



# Hamilton Robotics

Market-leading automated liquid handling and lab automation systems, powered by VENUS software, for precision and high-throughput assays in biotech, pharma, and clinical diagnostics.

<https://www.hamiltoncompany.com/>

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## Overview

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Hamilton Robotics, a division of Hamilton Company, provides market-leading automated liquid handling workstations and laboratory automation technology to the scientific community, including the Microlab STAR, VANTAGE, NIMBUS, and Prep platforms. These systems are designed to automate complex, high-throughput assays such as Next-Generation Sequencing (NGS) library preparation, ELISA, and clinical diagnostics, significantly reducing hands-on time and ensuring consistent, reliable results.

Key to the system is the proprietary **VENUS software**, which offers an intuitive graphical user interface (GUI) for simple programming, dynamic scheduling, and complete process control. The hardware utilizes patented technologies like **CO-RE II (Compressed O-Ring Expansion)** for precise tip attachment and **Monitored Air Displacement (MAD)** for superior pipetting accuracy. Advanced liquid handling features include Total Aspiration and Dispense Monitoring (TADM), Capacitive and Pressure-based Liquid Level Detection (LLD), and Clot Detection to safeguard sample integrity.

For integration, the VENUS software features a **REST API** and a developer portal, allowing seamless connectivity with LIMS databases and other third-party laboratory devices, enabling a closed-loop lab solution. The modular design allows for flexible configuration and scalability to accommodate changing lab needs, from desktop solutions to large, fully integrated automation networks.

## Key Features

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- Automated Precision Pipetting (Air Displacement)
- CO-RE II Technology (Compressed O-Ring Expansion)

- VENUS Automation Software (GUI, Dynamic Scheduling)
- Total Aspiration & Dispense Monitoring (TADM)
- Capacitive and Pressure-based Liquid Level Detection (LLD)
- Full Sample Traceability (Barcode Reading)
- REST API for LIMS/3rd Party Integration
- Modular and Scalable Deck Configuration

## Pricing

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**Model:** enterprise

Pricing is not publicly disclosed. Systems are highly configurable and require a direct quote from Hamilton based on the specific liquid handler platform (e.g., STAR, VANTAGE, NIMBUS), integrated devices, and VENUS software licensing.

**Target Company Size:** medium, enterprise

## Integrations

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LIMS Systems, Third-Party Lab Devices (e.g., readers, washers, incubators, shakers), Custom Databases (via REST API)

## Compliance & Certifications

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ISO 9001:2015, ISO 13485:2016, RoHS, ATEX, CE Mark

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