

HAMILTON

Automated DNA Storage

Next Level Sample Storage for Genetic Labs



Automated DNA Storage

In the era of advancing personalized medicine, clinical diagnostics that enable the early detection of diseases and conditions offer significant advantages. Part of that testing process often involves storing human DNA samples, a delicate task that requires a thoughtful, diligent approach to ensure specimens remain safe and secure. A DNA sample is both precious and uniquely personal, and each one deserves the utmost care. By utilizing specially labeled storage tubes in a fully automated freezer, Hamilton can provide a solution for this vital responsibility.

How It Works

Storing samples has never been easier. Simply place a tube rack in the Input/Output (I/O) Module and let the Verso Q-Series system handle the rest. The platform can identify samples, store at a temperature ranging from ambient to -20°C , and, if desired, transmit the information of loaded tubes to your LIMS without any additional user interaction. Likewise, sample retrieval is far more efficient than with a standard manual freezer storage setup. Instead of searching and collecting the necessary tubes from multiple freezers, just load a pick list into the Verso Q-Series user interface and the system will start cherry-picking the requested tubes immediately. Once the job is complete, a message is sent to the user and the samples will remain inside at a -20°C storage temperature until the user requests them. This process allows the platform to process large pick jobs overnight and have them available at the start of your workday.

Complete Sample Traceability

One of the key components of a seamless audit trail is an easy-to-read 2D barcode on the bottom of the sample tube. This laser-etched bottom barcode gives researchers the ability to identify a tube at any given time.

Hamilton automated sample storage systems scan the barcode of each introduced tube and store its position within the database. From the very first identification step, every move a tube makes is tracked. The current position of a tube can be displayed within the INSTINCT S software's user interface, or a report showing the entire audit trail can be created and exported.

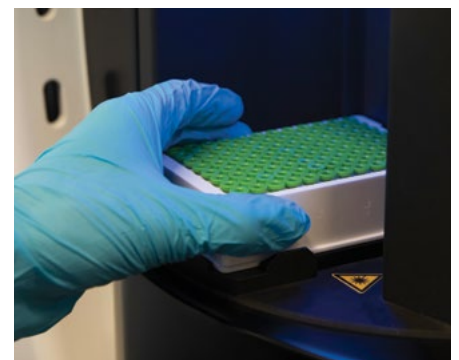
Verso and Verso Q-Series platforms can also run a self-inventory audit, during which the INSTINCT S software verifies that all tubes are in their expected location. The system automatically reports or corrects the database if discrepancies are discovered.



Full audit trail reports



Sample tube with bottom 2D barcode



Loading samples into a Verso Q-Series



Automated DNA extraction combined with automated storage

Sample Safety, Always

Verso Q-Series features superior insulation and refrigeration technology for a secure, reliable storage environment, making it the ideal system for your precious samples.

- Unique, manufacturing applied 2D bottom barcode allows for foolproof tube identification—no need to rely on reading an employee's handwriting.
- Risk of picking the wrong tube is mitigated as tube IDs and positions are managed by the software. There are no manual steps required for tube archiving and picking.
- With no freezer door to open, sample temperature fluctuation and frost formation are virtually eliminated.
- Rigid storage racks keep tubes safely in position.
- Systems are available with redundant refrigeration to maintain storage temperature in the event of a disaster scenario.

Integrate and Elevate

Automate your entire process with Hamilton. Upgrade your automated DNA extraction workflow with the addition of an integrated, fully automated storage solution.

- Transfer extracted DNA directly from the primary tube into the automated storage system, with no manual intervention.
- Minimize the time a sample is exposed to ambient temperature.
- The system sorts samples at -20°C .

For workflows where storage capacity of several hundred-thousand tubes are required, Hamilton also offer large scale, modular storage systems.



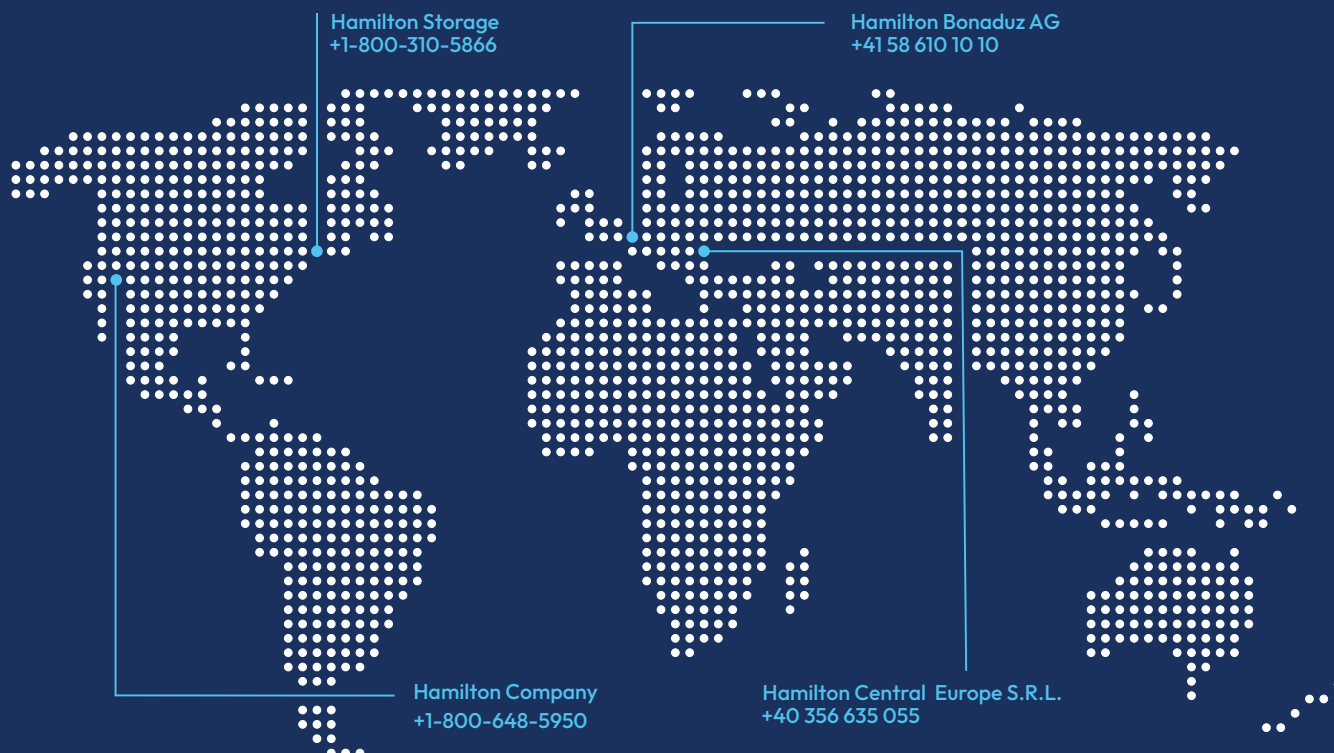
Automated tube picking



High-density storage



Verso Q20—automated sample storage in a manual freezer footprint



● Headquarters / Manufacturing



Years of Experience
75+



Locations Worldwide
22+



Employees Internationally
3,000+

To find a representative in
your area, please visit:
www.hamiltoncompany.com/contacts

Web: www.hamiltoncompany.com
USA: 800-310-5866
Europe: +41-58-610-10-30

Americas & Pacific Rim
Hamilton Storage
Technologies, Inc.
3 Forge Parkway
Franklin, MA 02038 USA
Tel: +1-508-544-7000
sales@hamilton-storage.com

Europe, Asia & Africa
Hamilton Storage GmbH
Parc Industrial Vial 10
7013 Domat/Ems, Switzerland
Tel: +41-58-610-10-30
sales@hamilton-storage.com

Japan
Hamilton Company Japan
Shiroyama Trust Tower 31F
4-3-1 Toranomon, Minato-ku
Tokyo, 105-6031, Japan
Tel: +81-3-6435-6850
sales@hamilton-storage.com