# FlexLab™ X

## Automation excellence redefined

**GRIFOLS**

# Transforming transfusion medicine through tailored automation

Are you looking to boost productivity in your laboratory to meet rising testing demands and ensure consistent blood and plasma availability?

With limited staffing and tight budgets, reducing turnaround times can be a significant challenge. As qualified laboratory personnel become increasingly scarce, automation is emerging as a critical strategy to sustain efficient and uninterrupted operations well into the future.

With your needs in mind, Grifols Diagnostic has partnered with Inpeco, a highly respected industry leader in total lab automation, to bring you cutting-edge solutions designed to optimize workflows, reduce unnecessary expenses, empower your team, and foster sustainable growth.

## READY FOR A GAME-CHANGER IN LAB AUTOMATION?

Imagine a solution that's not just smart — it's built to transform the way your lab works:

### OPEN & FLEXIBLE

Choose the analyzers you want.
Scale and adapt as your needs evolve.

### TAILORED TO YOUR SPACE

Compact, customizable layouts that fit your lab — not the other way around.

### DESIGNED FOR SIMPLICITY

Intuitive interfaces make monitoring and managing your system simple and efficient.

### PROVEN & RELIABLE

Built on trusted technology designed to deliver fast, consistent, and high-quality results.

Partnering with Grifols means unlocking innovation, flexibility, and performance — all in one solution.

# If you lead a donor screening or a transfusion medicine lab

As the person responsible for the strategic direction and quality of your laboratory, you face the challenge of scaling operations while maintaining quality, compliance and accuracy. Increasing testing volumes, evolving regulations, and limited resources can make it difficult to keep everything running smoothly.

FlexLab™ X is designed to help you ensuring consistent performance, reduce risk, and future-proof your lab for sustainable growth.

## Openness and flexibility are at the core of FlexLab™ X

FlexLab™ X gives you the freedom to build a lab system that fits your needs, with integration from a growing range of analyzers specifically for transfusion medicine. Its modular, space-efficient design supports diverse specialties and simplifies future upgrades, ensuring your lab is equipped for today and ready to evolve with tomorrow's demands.

## Boost lab performance with FlexLab™ X

FlexLab™ X delivers intelligent automation at scale, processing up to 15,525 tubes per hour to significantly reduce turnaround time. Its smart design helps labs consistently meet critical KPIs—including throughput, operational efficiency, and workflow consistency—making it the ideal solution for labs of any size aiming to elevate performance and reliability.

## Trusted traceability for confident compliance

FlexLab™ X empowers labs to meet the highest standards of quality and regulatory compliance through intelligent, traceable automation. With dynamic sample prioritization, STAT processing, and rapid tube retrieval, it ensures urgent analyses are handled swiftly and accurately. Every step—from sample input to rerun and disposal—is seamlessly tracked, giving you full control and confidence across the total testing process.

# If you work in the lab

As the lab manager or supervisor, you face the daily challenge of balancing turnaround times, staffing limitations, and workflow bottlenecks. The growing volume of results, tight deadlines, and fewer available staff can quickly become overwhelming.

FlexLab™ X is designed to help you to streamline tasks, improve consistency, and empower your team to focus on high-value work.

## Designed for simplicity. Built for safety.

FlexLab™ X simplifies daily lab operations with intuitive software and hardware that minimize repetitive manual tasks and biological exposure. Its ergonomic design, customizable workflows, and easy consumables loading create a comfortable and efficient workspace.

## Reliable automation, optimized uptime

FlexLab™ X enables stable performance with proven technology and smart monitoring tools. Its Automation Map and color signaling keep you informed of system status and traffic flow, while the DMX (Data Management SW) Mobile app alerts you to issues and helps resolve them quickly—increasing uptime and keeping workflows on track. Remote updates for DMX software keep your system leading-edge and cybersecure.

## Focus on quality

FlexLab™ X enhances sample result quality through automated sample integrity checks. Its Vision System and Sample Integrity Module assess tube condition, volume, and HIL* indexes upfront—automatically flagging compromised samples to save time and ensure only high-quality specimens proceed to analysis.

*HIL functionality is currently not available in the U.S.

# If you work in procurement

Managing the purchasing process, you play a critical role in ensuring your organization has the resources it needs to operate efficiently. This means constantly balancing performance requirements with financial targets. Finding the right solution that meets both quality and cost expectations can be challenging.

FlexLab™ X is a smart investment—it optimizes resource use, optimizes operational costs, and results in measurable outcomes that align with both financial and performance objectives

By choosing FlexLab™ X, you're not just purchasing a solution—you're enabling long-term value, operational continuity, and measurable savings for your organization.

## Smart investment, sustainable savings

FlexLab™ X is designed with cost-efficiency at its core. Its modular, battery-free track system significantly streamlines installation time and service complexity—translating into lower upfront costs and minimal ongoing maintenance expenses. With fewer components to replace and simplified service interventions, your lab benefits from minimized downtime and predictable operating costs.

Built to last and engineered for reliability, FlexLab™ X increases uptime, helping you avoid costly disruptions and protect your investment over time. Its intuitive interface minimizes training needs and operational errors, further supporting minimizing indirect costs associated with onboarding and support.

## Open connectivity for lab excellence for long-term flexibility

FlexLab™ X is a scalable, open-track solution designed to integrate seamlessly with analyzers from multiple vendors—giving you the freedom to build and evolve your lab infrastructure without being locked into proprietary systems. Its modular architecture and standardized components make it easy to adapt layouts, add or replace instruments, and respond to changing testing volumes or clinical needs. Compact and ergonomic, it optimizes space and implementation costs while ensuring your investment remains future-proof and aligned with strategic procurement goals.

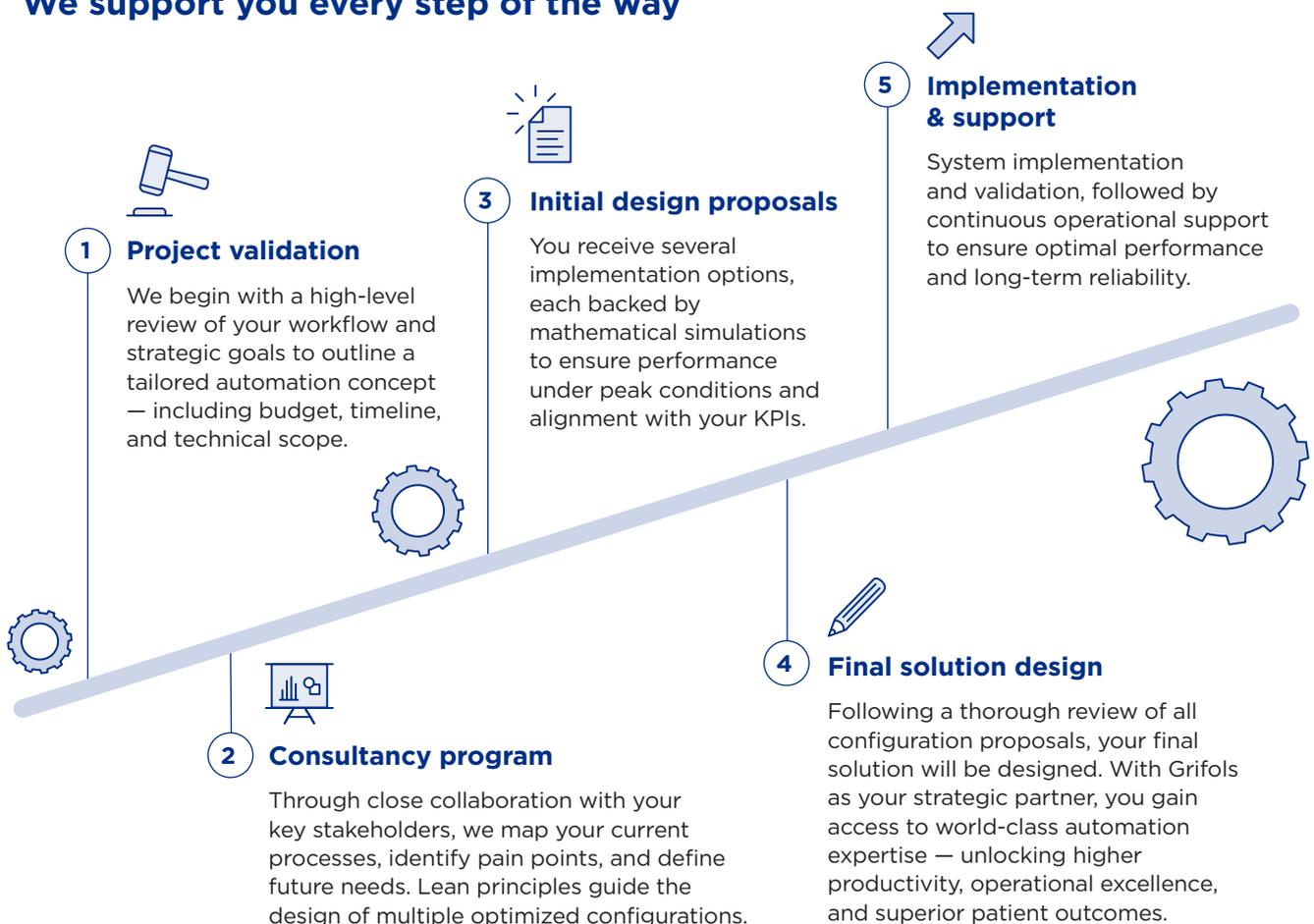# Personalized automation, powered by expert insight

## Tailored workflow consulting to unlock your lab's full potential

Grifols Lab Consultants ensure your automation journey starts with a strong foundation. Certified in Lean Six Sigma, our consultancy team analyzes workflows, identifies inefficiencies, and recommends improvements to enhance productivity. By optimizing your process at the start, we ensure a smooth implementation, so your lab maximizes the full potential of automation.

Our team of Workflow Consulting and Automaton Design experts will create a game-changing automation solution for you, with you- in five steps:

# Your path to smart automation

## We support you every step of the way

**1 Project validation**

We begin with a high-level review of your workflow and strategic goals to outline a tailored automation concept — including budget, timeline, and technical scope.

**2 Consultancy program**

Through close collaboration with your key stakeholders, we map your current processes, identify pain points, and define future needs. Lean principles guide the design of multiple optimized configurations.

**3 Initial design proposals**

You receive several implementation options, each backed by mathematical simulations to ensure performance under peak conditions and alignment with your KPIs.

**4 Final solution design**

Following a thorough review of all configuration proposals, your final solution will be designed. With Grifols as your strategic partner, you gain access to world-class automation expertise — unlocking higher productivity, operational excellence, and superior patient outcomes.

**5 Implementation & support**

System implementation and validation, followed by continuous operational support to ensure optimal performance and long-term reliability.

# Solutions for automating all areas of your lab

## ① Input

### Input/Output Module (IOX)
IOX loads, sorts, and unloads up to 1,000 tubes/hour, with built-in samples ID and tube detection, a customizable touchscreen, and seamless third-party rack integration.

### Bulk Input Module (BIMX)
BIMX bulk-loads up to 1,200 tubes/hour with near-FIFO processing and Priority Sample Loading for faster turnaround.

### Rack Input Module (RIMX)
Fast rack loading up to 1,000 tubes/hour with built-in ID and tube detection, plus an easy-to-use display for quick configuration checks.

## ② Pre-Analytical

### Aliquoter Module (ALX)
Prepares up to 500 secondary tubes/hour from primary samples, with on-the-fly consumables loading for continuous efficiency.

### Centrifuge Module (CMX)
Automates centrifugation with customizable settings and STAT prioritization, ensuring consistency and alignment with lab protocols.

### Decapper Module (DCX)
Automates tube de-capping to boost productivity and enhance safety, handling both original and universal caps.

### Sample Integrity Module (SIMX)
Analyzes sample volume and serum/plasma levels, estimating HIL* indexes to flag compromised specimens early and boost productivity.

*HIL functionality is currently not available in the U.S.

### Mixer Module (MMX)
Mixes up to 700 tubes/hour for tests requiring homogenized samples, like whole blood or thawed plasma—enhancing efficiency with parallel processing.

## ③ Analytical

FlexLab™ X is an open track automation solution designed to seamlessy integrate with a broad spectrum of Blood and Plasma screening laboratory instruments—including NAT, Serology, Hematology, Immunohematology* analyzers.

*In development

## ④ Post-Analytical

### Sealer Module (SMX)
Automatically seals sample tubes post-analysis to preserve integrity and reduce hazardous manual tasks—enhancing operator safety and saving time for higher-value tasks.
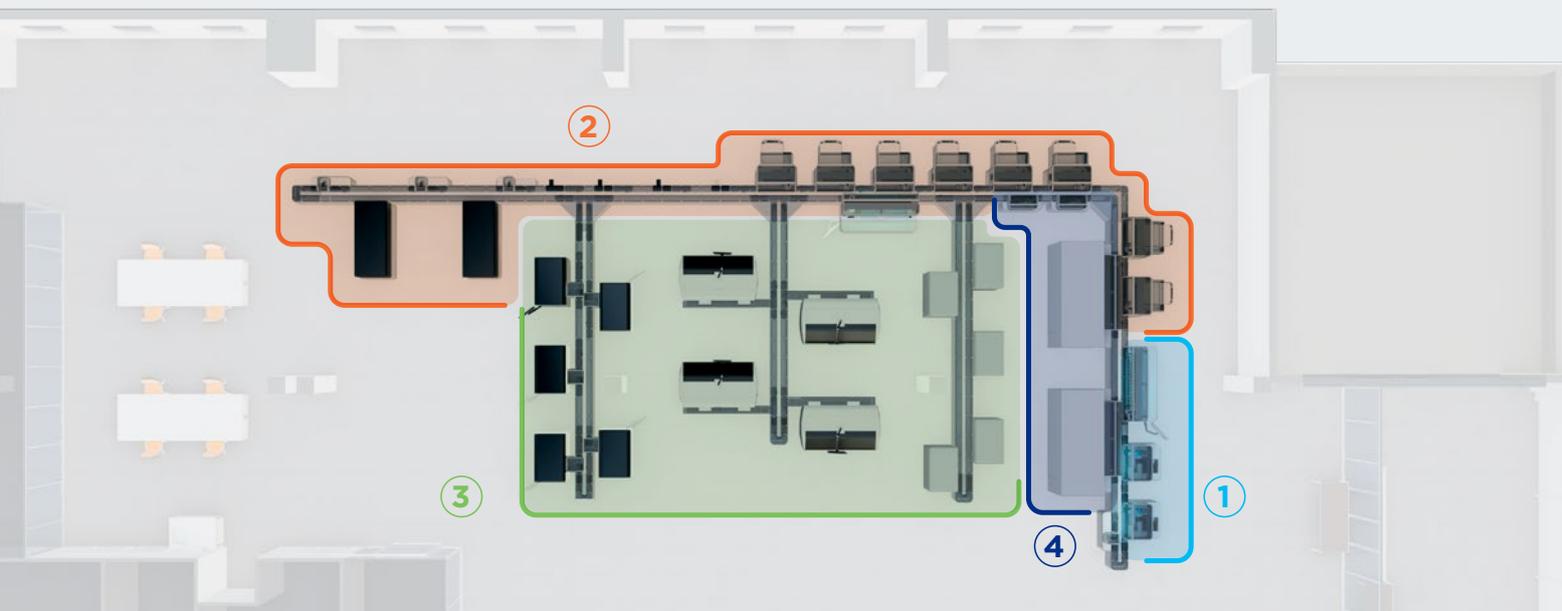
### Recapper Module (RCX)
Automates recapping of secondary tubes to preserve sample integrity and eliminate manual, hazardous tasks—enhancing operator safety and efficiency.

### Desealer Module (DSX)
Automates foil removal from sample tubes for re-testing—saving operator time, preventing spillage, and reducing contamination risks.

### Storage Module (SRMX)
Stores up to 12,672 tubes in temperature-controlled conditions, including 600 tubes at room temperature for short term parking. Optimized rack management enables 1,500 tubes/hour throughput and 30-second retrieval through smart rack management. Samples are auto-discarded after a predefined optimising storage, efficiency and productivity.

# Why <u>choose</u> Grifols for total lab automation?

Because your lab deserves a partner that delivers more than automation — it delivers confidence.

Freedom to integrate your existing instruments and the flexibility to expand as your lab evolves

Expert guidance from Grifols Lab Consultants and Automation Design Services tailored to your needs

World-class service and support that supports with you every step of the way

Backed by an industry leader in Transfusion Medicine with decades of trusted experience

In partnership with Inpeco, a global automation pioneer with thousands of installations worldwide

And above all, the peace of mind that comes from knowing **Grifols is By Your Side**

✓ **Choose innovation.**
✓ **Choose reliability.**
✓ **Choose a partner commited to your success.**

FlexLab™ X is a trademark of Inpeco SA.
The mentioned solutions are available in selected markets, and are currently not available in the United States.
Please contact your sales representative for further information.

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