP–001016

Features

- Up to 4 independent pipetting channels; 96 channel pipetting. Supports fully automatic operation and multiple operating modes without manual intervention.
- Optional high precision pipetting technology; supports disposable and fixed tips; compatible with 10 μL, 50 μL, 100 μL, and 300 μL tips to meet different experimental needs.
- Optional built in barcode reader for automatic plate identification and tracking, ensuring data traceability.
- Meets relevant CFR Part 11 compliance requirements.

Full–Process Preparation System

INNOSMART® MFS

Full Trace: VEL–BP–001007
Standard Trace: VEL–BP–001008

Product Overview

INNOSMART® MFS is an integrated full workflow system that combines sample supply with nucleic acid extraction, enabling highly automated sample in to result out processing.

It supports flexible configuration of modules such as sample loading, tube decapping, reagent addition, mixing, incubation, nucleic acid extraction, and plate sealing to automate up to ten process steps.

Specifications

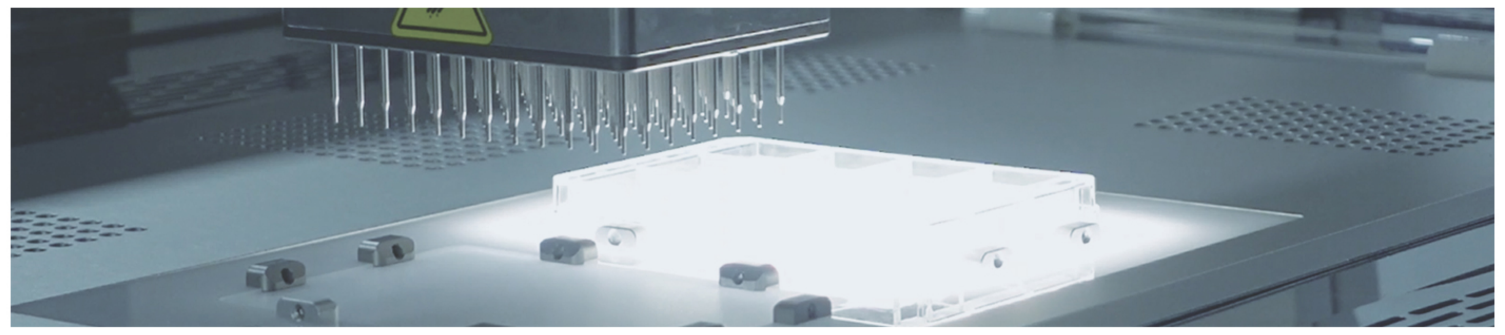
2000 mm (W) × 990 mm (D) × 1780 mm (H)

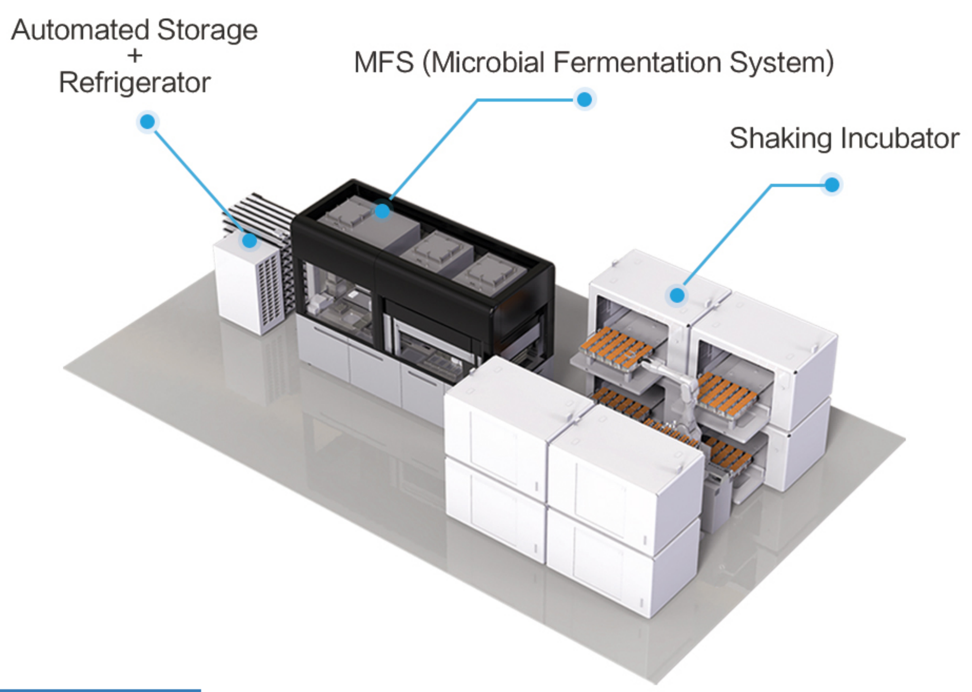
78.7" (W) × 39.0" (D) × 70.1" (H)

Features

- Provides up to 4 independent pipetting channels and 96 channel pipetting; supports automatic aspiration and dispensing without manual intervention; compatible with blood tubes, PCR plates, deep well plates, microplates, and other common labware.
- Uses high precision pipetting technology with options for disposable or fixed tips; supports 10 μL, 50 μL, 100 μL, 300 μL, and 1000 μL tips to meet different experimental needs.
- Open modular design supports flexible configuration of functional modules for multiple process combinations and applications.
- Enclosed structure helps prevent aerosol contamination and cross contamination, improving experimental safety.
- Equipped with a visual monitoring system and integrated data management functions to support traceability and audit trails in compliance with 21 CFR Part 11.
- Elegant industrial design suitable for high end laboratory environments.

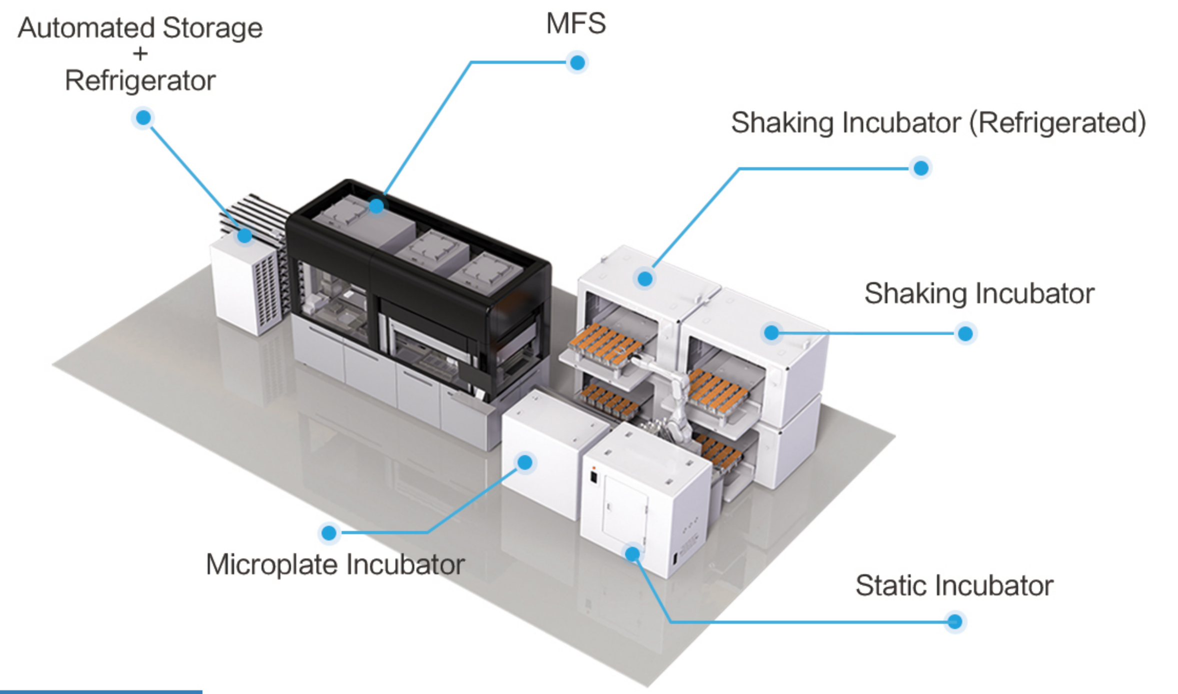
TYPICAL PROCESS SCENARIOS





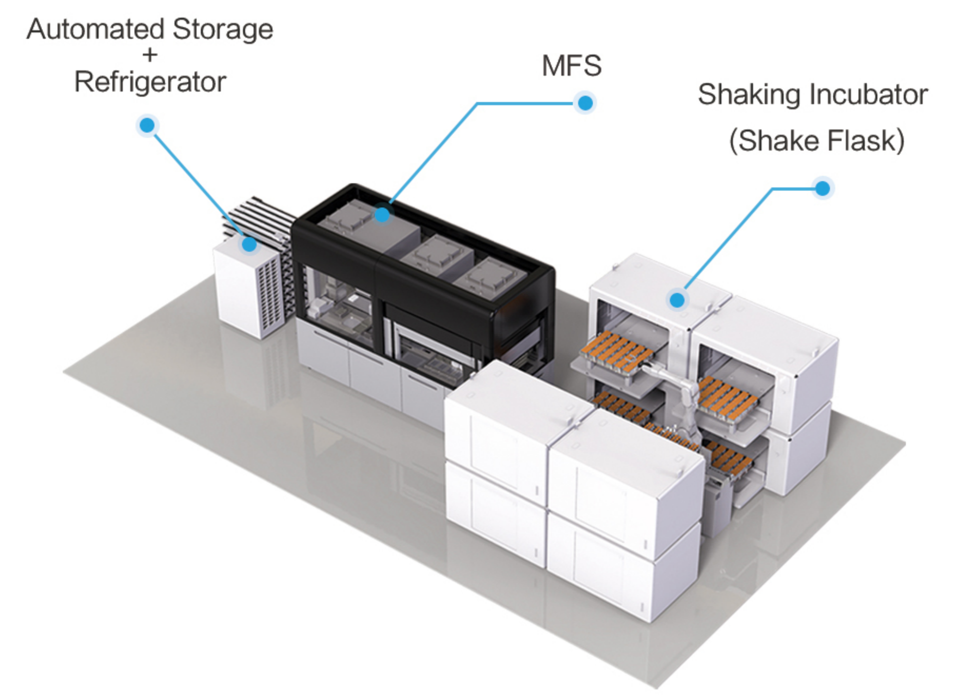
Scenario 1 MFS + Automated Warehouse + Shaking Incubator

Plasmid sconstruction



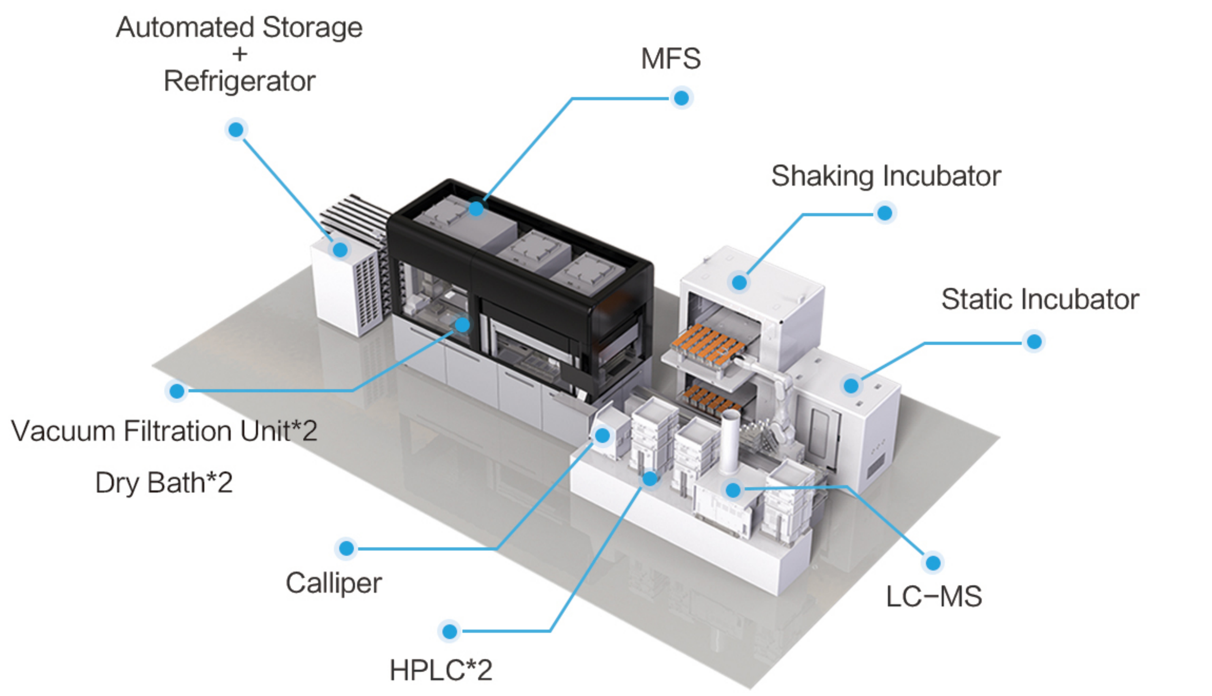
Scenario 2 MFS + Automated Warehouse + INNOSHAKER Series Incubators

Large–Scale Cell Culture



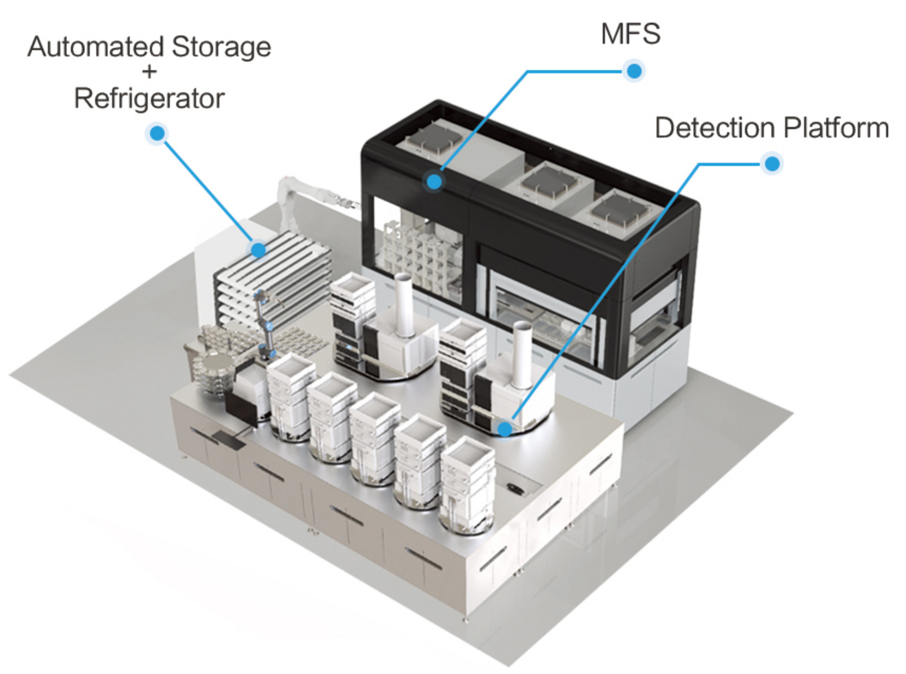
Scenario 3 MFS + Automated Warehouse + Shaking Incubator

MFS + Automated Warehouse + Shaking Incubator



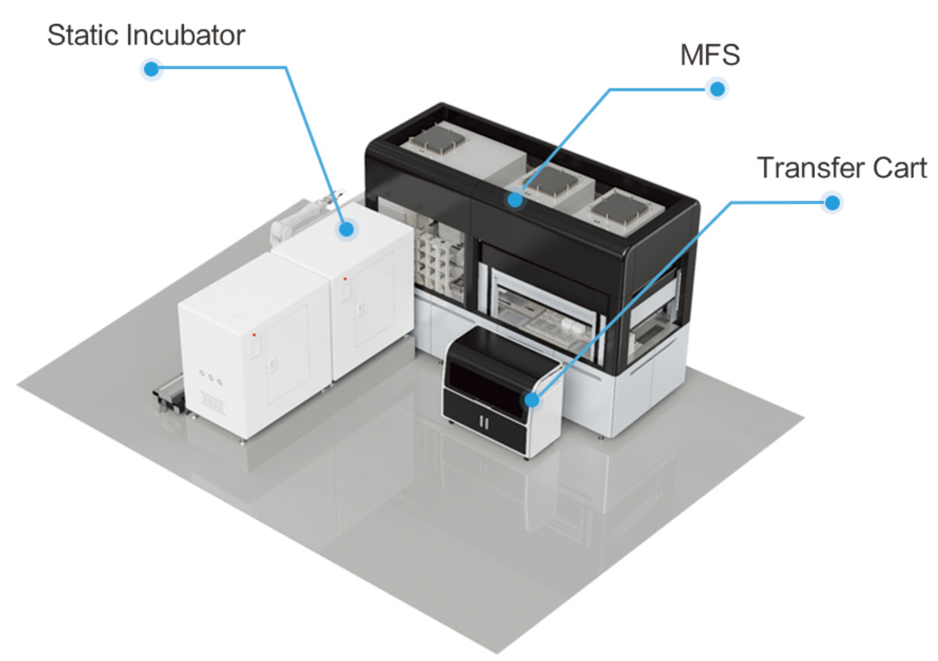
Scenario 4 MFS + Automated Warehouse + Multi–Type Analytical Instruments

End–to–End Screening Platform



Scenario 5 MFS + Automated Warehouse + Detection Platform

High–Throughput Analysis Platform



Scenario 6 MFS + Automated Warehouse + Static Incubator

Toxicology and Pathology Testing System

Three–in–One Monoclonal Screening System

INNOSMART® MONOCLONE

Product Overview

INNOSMART® MONOCLONE a high–throughput automated device for microbial single–colony picking, capable of performing processes such as plating and colony selection.

Specifications

2096 mm (W) × 1360 mm (D) × 2380 mm (H)
82.5" (W) × 53.5" (D) × 93.7" (H)

VEL–BP–001009

Features

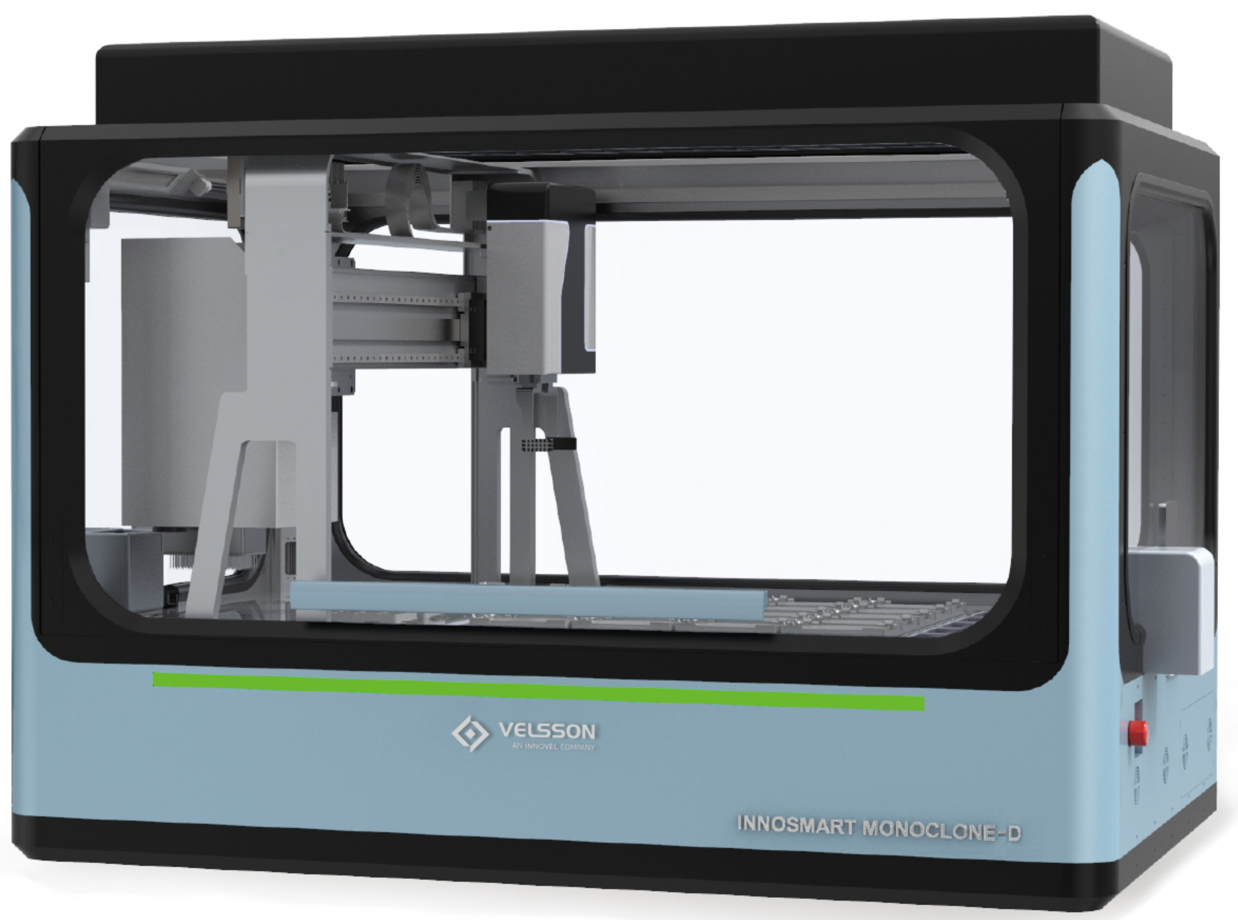
- **Integrated Design:** Integrates a 4–channel pipetting module, plate–handling robot, 96–channel picking head, sterile pumping unit, etc., into one system.
- **Ultra High Throughput:** Supports picking over 30,000 clones per day.
- **Tip CIP:** Automatic CIP (Cleaning–In–Place) for the picking head ensures reuse with maintained sterility and no contamination, preventing cross–contamination at the nucleic acid level.
- **Process Editing:** Offers pre–set process parameters for common strains, reducing users' process development time.
- **Laminar Flow:** Class 100 (ISO 5) Laminar flow environment protection ensures experimental safety.
- **International Standards:** Compliant with international standard 21 CFR Part 11.
- **Intelligent Exception Handling:** Smart automated handling of any process abnormalities.

Desktop Microbial Monoclonal Picking System

INNOSMART® MONOCLONE–D

Product Overview

INNOSMART® MONOCLINE–D is a fully automatic benchtop monoclonal picking device, supporting various microbial colony picking workflows.



Specifications

1430 (W) × 950 (D) × 990 (H) mm
56.3" (W) × 37.4" (D) × 39.0" (H)

IN–BP–001013

Features

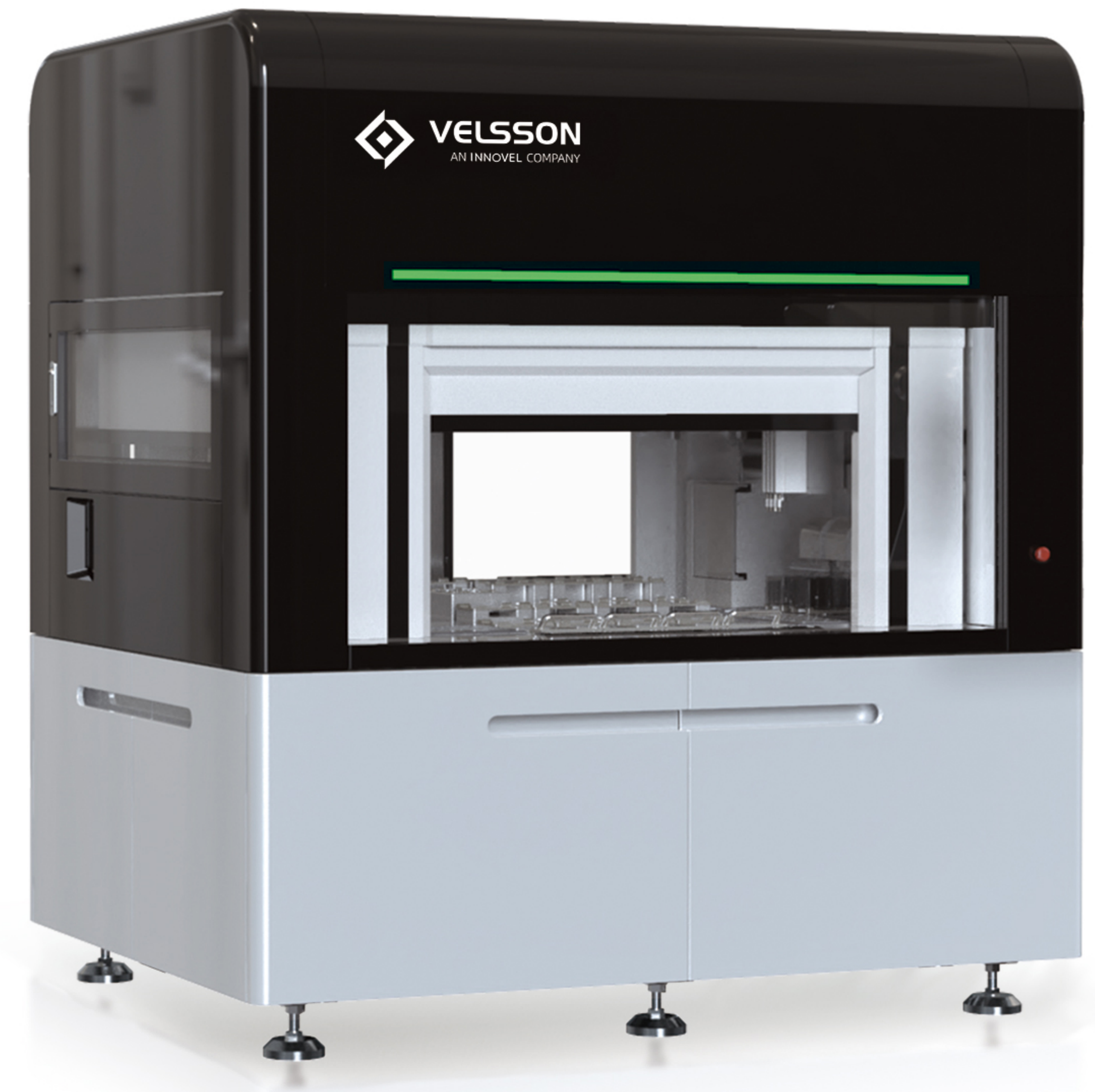
- **Compact Footprint:** Bench–sized unit
- **Integrated Design:** Incorporates multiple functional units (automated picking, tip cleaning, etc.) within one system.
- **Ultra High Throughput:** Capable of picking over 30,000 colonies per day.
- **Process Parameters:** Provides built–in process parameters for common microbial strains, shortening process optimization time.
- **Laminar Flow Control:** Class 100 laminar flow protection ensures a sterile and safe operation environment.
- **Intelligent Exception Handling:** Smart automation handles abnormal situations without intervention.

Mammalian Cell Monoclonal Picking System

INNOSMART® PICK

Product Overview

INNOSMART® PICK is a high–throughput automated system for single–cell clone selection, widely used for screening mammalian cell clones.



Specifications

1790 mm (W) × 1430 mm (D) × 2000 mm (H)
70.5" (W) × 56.3" (D) × 78.7" (H)

IN–BP–001014

Features

- **All–in–One Operation:** Integrates identification (imaging) and picking into one seamless operation.
- **Compact Size:** Floor–standing unit.
- **Ultra High Throughput:** Capable of picking over 30,000 colonies per day.
- **High Efficiency:** Picking efficiency ≥ 6,000 clones per 8 hours; effective picking success rate > 98%.
- **Unattended Operation:** Supports 24–hour unattended continuous picking.
- **Low Cost:** Low consumable usage and operating costs.
- **Laminar Flow Control:** In–chamber laminar airflow throughout the process prevents cross–contamination of samples.
- **Human–Like Workflow:** Fully simulates manual handling steps, allowing adaptation to rapidly evolving processes.
- **Flexible Process Editing:** Offers flexible protocol editing capabilities for quick process switching during R&D.

Biological Culture Products

Incubator

INNOSHAKER™

INNOSHAKER™ PLANET

Manual Shaker Incubator (Microbial)

Manual Mammalian Cell Culture: VEL–BP–5001001
Manual Microorganism Culture: VEL–BP–5001002

The shaking incubator features a compact footprint, flexible configuration, and strong scalability, making it ideal for large–scale cultivation of mammalian cells such as CHO–S / K1 / M, SF9, HEK293, and bacterial cultures.

External Dimensions: 400 mm × 890 mm × 680 mm
55.1" (W) × 35.0" (D) × 26.8" (H)
Power Supply: 110/220V 50/60Hz
Weight: 250kg
Power Consumption: 3kw
Capacity: 65 × 5 L flasks (with standard tray configuration)
Speed Range: 0~350RPM (±1RPM)
Speed Range: 4~60℃ (±0.2℃)
Humidity Control: 0~95% (±1%)
CO_2 Control: 0~20% (±0.1%)
Communication Interface: Modbus RTU or Modbus TCP/IP
Stacking: Triple–stack supported
Sterilization: High–temperature or UV light

INNOSHAKER™ STAR

Automatic Shaker Incubator

The shaking incubator supports large–scale cultivation of mammalian cells and microbial cultures, including CHO–S / K1 / M, SF9, HEK293, and bacteria. Designed for automation–ready workflows, it enables efficient, scalable, and reproducible cell culture operations.

External Dimensions: 1570 mm × 950 mm × 1030 mm
61.8" (W) × 37.4" (D) × 40.5" (H)
Power Supply: AC 220 V, 50 Hz
Weight: 425 kg
Power Consumption: 3 kW
Capacity: Flask 5 L × 8, 3 L × 12, 2 L × 20, 500 mL × 30, 250 mL × 48, 50 mL × 150
Speed Range: 0 – 250 RPM (±1 RPM)
Temperature Range: 4 – 37℃ (±0.2℃)
Humidity Control: Up to 90% RH (±1%)
CO_2 Control: 0 – 20% (±0.1%)
Automated control: Integration with the outer door, slide stage, shaker, tri–gas system, and robot operation system
Stacking: Double–stack supported
Sterilization: UV light

Automatic Mammalian Cell Culture: VEL–BP–5001003
Automatic Microorganism Culture: VEL–BP–5001004

INNOSHAKER™ SATELLITE

Static Incubator

VEL-BP-5001005

The static incubator features a compact footprint and flexible scalability, making it suitable for large-scale cultivation of mammalian cells and microbial cultures, including hybridoma cells, SF9, and HEK293.

External Dimensions: 1320 mm × 815 mm × 1200 mm
52.0" (W) × 32.1" (D) × 47.2" (H)

Power Supply: AC 220 V, 50 Hz

Weight: 300 kg

Power Consumption: 4.5 kW

Capacity: 200PC standard well plate

Speed: 1/6 RPM (1°/s)

Temperature Range: 4 - 40 ℃ (±0.2℃)

Humidity Control: Up to 90% RH (±1%)

CO_2 Control: 0 - 20% (±0.1%)

Sterilization: High-temperature or UV light

INNOSHAKER™ PULSAR

Microplate Shaking Incubator

VEL-BP-5001006

Designed for large-scale cultivation of mammalian cells and microbial cultures, including CHO-S / K1 / M, SF9, HEK293, and bacterial cells. Optimized for high-throughput screening and automation-ready workflows.

External Dimensions: 900 mm × 1300 mm × 800 mm
35.4" (W) × 51.2" (D) × 31.5" (H)

Power Supply: AC 220 V, 50 Hz

Weight: 300 kg

Power Consumption: 3 kW

Capacity: 200PC standard well plate

Speed Range: 0 - 1000 RPM (±1 RPM)

Temperature Range: 28 - 37℃ (±0.2℃)

Humidity Control: Up to 98% RH (±1%)

CO_2 Control: 0 - 20% (±0.1%)

Sterilization: High-temperature or UV light

Analytics Devices

Chip–Based Concentration Analyzer

INNOMET™ READER

VEL–BP–4001001

Product Overview

INNOMET™ READER is designed for rapid, high–throughput density measurement of samples during process development and routine workflows. The system operates in a fully automated manner and can complete testing of 24 samples simultaneously, delivering fast and reliable results.

Specifications

350 mm (W) × 260 mm (D) × 210 mm (H).
13.8" (W) × 10.2" (D) × 8.3" (H)

Features

- **Fast Results:**
  Completes density measurement and report generation for 24 samples in 3 – 10 minutes.
- **Minimal Sample Preparation:**
  No complex preparation required. Samples are loaded directly for testing, enabling quick turnaround.
- **Microfluidic Chip Technology:**
  Ensures accurate, repeatable measurements with low sample consumption.
- **Low Sample Volume:**
  Each test requires only 5 – 15 μL per sample, supporting efficient processing of up to 24 samples in parallel.
- **Compact Footprint:**
  Space–saving benchtop design ideal for laboratory environments.
- **High Level of Automation:**
  Supports batch loading with fully automated detection and analysis.

PCR Instrument

INNOMET™ PCR

Product Overview

INNOMET™ PCR system is designed for efficient amplification of biological samples, delivering high–precision temperature control and rapid thermal cycling. Its stable temperature performance improves DNA amplification efficiency and supports reliable PCR workflows.

Specifications

350 mm (W) × 260 mm (D) × 210 mm (H)
13.8" (W) × 10.2" (D) × 8.3" (H)

Features

- **96–Well PCR Plate Support:**
  Optimized for efficient DNA amplification using standard 96–well PCR plates.
- **Rapid Heating Rate:**
  Sample block heating speed up to 3.5°C/second, enabling fast cycling times.
- **Accurate Temperature Control:**
  Temperature accuracy of ±0.2°C for consistent and re–producible results.
- **Wide Temperature Range:**
  Sample block temperature range from 0°C to 105°C.
- **Flexible Plate Compatibility:**
  Compatible with standard 96–well plates and half–skirt PCR plates.
- **User–Friendly Operation:**
  Simple operation with a high level of automation, sup–porting unattended workflows.
- **Compact Benchtop Design:**
  Space–saving form factor ideal for routine laboratory use.
- **Reliable Performance:**
  Designed for continuous operation, improving throughput and laboratory efficiency.

VEL–BP–4001002

Automated Cell Counter

INNOMET™ COUNTER

Product Overview

INNOMET™ COUNTER is a fully automated cell counting system powered by artificial intelligence image recognition and high-throughput analysis. It integrates a high-resolution camera, optical microscope, and intelligent algorithms to deliver accurate and reproducible cell counting results. The system is widely used in cell biology research and pharmaceutical development workflows.

VEL-BP-4001004

Specifications

330 mm (W) × 340 mm (D) × 248 mm (H)
13.0" (W) × 13.4" (D) × 9.8" (H)

Features

- **Rapid Analysis:**
  Completes counting and reporting for 24 samples in as little as 4 minutes.
- **High Accuracy & Reproducibility:**
  Counting error of ≤3% for repeated measurements of the same sample.
- **AI-Based Image Analysis:**
  Automated identification and classification of cell types for accurate results.
- **Wide Cell Density Range:**
  Supports concentrations from 1×10^5 to 1×10^7 cells/mL, with viability measurement from 0 - 100%.
- **High-Resolution Optics:**
  Equipped with an imported optical microscope and high-resolution camera for clear imaging.
- **Fine Detection Resolution:**
  Minimum detectable particle size of 2 μm.
- **Remote & Automated Control:**
  Supports remote operation and system expansion for automated workflows.

Desktop Devices

Thermostatic Mixer

INNOMINI™ T℃mixER

Product Overview

INNOMINI™ T℃mixER is a standalone, high-precision temperature-controlled mixer independently developed by INNOVEL. It supports **heating, cooling, and mixing** of samples across a wide range of experimental scenarios. With high accuracy, stable performance, compact design, and automation-ready capabilities, it is well suited for integrated laboratory workflows.

Specifications

200 mm (W) × 200 mm (D) × 140 mm (H)
7.9" (W) × 7.9" (D) × 5.5" (H)

VEL-BP-3001021

Features

- **High-Precision Temperature Control:**
  Equipped with a high-accuracy temperature sensor and intelligent control system. Temperature range 0 – 100°C with accuracy of ±0.2°C.
- **Rapid Heating & Cooling:**
  Advanced heating and cooling modules enable fast temperature ramping while maintaining stable control.
- **Intuitive Operation:**
  Touchscreen interface with simple, user-friendly operation.
- **Efficient Mixing Performance:**
  High-efficiency shaking and mixing ensure rapid homogenization of samples, supporting a wide range of applications.
- **Automation-Ready:**
  Supports automated operation through program control and seamless integration into automated workflows.
- **Flexible Compatibility:**
  Compatible with multiple sample formats and vessel types.

Automatic Labeling Device

INNOMINI™ LABELLER

Product Overview

INNOMINI™ LABELLER is an online, real-time printing and labeling system designed to work seamlessly with robotic arms to complete labeling of various laboratory consumables. It provides an efficient solution for material traceability, sample management, and quality control in laboratory environments.

Specifications

Without Cabinet:
650 mm (W) × 420 mm (D) × 460 mm (H) 25.6" (W) × 16.5" (D) × 18.1" (H)
With Cabinet:
650 mm (W) × 420 mm (D) × 1150 mm (H) 25.6" (W) × 16.5" (D) × 45.3" (H)

Features

- **Wide Label Size Compatibility:**
  Supports label widths from 20 – 114 mm.
- **Bottle Diameter Range:**
  Compatible with container diameters from 51 – 110 mm, with interchangeable adapters.
- **Multiple Barcode Formats:**
  1D barcodes: Code 11, Code 39, Code 93, etc.
  2D barcodes: Codablock, PDF417, Code 49, etc.
  Alphanumeric text supported.
- **Broad Container Compatibility:**
  Suitable for labeling conical tubes, 50 mL centrifuge tubes, 2 mL cryovials, and more.
- **Compact, Modular Design:**
  Small footprint with flexible placement, allowing inte-gration with other equipment.
- **Real-Time Printing & Labeling:**
  Uses thermal transfer printing and labeling, eliminating the need for pre-printed labels.
- **High Consistency & Throughput:**
  Ensures uniform label placement with improved speed and reliability.

Standard: VEL-BP-3001004
Standard(JQRversion): VEL-BP-3001003

Automatic Plate Peeler

INNOMINI™ PEEL

Product Overview

INNOMINI™ PEEL is a versatile sealing instrument designed for microplates, PCR plates, and deep–well plates. Featuring simple operation and fast sealing performance, it is ideal for laboratory environments requiring reliable, high–quality plate sealing. The system delivers stable temperature control, consistent sealing results, and supports automated workflows.

Specifications

315 mm (W) × 440 mm (D) × 600 mm (H)
12.4" (W) × 17.3" (D) × 23.6" (H)

Features

- **Easy Operation:**
  Supports both touchscreen control and remote operation, enabling fast and intuitive workflows.
- **High–Precision Temperature Control:**
  Sealing temperature accuracy of ±5°C, ensuring uniform and reliable seals.
- **Fast Sealing Performance:**
  Optimized heating technology enables quick sealing cycles while maintaining consistent seal quality.
- **High Reliability:**
  Ensures consistent sealing strength across plates, improving experimental reproducibility.
- **Wide Compatibility:**
  Automatically adapts to a variety of microplate formats and sealing films.

VEL–BP–3001018

Automatic Plate Sealer

INNOMINI™ SEAL

Product Overview

INNOMINI™ SEAL is a fully automated SBS–format plate sealing film removal system. It automatically peels and removes sealing films with high accuracy and efficiency, reducing manual handling and significantly improving laboratory productivity.

Specifications

381 mm (W) × 320 mm (D) × 400 mm (H)
15.0" (W) × 12.6" (D) × 15.7" (H)

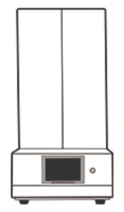
Features

- **Automation–Ready:**
  Designed for use in fully automated laboratory systems.
- **Multi–Film Compatibility:**
  Supports peeling of multiple types of sealing films.
- **Efficient & Accurate Operation:**
  Ensures consistent film removal without damaging plate.
- **Compact, Space–Saving Design:**
  Small footprint supports flexible installation and layout.
- **Safe & Reliable:**
  Ensures complete removal of sealing films while maint–aining plate integrity.

VEL–BP–3001019

Powder Dispenser

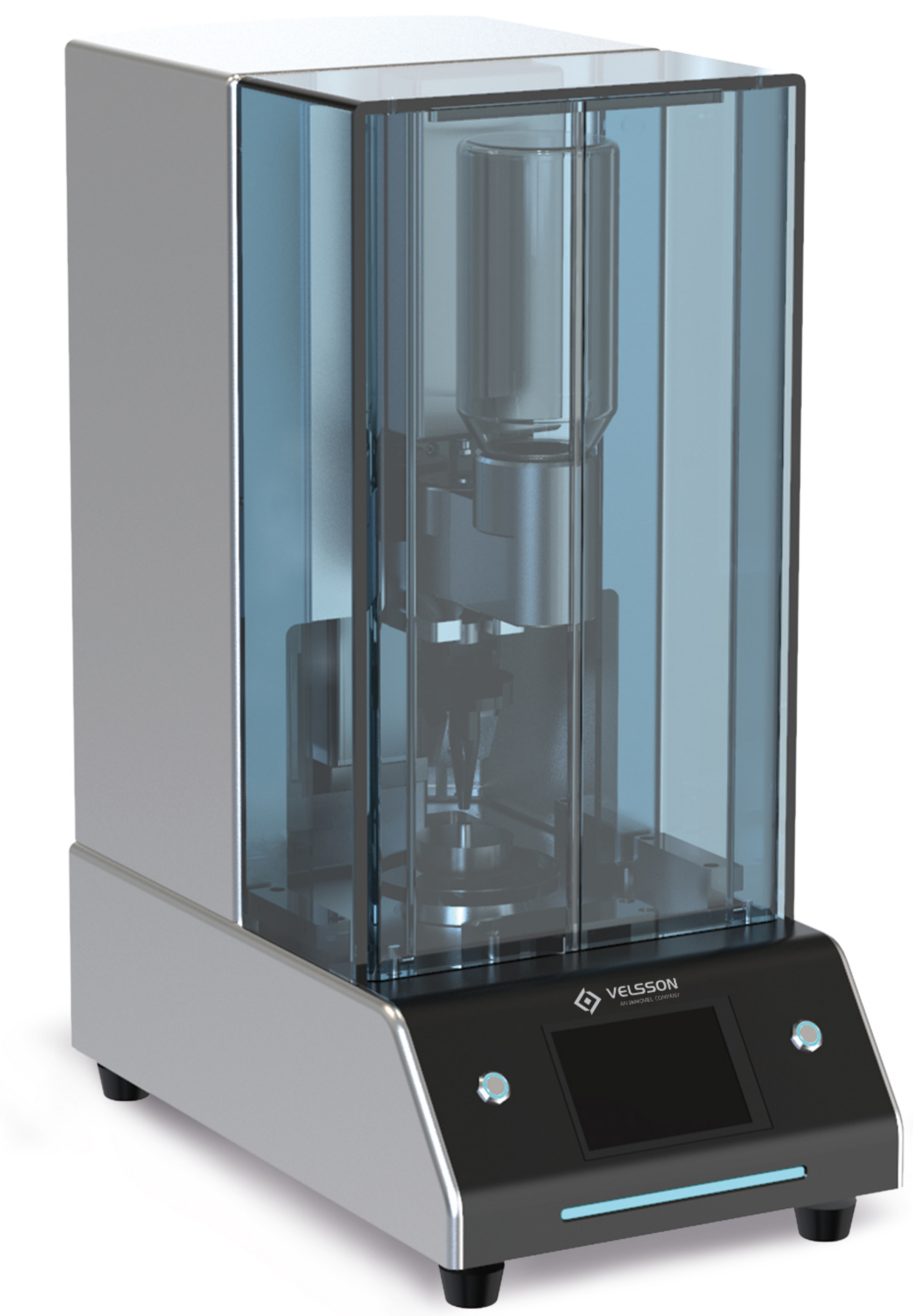
INNOMINI™ Powder Dispenser



Product Overview

INNOMINI™ POWDER DISPENSER is a smart portable solution for precision powder handling. Built for excellence, it combines high accuracy with intelligent automation to deliver fast, reliable dispensing across pharmaceutical, chemical, and food industries. Perfectly suited for research labs and small-batch production, it brings lab-grade precision wherever you need it.

The system features a fully enclosed dispensing unit, combining 316L stainless steel with organic glass containers for clean and safe material handling. A servo-controlled dispensing screw delivers precise powder properties. The modular dispensing heads can be quickly replaced, allowing flexible adaptation to different materials. An adjustable-frequency vibration motor enhances powder flow by adapting to the physical state of the material, ensuring consistency and reliability.



VEL-BP-3001022

Specifications

375 mm (W) × 206 mm (D) × 446 mm (H)
14.7" (W) × 8.1" (D) × 17.5" (H)

Features

- **Automation-Ready:**
  Designed for use in fully automated laboratory systems.
- **Multi-Film Compatibility:**
  Supports peeling of multiple types of sealing films.
- **Efficient & Accurate Operation:**
  Ensures consistent film removal without damaging plates.
- **Compact, Space-Saving Design:**
  Small footprint supports flexible installation and layout.
- **Safe & Reliable:**
  Ensures complete removal of sealing films while maintaining plate integrity.

General Consumables

Culture Tubes

Features

- **Excellent Optical Transparency:**
  Meets USP Class VI standards.
- **Easy Handling:**
  Designed for convenient operation and easy loading/unloading.
- **0.22 μm Hydrophobic Filter Membrane:**
  Provides efficient gas exchange while maintaining sterility.
- **Optimized for Cell Growth:**
  Enables balanced gas exchange between the culture medium and air, supporting rapid and healthy cell proliferation.
- **Automation-Compatible:**
  Designed for seamless integration with Velsson automated systems.
- **Free of Contaminants:**
  No endotoxins, no DNA, no RNA, and no protease contamination.
- **Gamma Sterilized:**
  Ensures consistent sterility and safety.

50 mL Culture Tube (vented cap)

Manual Loading: VEL-CS-002003
Automated Loading: VEL-CS-002004

Centrifuge Tubes

Features

- **Excellent Optical Clarity:**
  Complies with USP Class VI standards.
- **Easy Handling:**
  Simple operation with reliable sealing performance.
- **Automation-Compatible:**
  Designed for seamless integration with Velsson automated systems.
- **Wide Temperature Resistance:**
  Suitable for temperatures from 12,000 × g centrifugation to -80°C to 121°C.
- **Free of Contaminants:**
  No endotoxins, no DNA, no RNA, and no protease contamination.
- **Gamma Sterilized:**
  Ensures sterility and consistent performance.

50 mL Centrifuge Tube (vented cap)

Manual Loading: VEL-CS-002001
Automated Loading: VEL-CS-002002

Microplates

Features

- **USP Class VI Compliant**
- **High-Speed Centrifugation Compatible:**
  Supports centrifugation up to 3,500 rpm.
- **Low Residual Volume Design:**
  Minimizes sample loss.
- **ANSI Standard Compliant:**
  Suitable for standard laboratory channels and compatible with Velsson automated systems.
- **Free of Contaminants:**
  No endotoxins, no DNA, no RNA, and no protease contamination.
- **Gamma Sterilized:**
  Ensures sterility and reliability.

96 Well Plate
(V-Bottom, Round-Well, 300 μL/well)

VEL-CS-002046

PCR Plates

Features

- **Uniform Secondary Injection Molding:**
  Ensures consistent wall thickness for improved thermal conductivity and efficient amplification.
- **Clearly Labeled Wells:**
  Easy to identify and handle during workflows.
- **Autoclavable:**
  Withstands 121°C for 20 minutes.
- **Reinforced Tube Rim Design:**
  Enhances structural strength and ensures reliable sealing with PCR films.
- **ANSI Standard Compliant:**
  Suitable for standard laboratory automation channels and compatible with INNOVEL automated systems.
- **Free of Contaminants:**
  No endotoxins, no DNase, no RNase, and no protease contamination.
- **Gamma Sterilized:**
  Ensures sterility and consistent performance.

96 Well Plate
(V-Bottom, Round-Well, 200ul /well)

VEL-CS-002039

Single-Well Reagent Reservoirs

Features

- **Made from Medical-Grade Polypropylene (PP):**
  Chemically resistant and compliant with USP Class VI standards.
- **Flat-Bottom Design:**
  Facilitates complete liquid aspiration and minimizes dead volume.
- **Hanging-Lip Design:**
  Provides secure placement and easy handling.
- **Compatible with Lid Options:**
  Reduces evaporation and contamination risk.
- **ANSI Standard Compliant:**
  Compatible with standard laboratory automation channels and Velsson automated systems.
- **Free of Contaminants:**
  No endotoxins, no DNase, no RNase, and no protease contamination.
- **Gamma Sterilized:**
  Ensures sterility and consistent performance.

Single Well Reagent Reservoirs
(V-Bottom, Square-Well, 400ul /well)

VEL-CS-002005

Cell Culture Plates

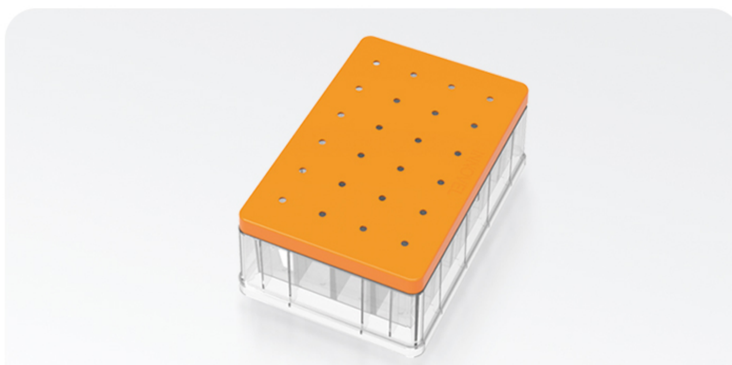
Features

- **USP Class VI Compliant**
- **Autoclavable:**
  Withstands 121°C for 15 minutes.
- **Temperature Resistant:**
  Suitable for use up to 80°C.
- **Centrifugation Compatible:**
  Supports speeds up to 3,500 rpm.
- **Low Residual Volume:**
  Minimizes reagent loss.
- **Lid Compatible:**
  Reduces evaporation and contamination risk.
- **ANSI Standard Compliant:**
  Compatible with standard laboratory automation channels and Velsson automated systems.
- **Free of Contaminants:**
  No endotoxins, no DNA, no RNA, and no protease contamination.
- **Gamma Sterilized**

24-Well Formats


24-Well Deep-Well Plate
(V-Bottom, Square-Well, 8 mL /well)

VEL-CS-002048


24-Well Cell Culture Plate
(V-Bottom, Round-Well, 8 mL /well)

VEL-CS-002033


24-Well Deep-Well Plate
(V-Bottom, Square-Well, 13 mL /well)

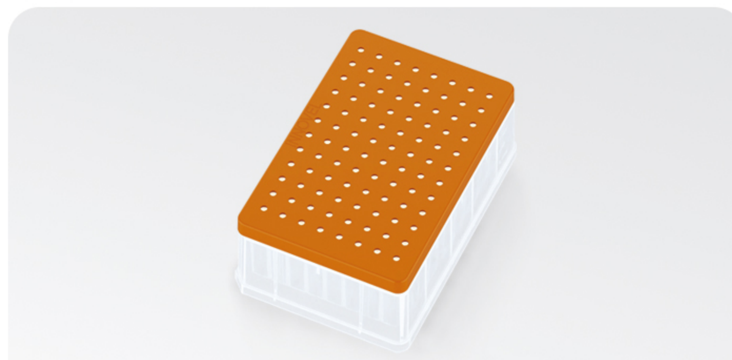
VEL-CS-002012


96-Well Deep-Well Plate
(V-Bottom, Square-Well, 2 mL /well)

VEL-CS-002049


96-Well Deep-Well Plate
(V-Bottom, Round-Well, 1.6 mL /well)

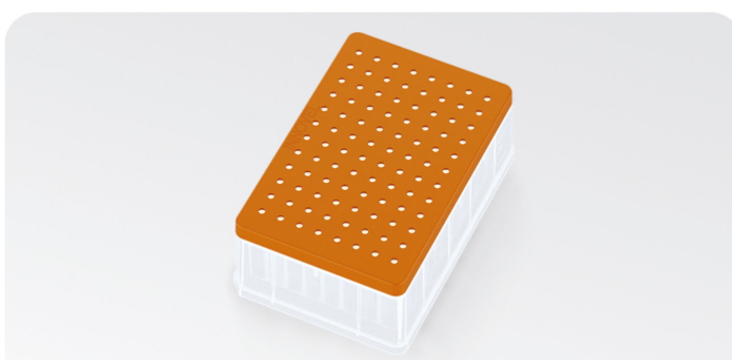
VEL-CS-002042


96-Well Cell Culture Plate
(V-Bottom, Square-Well, 2 mL /well)

VEL-CS-002050


96-Well Deep-Well Plate
(V-Bottom, Square-Well, 1.6 mL /well)

VEL-CS-002041

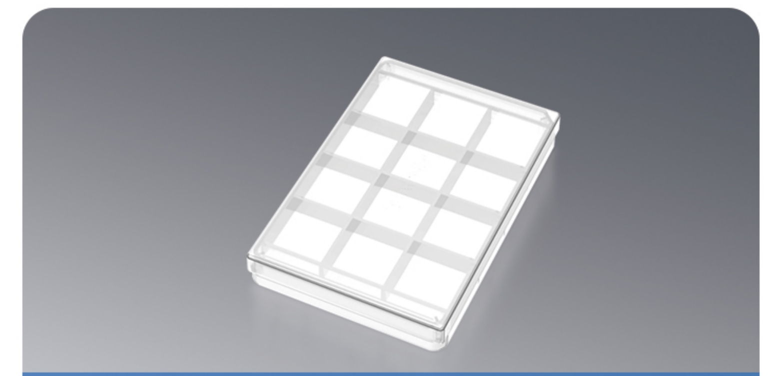

96-Well Cell Culture Plate
(V-Bottom, Square-Well, 1.6 mL /well)

VEL-CS-002030

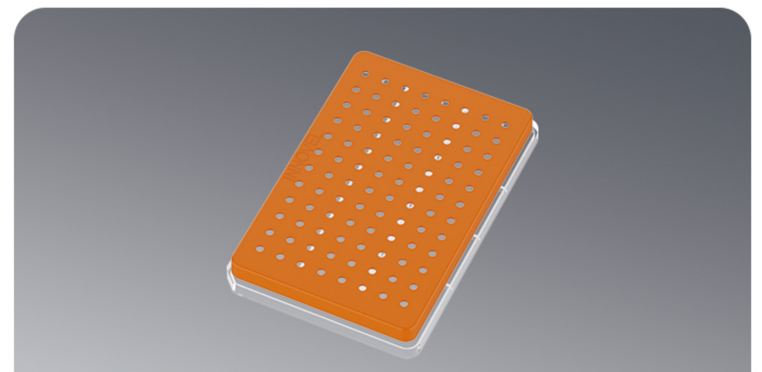
Agar Plates

Features

- **USP Class VI Compliant**
- **Clear Orientation Markings:**
  Indexed markings help identify well positions and orientation.
- **High Optical Transparency:**
  Glass bottoms provide excellent clarity for imaging and microscopy.
- **ANSI Standard Compliant:**
  Compatible with standard laboratory automation channels and Velsson automated systems.
- **Free of Contaminants:**
  No endotoxins, no DNA, no RNA, and no protease contamination.
- **Gamma Sterilized:**
  Ensures sterility and consistent performance.


12-Well Agar Plate
(Flat-Bottom, Square-Well, 4.8 mL /well,
Ordinary Lid)

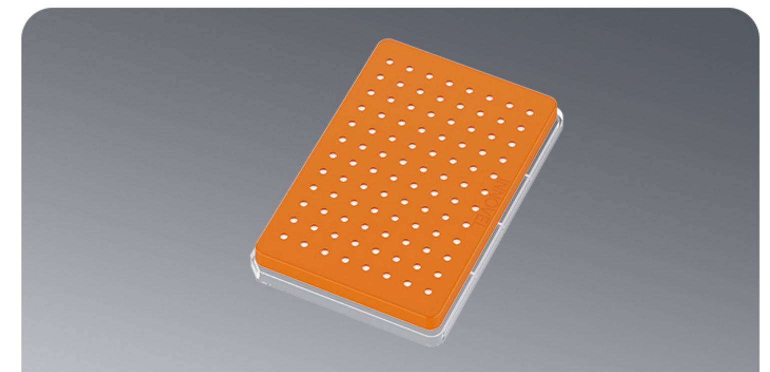
VEL-CS-002047


12-Well Agar Plate
(Flat-Bottom, Square-Well, 4.8 mL /well,
Breathable Lid)

VEL-CS-002043


Single-Well Agar Plate
(Flat-Bottom, Square-Well, 60 mL /well,
Ordinary Lid)

VEL-CS-002044


Single-Well Agar Plate
(Flat-Bottom, Square-Well, 60 mL /well,
Breathable Lid)

VEL-CS-002045

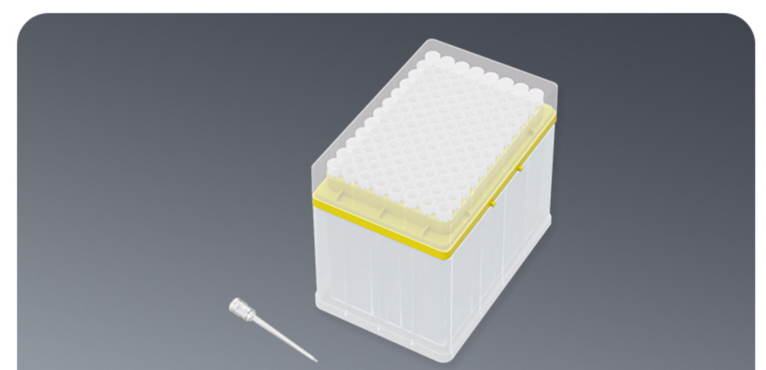
Pipette Tip Boxes

Features

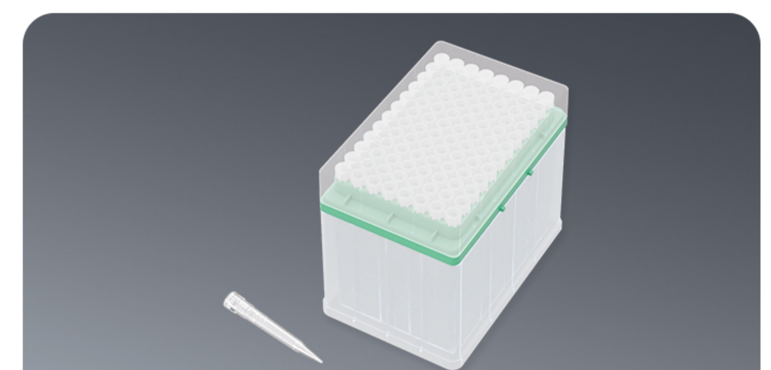
- **USP Class VI Compliant**
- **Optically Clear Interior:**
  Allows easy visual confirmation of tip presence and liquid level.
- **Wide Temperature Resistance:**
  Suitable for temperatures from -80°C to 121°C.
- **Integrated Internal Filtration:**
  Helps prevent contamination during pipetting.
- **ANSI Standard Compliant:**
  Compatible with standard laboratory automation channels and Velsson automated systems.
- **Free of Contaminants:**
  No endotoxins, no DNA, no RNA, and no protease contamination.
- **Gamma Sterilized:**
  Ensures sterility and consistent performance.


10μL Pipette Tip Box

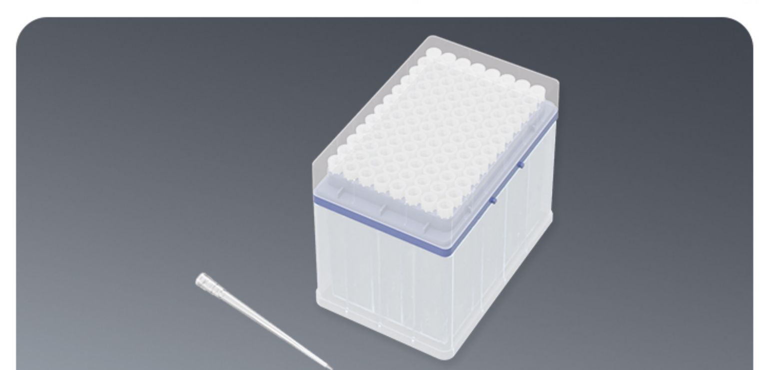
VEL-CS-002014


50μL Pipette Tip Box

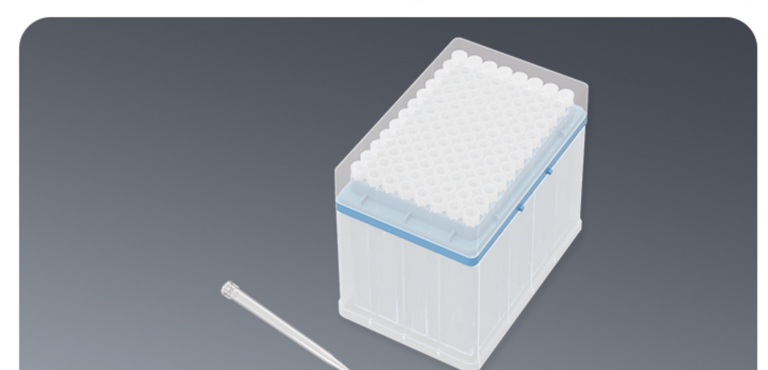
VEL-CS-002015


300μL Pipette Tip Box

VEL-CS-002016


300μL Pipette Tip Box (Filter Tips)

VEL-CS-002034


1000μL Pipette Tip Box

VEL-CS-002017

Specialized Immune Cell Culture Bottle Series

INNOVESSEL™

InnoVessel™ series culture vessels are designed for suspension cell culture and are suitable for cell expansion during early research and development, process optimization, and late-stage large-scale production.

These vessels support high-density culture of a wide range of immune cells, including: T cells, CAR-T cells, TCR-T cells, TILs, NK cells, CAR-NK cells, CIK cells, K562 cells, Jurkat cells, and Raji cells.

Recommended Working Volume
2~25mL

Expected Cell Yield
2.5~4E+08

INNOVESSEL™ 30

Features a single-use vented cap structure that enhances gas exchange efficiency. Supports high-density cell culture and rapid cell growth. Compatible with six-position holders for convenient handling and operation.

VEL-CS-001004

INNOVESSEL™ 500

Recommended Working Volume
50~400mL

Expected Cell Yield
4~6E+09

Designed with an upper wide-neck opening, allowing easy media exchange and reducing the risk of cell damage during handling. Space-efficient design supports higher culture volumes. During cell harvesting, the vessel can be inverted for direct centrifugation, improving workflow efficiency and reducing contamination risk.

VEL-CS-001003

Recommended Working Volume
150~1000mL

Expected Cell Yield
1~1.5E+10

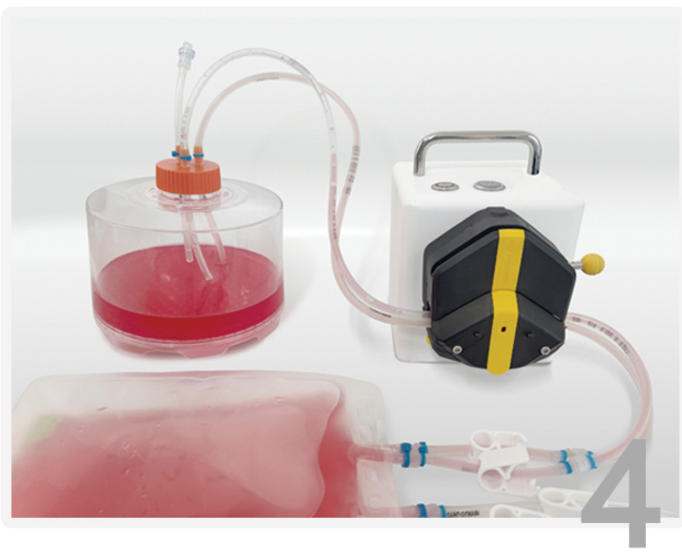
INNOVESSEL™ 1000

Developed to meet customer demand for high-volume immune cell expansion, the INNOVESSEL™ 1000 supports a maximum working volume of up to 1.2 L, delivering significantly higher cell yields. Its optimized gas exchange design improves oxygen transfer efficiency, supporting healthy cell growth in large-scale culture environments.

VEL-CS-001005

INNOVESSEL™ 1000 Closed Culture System

The maximum culture volume of INNOVESSEL™ 1000 Closed Culture Flask System is 1.2L. The bi-layer breathable membrane technology and enlarged height and bottom surface area can improve permeable efficiency and provide suitable culture environment.

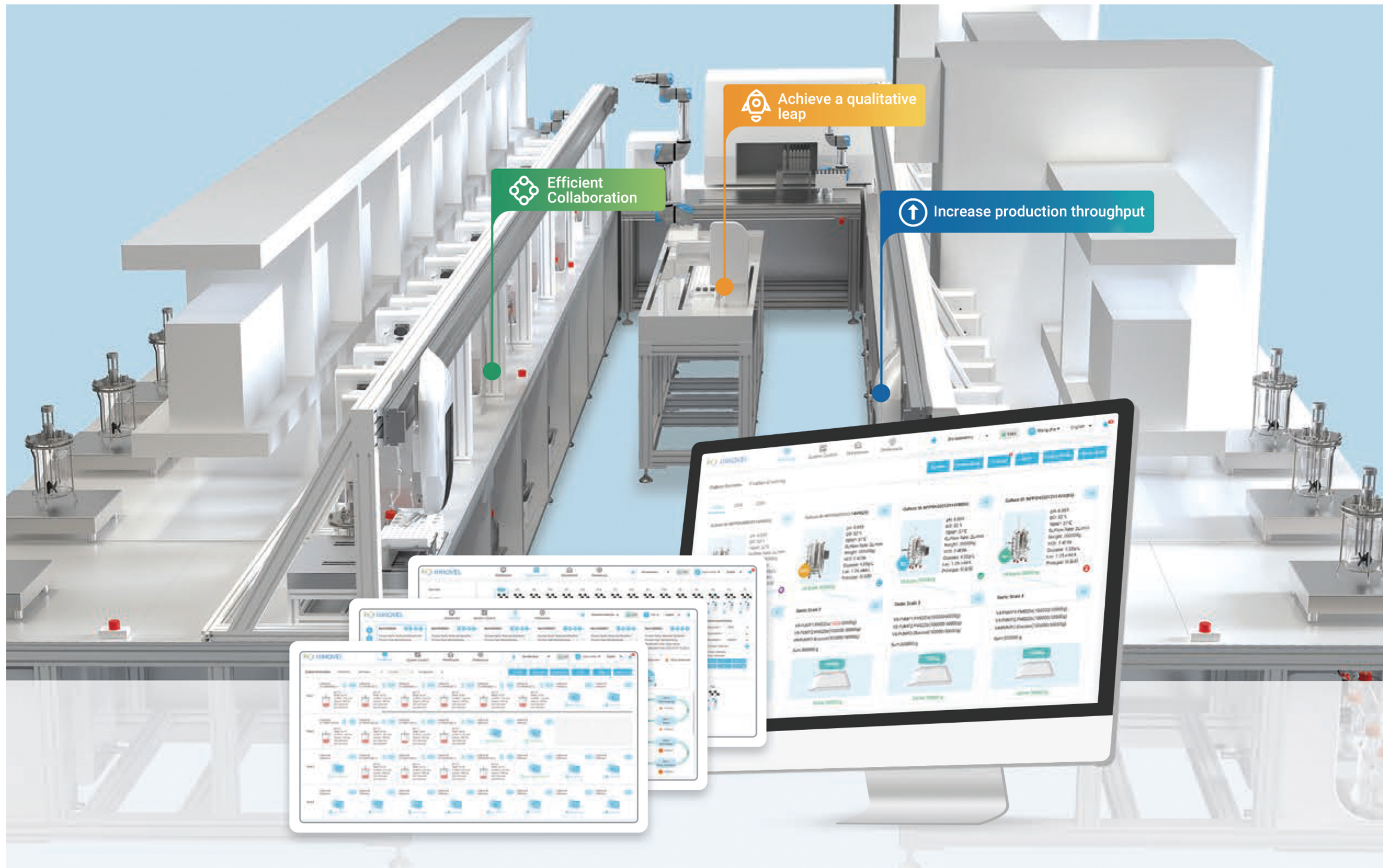


VEL-CS-001006

Lab Management Software

Smart-Management System

INNOSMART® SMS



The Smart Management System (SMS) enables the rapid transition from manual operations to digital automation, and from small-scale experimentation to large-scale production. It accelerates life science research workflows while enabling seamless collaboration between human operators and automated systems.

By integrating process design, equipment control, and data management, SMS helps laboratories improve efficiency, reduce manual intervention, and achieve digital, intelligent, and scalable laboratory operations, from R&D through production.

Laboratory Layout Management

Creates a digital model of laboratory spaces and equipment layouts, enabling intuitive visualization and real-time access to laboratory configuration information.

Process (Recipe) Management

Supports the conversion of manual experimental workflows into automated digital processes, making protocol design, optimization, and execution faster and more reliable.

Equipment Driver Management

Provides centralized control of laboratory instruments, including:
- Equipment communication
- Data acquisition
- Parameter configuration

Supports standardized, automated, and intelligent equipment operation.

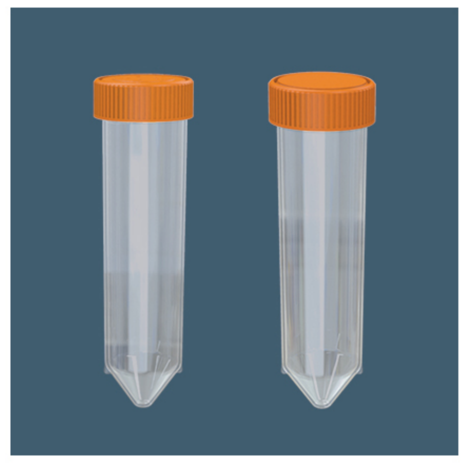
Production Status Monitoring

Monitors real-time production data, workflow progress, equipment status, and environmental conditions to ensure laboratories and production facilities operate at peak efficiency.

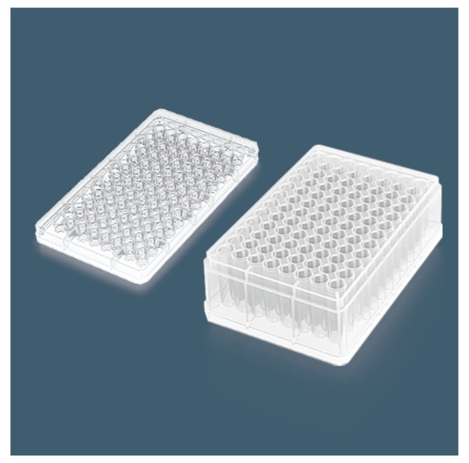
Consumables Catalog Numbers

COMSUMABLES

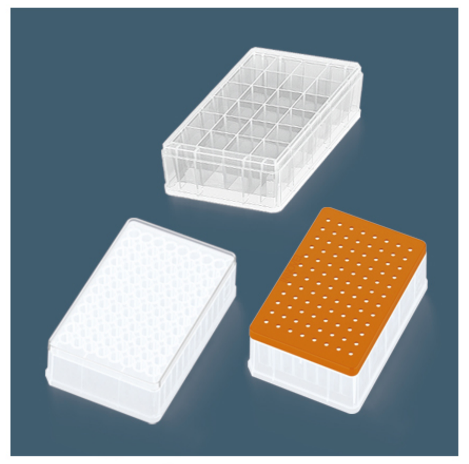
Velsson INNOCONSUMABLE

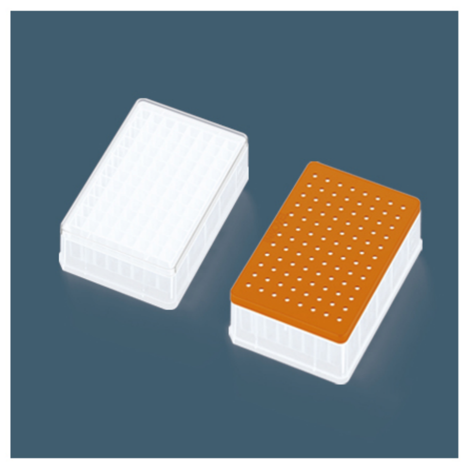


Tube	Approx, Total Tube Volume(mL)	Cap	Sterility	Case size	Catalog Number
Centrifuge Tube	50	Auto Lock cap	Sterile	25 Pcs/Bag 20 Bags/Case	VEL-CS-002001
Culture Tube	50	Auto Lock cap	Sterile	25 Pcs/Bag 20 Bags/Case	VEL-CS-002003

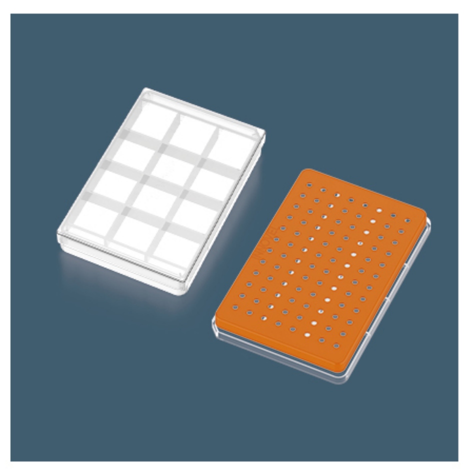


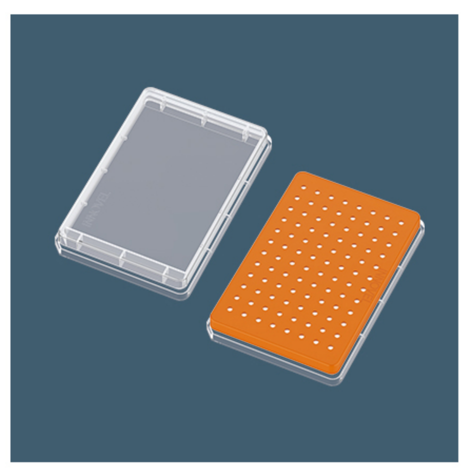
Well Plate	Well Diameter (Bottom)(mm)	Single Well Only		Case size	Catalog Number
		Total Well Volume (uL)	Working Volume (uL)		
96 Shallow Well Plate (V-Bottom, Round-Well)	8.1	350	300	10 Pcs/Bag 10 Bags/Case	VEL-CS-002046
96 Deep Well Plate (V-Bottom, Square-Well)	8.2 x 8.2	220	200	1 Pcs/Bag 50 Bags/Case	VEL-CS-002049



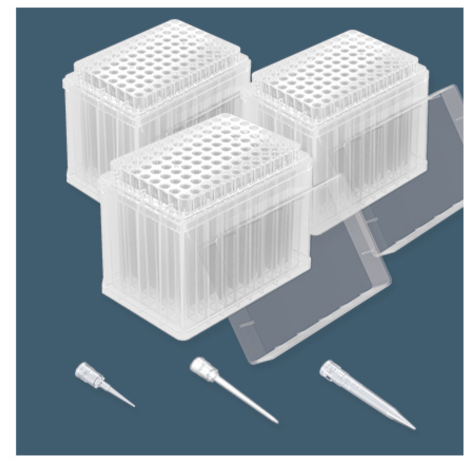


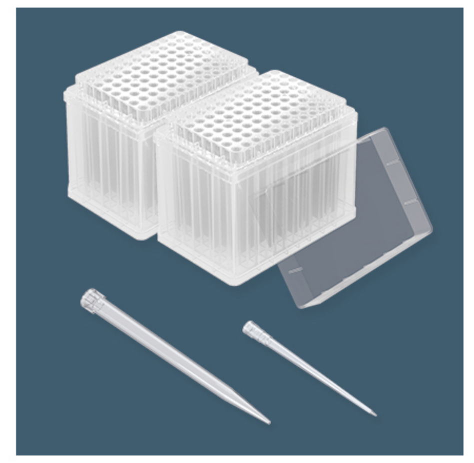
Cell Culture Plate	Well Diameter (Bottom)(mm)	Single Well Only		Case size	Catalog Number
		Total Well Volume (uL)	Working Volume (uL)		
24 Well Plate (V-Bottom)(Square-Well)	17 x 17	10.4	8.0	1 Pcs/Bag 50 Bags/Case	VEL-CS-002033
96 Well Plate (Round-Bottom, Round-Well)	8	1.65	1.6	1 Pcs/Bag 50 Bags/Case	VEL-CS-002042
96 Well Plate (V-Bottom, Square-Well)	8 x 8	2.2	2.0	1 Pcs/Bag 50 Bags/Case	VEL-CS-002050
96 Well Plate (V-Bottom, Square-Well)	8 x 8	1.85	1.75	1 Pcs/Bag 50 Bags/Case	VEL-CS-002041
96 Well Plate (V-Bottom, Square-Well)	8 x 8	1.85	1.75	1 Pcs/Bag 50 Bags/Case	VEL-CS-002030





Agar Plate	Well Diameter (Bottom)(mm)	Single Well Only		Case size	Catalog Number
		Total Well Volume (uL)	Working Volume (uL)		
12 Well plate (Flat-Bottom, Square-Well, Ordinary Lid)	24.34 x 25.5	5.0	4.5	10 Pcs/Bag 10 Bags/Case	VEL-CS-002047
12 Well plate (Flat-Bottom，Square-Well，Breathable Lid)	24.34 x 25.5	5.0	4.8	10 Pcs/Bag 10 Bags/Case	VEL-CS-002043
Single Well Plate (Flat-Bottom, Square-Well, Ordinary Lid)	106.5 x 75.4	67.0	64.0	10 Pcs/Bag 10 Bags/Case	VEL-CS-002044
Single Well Plate (Flat-Bottom, Square-Well, Breathable Lid)	106.5 x 75.4	67.0	64.0	10 Pcs/Bag 10 Bags/Case	VEL-CS-002045





Pipette Tips	Approx, Total Tip Volume(uL)	Length (mm)	Sterility	Case size	Catalog Number
Clear tip	10	35.3	Sterile	10 Boxes/Set 5 Sets/Case	VEL-CS-002014
Clear tip	50	59.57	Sterile	10 Boxes/Set 5 Sets/Case	VEL-CS-002015
Clear tip	300	54.4	Sterile	10 Boxes/Set 5 Sets/Case	VEL-CS-002016
Clear tip (extended Length)	300	95	Sterile	10 Boxes/Set 5 Sets/Case	VEL-CS-002034
Clear tip	1000	95	Sterile	10 Boxes/Set 5 Sets/Case	VEL-CS-002017

Velsson INNOVESSEL cell culture flasks

Flask	Approx. Growth Area (cm^2)	Recommendation Cell Yield (/mL)	Minimal Cell Yield (/mL)	Recommendation Medium Volume (mL)	Case size	Catalog Number
INNOVESSEL 30	4491 (full cup)	5E+05	36.5	10-25	200 Pcs/Case	VEL-CS-001004
INNOVESSEL 500	9108 (bottom)	5E+05	550	50-400	100 Pcs/Case	VEL-CS-001003
INNOVESSEL 1000	22288 (bottom)	5E+05	1500	150-1000	30 Pcs/Case	VEL-CS-001005
INNOVESSEL 1000 CLOSE	22288 (bottom)	5E+05	1500	150-1000	30 Pcs/Case	VEL-CS-001006