



Tego's Solution for Aseptic Manufacturers

Boost Efficiency and Quality with Automated Environmental Monitoring

Tego offers an automated environmental monitoring solution combining a durable hardware component, the TegoChip™, with customizable software and expert services to provide real-time visibility across the environmental monitoring and quality control programs. This solution provides significant efficiency improvements for aseptic manufacturers by enhancing the quality, safety, and reliability of their operations.



ABOUT

Automating Environmental Monitoring (EM) for Patient Safety

In aseptic manufacturing, the goal is to enhance sterility assurance and reduce contamination with advanced environmental monitoring technology. However, this shift to innovation is often hindered by three key challenges: high upfront costs and complex regulatory hurdles, especially with evolving standards like EU Annex 1, and the difficulty of integrating new digital solutions with outdated legacy systems.

Most of today's Quality Control (QC) laboratories are still reliant on manual sample processing, which is cumbersome, labor intensive, and prone to inconsistency and error. Moreover, when manufacturing teams are bound by manual data recording and transfer, Quality Assurance (QA) teams lack the means to review and resolve exceptions in the moment. Instead, they often discover exceptions weeks or months after they occur, necessitating a time-consuming and expensive investigation to determine the root cause and address the impact.

The need for automated visibility and real-time information has never been more pertinent. Despite technology innovation, still only an estimated 20 percent of the environmental monitoring programs utilize even basic bar codes. Lack of automated solution offerings and reliance on paper and pencil activity means the manufacturing floor is error-prone, and that the most critical monitoring activities are time and labor intensive.

Need for Touchless EM Programs

40%

Reduction of contamination events and failed batches

Building an automated and accurate aseptic manufacturing solution requires more than bar codes and manual collection; it requires specialized hardware, technology integration and data analysis to support all reporting activities.

Leaders are prioritizing platforms that deliver flexibility, real-time insight, and seamless integration across teams and tiers of the business. Cloud infrastructure, mobile tools, and intelligent automation are no longer optional—they're prerequisites for staying competitive.

Tego meets this need with an end-to-end solution that supports operations and delivers real-time insights for the people who need them most.

Tego Solves Business Problems

Tego is the architect, deployer and servicer of a solution that combines edge devices, intelligent software, and hands-on services - engineered for the realities of industrial operations.

Differentiated from other platform solutions that only automate and collect data, TegoHub also pulls and pushes data from other systems (ERP, MES, WMS and others), offering a completely integrated digital solution with powerful real-time analytics and true business insights. Our tailored services support your environment, your workflows, and your goals for today, tomorrow and always.

One System-Wide View of Everything That Matters

Tego is inventor of the only sterilization-proof RFID technology, TegoChip™, that survives gamma and e-beam sterilization. The company designs RFID labels, tags and software perfect for digitizing settle plates and other environmental monitoring items so that a touchless, paperless sample tracking with real-time data integration meets the needs of aseptic manufacturers' good manufacturing practice (GMP). Tego delivers a modular, scalable solution that provides real-time operational visibility across the enterprise. Tego empowers organizations to automate their environmental monitoring programs for better patient safety.



**It's operational
precision —
delivered in
real time, on
your terms.**

TegoHub™

Tego's software captures data directly from tagged items and delivers it to LIMS systems for real-time reporting of the people performing the work, to the batch and drug being monitored during production, to the processes being carried out. This information integrates seamlessly with other system data and delivers real-time alerts and notifications.

- Digital and automated transparency of EM programs
- Automated alerts to prevent quality and process issues
- Easy integration with your existing LIMS , ERP, Data Lakes
- Easy integration with your existing IT/OT ecosystem
- Integrated real-time reporting that incorporates finance data, supply chain information and scheduling details



Tego Empowers EM Labs and Quality Control (QC) Programs to Perform Better

- Gain direct traceability of QC Micro programs
- Maintain a paperless regulatory compliant workspace, which increases speed to market
- Make sound product and quality release decisions
- Reduce errors with automated data flowing from the manufacturing floor into LIMS

Real-World Results

52%

reduction of
manual data
collection

30%

improvement in QC
worker's efficiency

28%

reduction of QC
investigations

61%

reduction of personnel
sourced contamination

A Solution Provider with End to End Responsibility. We're with you Every Step of the Way.

1



Audit & Assessment

Every engagement begins with a deep understanding of your operation.

- Facility walk-throughs and workflow observation
- Assessment of materials, inventory, workflows, and digital maturity
- Review of current systems, processes, and workforce needs

This assessment lays the foundation for a solution that accurately reflects how your organization works, how data flows and assures maximum impact of the solution when deployed.

2



Design the End-to-End Solution

We build a complete, right-sized solution aligned with your use cases and scalable for growth.

- Hardware selection and procurement – selection of auto-ID devices, sensors, and edge components tailored for your environment
- System design & configuration – including modeling of coverage areas, workflows, data, labeling formats, and access roles
- Application ready – a configured app is plug-and-play ready for item tracking, task logging, and field mobility, ready for warehouse, production, and field environments
- Label design and management –including integration into your labeling systems (e.g. SAP), and management of front-end label software

3



Integrate Hardware, Configure Software & Monitor Systems

We bring it all together and make sure it works in your environment.

- Provisioning, configuration and proactive maintenance of devices
- Software implementation: TegoHub™ and TegoConnect™ Fixed and Mobile
- System configuration and integration with ERP, MES, WMS, and other business platforms
- Validation of workflows and data models in production

4



Rollout, Train & Support

Our work doesn't end at go-live. We stay involved to ensure adoption, minimize deployment risk, and optimize performance over time.

- Go-Live Support – Onsite and remote support from subject matter experts to assist with issue resolution during go-live
- Training Services – “Train the trainer” education for administrators and frontline champions, customized to your operation and supported with clear documentation
- Ongoing Support – Remote technical support, system updates, proactive maintenance, and roadmap planning



Start Connecting Now

Discover how Tego can help your team get ahead of today's demands—and tomorrow's.



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