

Biobanks & biorepositories

Preserving today for tomorrow. Built for GxP.

XILTRIX | Nothing left to chance.



	 1. Sample intake & processing GCP GMP GLP	 2. Long-term storage GMP GCP GLP	 3. Inventory management GxP	 4. Research & distribution GxP	 5. Long-term preservation GxP
	- Sample collection & registration - Processing & aliquoting - Initial quality control - Short-term storage	- LN₂ storage with auto-fill - Ultra-low temperature freezers - Controlled rate freezers - Redundant storage	- Sample tracking & traceability - Location management - Chain of custody - Audit-ready documentation	- Sample retrieval - Repackaging & shipment - Condition monitoring - Receiving at partner sites	- Unattended monitoring - Early deviation detection - Maintain sample integrity - Support future research
 Key processes	- Sample intake & accessioning - Processing & aliquoting - Quality control testing - Temporary storage	- Cryogenic storage management - LN₂ auto-fill & supply - Inventory management - Controlled access & security	- Sample tracking & traceability - Location & condition monitoring - Data management - Audit & compliance reporting	- Sample retrieval & preparation - Packaging & shipping - In-transit monitoring (via partners) - Receipt & verification	- Long-term storage management - Continuous monitoring - Deviation handling - Data retention & reporting
 Locations	- Sample collection sites - Processing laboratories - Biobank facilities - Quarantine areas	- Cryogenic storage rooms - Ultra-low freezer rooms - LN₂ tank areas - Secure storage facilities	- Repository storage areas - Automated storage systems - Data management rooms - Restricted access zones	- Shipping/receiving areas - Packaging laboratories - Quarantine & validation areas - Partner sites (external)	- Long-term storage facilities - Redundant storage sites - Disaster recovery locations - Off-site repositories
 Assets to monitor	- Refrigerators (2–8°C) - Centrifuges & sample processors - Incubators (CO₂/O₂) - Short-term freezers (–20°C)	- Ultra-low freezers (≤ –80°C) - LN₂ tanks (vapour phase) - LN₂ supply tanks & auto-fill - Backup power & alarm systems	- Automated storage systems - Sample storage freezers - Robotics & handling equipment - Environmental rooms	- Transport containers (dry ice/LN₂) - Shippers with data loggers - Packaging stations - Dock doors & cold storage	- LN₂ storage & supply tanks - Ultra-low freezers - Environmental storage rooms - HVAC & backup systems
 Environmental parameters	- Temperature - Humidity - CO₂ / O₂ - Differential pressure	- Temperature (down to –196°C) - LN₂ level & fill cycles - Supply tank pressure - Door status	- Temperature - Humidity - Power status - Door status	- Temperature - Location (GPS, via partners) - Shock / vibration (via partners) - Lid/box opening	- Temperature - Humidity - LN₂ level & pressure - Room T/RH/pressure
 GxP requirements	GCP GMP GLP - Sample integrity - SOPs & documentation - Chain of custody	GMP GCP GLP - Validated monitoring - Calibration & qualification - Data integrity (ALCOA+)	GMP GCP GLP - Traceability - Audit trail & reporting - Deviation management	GDP GCP GLP - Transport validation - Excursion management - Chain of custody	GMP GCP GLP - Long-term stability - Continuous monitoring - Audit & inspection readiness
XILTRIX value	- Early warning for samples - Real-time monitoring & alerts - Integrates with LIMS via REST API - Audit-ready documentation	- Validated monitoring (incl. LN₂) - Auto-fill: level, pressure, fill cycles - Closed valves flagged early - Minimises sample loss risk	- Multi-site visibility & control - Centralised dashboards - Traceability & compliance - IT-grade sample system links	- End-to-end visibility (site to site) - In transit (via partners) - Excursion alerts - Monitored handover into facilities	- Long-term stability monitoring - Unattended storage covered - Supports research continuity - Reduces operational risk

Beyond monitoring



IT expertise

In-house IT know-how: SSO with Active Directory, ISO 27001, full encryption, REST API to LIMS, BMS and EMS.



Consultancy & validation

Risk inventory, URS and validation support (IQ/OQ), from design to inspection.



Visualisation, built in

Zoomable floor plans and live dashboards on any device; wall screens built into your lab.



Proven since 1987

No customer has lost irreplaceable material because our monitoring failed



24/7 technical support

Monitoring chain watched around the clock; alarms escalate to your own on-call team



Built for GxP

GMP | GCP | GLP: validated monitoring, audit-ready, data integrity