

Innovate AUTOSAMPLER III

Optimize your workflow with Hygiena's Automated Product Sampling Solution, used by the largest aseptic packing plants in the world.



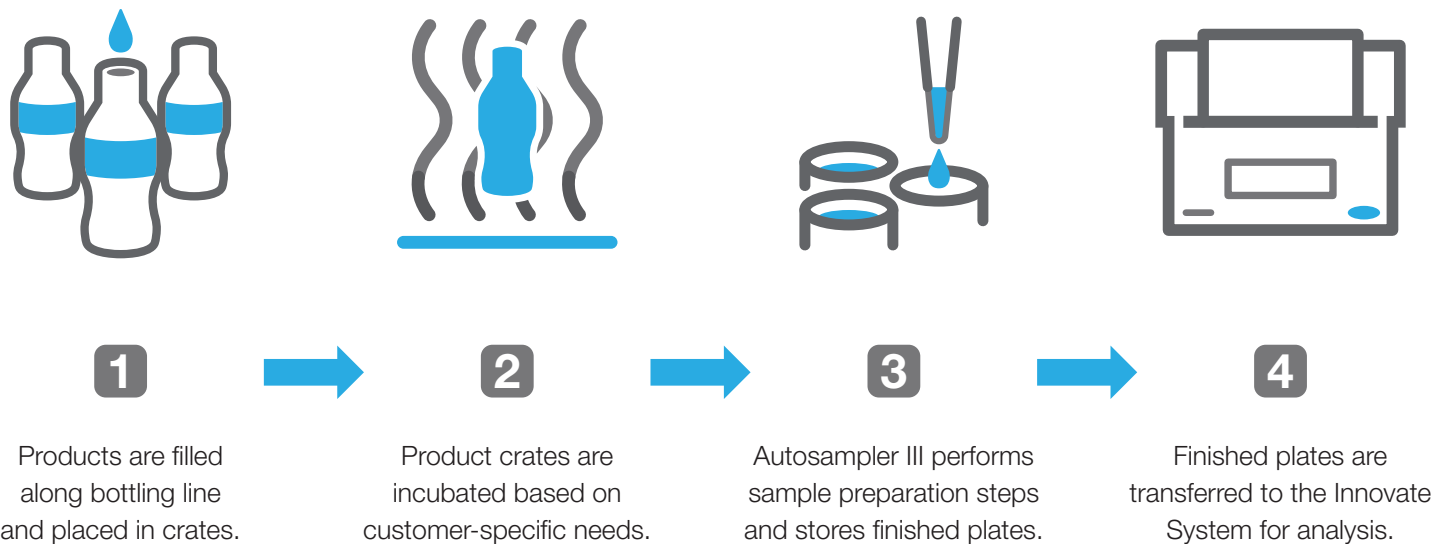
FILLING LINE

AUTOSAMPLER III

INNOVATE MICROBIAL SCREENING SYSTEM

The **Innovate Autosampler III** is a high-volume automated sampling solution for high throughput bottling and aseptic packaging facilities. It streamlines product sampling from any style carton to testing plate, increasing efficiency and consistency. Designed for flexibility, the Autosampler III can be customized for your particular workflow.

Innovate System Flow with Autosampler III



Innovate Autosampler III Features & Benefits

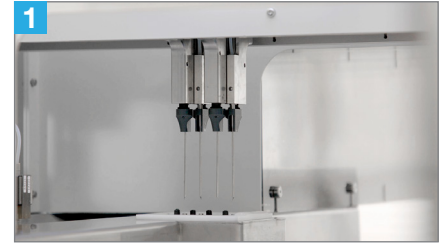
- **Increase Lab Productivity** | Demonstrated 7x improvement over best-in-class manual sampling to ~2,000 assays per hour resulting in more productive use of lab technician time.
- **Flexible Design** | Flexibility for custom needs with option to select from 4-8 pipetting channels to maximize sampling efficiency.
- **Simplification of Workflow** | Continuous workflow eliminates interruption from sampling process to maximize efficiency.
- **End-to-End Sample Tracking** | Integrated software connects the Autosampler III (middleware) between your production line and Innovate System using existing LIMS/QMS functionality.
- **On-Board Control Features** | Minimizes maintenance and downtime with on-board control process (alignment and vision system).
- **Compliance** | Provides user with state-of-the-art software and Industry 4.0 components for remote troubleshooting and real-time KPI tracking. Improves reliability over manual processes to ensure quality assurance standards are met and recorded accurately.

Innovate Autosampler III Operating Procedure

The Autosampler III is used for sampling products from their respective containers and manipulating these samples to be analyzed.

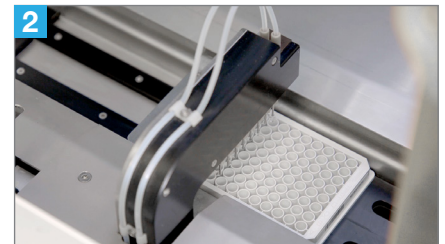
1. Prepping & Loading Samples

Finished products are incubated according to customer-specific SOPs once they leave the production line. Products are directly transferred onto the Innovate Autosampler III System in their original packaging.



2. Screening and Pipetting Samples

Camera reads product-box barcodes. Barcodes provide the system with information on the product being processed. Crates in the Innovate Autosampler III are scanned by on-board vision system to confirm layout and bottle alignment.



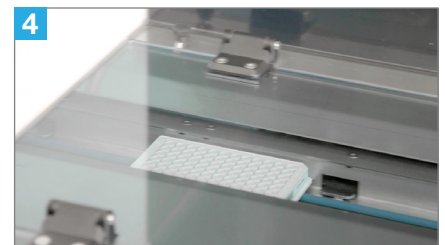
3. Pipetting Samples

The piercing needles draw samples directly from sample containers and dispenses them onto a 96-well microtiter plate. The machine can sample ~2,000 samples per hour when fully utilizing the needles in the pipetting chamber.



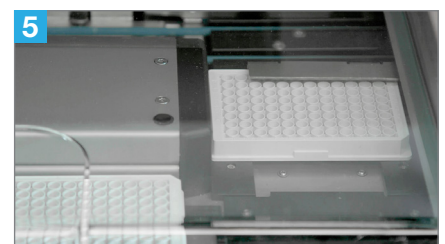
4. Reagent Addition

Once product is loaded into the testing plate, ATX and buffer are added per the Innovate System protocol using an efficient manifold pipetting arm.



5. Homogenizing the Sample

The samples are homogenized in a shaking routine according to the criteria of the Innovate System protocol.



6. Analyzing the Samples

The Innovate Autosampler III has the capacity to hold up to 12 finished testing plates for one hour before they are transferred to the Innovate System for analysis.

Innovate Autosampler III Software

The Autosampler III software displays system functions in real-time including recipe number, carton position, pipetting activity, etc. The software provides the user with the following functional capabilities:

- Innovate file generation
- LIMS-connection
- HMI (Human Machine Interface)
- Track & trace
- Sample Tracking

Innovate Autosampler III Specifications

Autosampler III system specifications can be customized to meet customer requirements.

Performance Specifications	
Throughput	Approx. ~2,000 samples per hour
Plate capacity	40 plates
Reagents	2 separate 8-channel dispensers
Conveyor belt	Food grade, spillage protected
Integrated shaker	Yes, up to 1,500 RPM orbital
Pump control	17-inch touch screen
Smart camera	Machine learning algorithms onboard
Input specifications	Dimensions: (L x W x H) 475 x 390 x 320mm Carton weight: 12kg
Installation Specifications	
Dimensions	Machine: (L x W x H) 2210 x 1290 x 1615mm, including protective covers infeed conveyor: (L x W x H) 2460 x 1380 x 1745mm Weight: 600-700kg (based on system configuration)
Working temperature	Room temperature (0-40°C), Humidity level max. 80%
Power input	1 x CEE plug 400V 16A 5P 6H (3 Phase + N + PE) separate group
Compressed air	7-8 bar input required
Direct connection to waste line	Yes (optional)
Performance Features	
Automatic track & trace	Yes
LIMS connection	Yes
Compatible box barcodes	Yes
Flexible protocols	Yes: volume, shake times, wash cycles
Pierce through cap	Yes