

WAREHOUSE AUTOMATION

ENSURING SAFETY & FULL CONTROL.
DRIVING SUCCESS IN THE
PHARMACEUTICAL INDUSTRY.



**MAXIMIZED
STORAGE CAPACITY
ON 25,620 PALLET
LOCATIONS**

Livzon
China

**60 SEC.
INTERVENTION
TIME PER
INCIDENT**

Roche
Switzerland

**ORDER
PREPARATION
TIME REDUCED
BY 60%**

Roche
Switzerland

Swisslog
**LOGISTICS
AUTOMATION
FOR THE
PHARMA
INDUSTRY**

**COMPLIANT
WITH GMP
STANDARD**

B. Braun Melsungen
Germany

**INDIVIDUAL
TEMPERATURE
CONTROL IN
3 AREAS**

Livzon
China



Take full control over your pharmaceutical logistics.

With best-in-class automation solutions for proven reliability.

The global pharmaceutical market has doubled over the last ten years whereas the medical device industry shows strong growth year by year. At the same time, compliance requirements are becoming increasingly stringent. In addition, a globally growing aging population further burdens supply chains and logistical planning. To handle complex production processes and regulations, the pharmaceutical industry requires precisely controlled storage and distribution solutions – an objective best achieved with automation.

The pharmaceutical industry's logistics processes are under growing pressure. It is increasingly important to expedite just-in-time delivery and a rapid exchange of materials. Packing material, raw materials and (semi-) finished goods must be stored and handled in a way that ensures product safety – while allowing exact traceability down to individual products, throughout

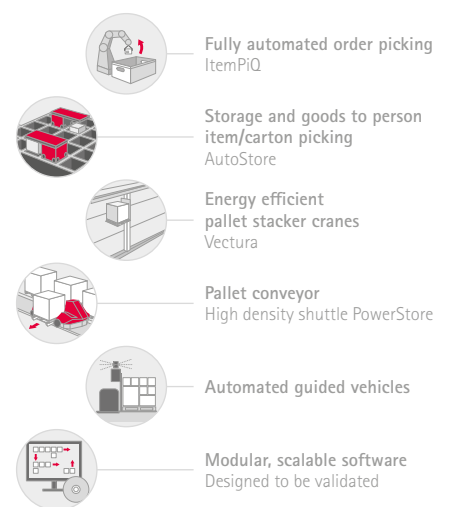
the complete supply chain and all distribution channels. The solution? Flexible designs, proven handling equipment and software that can schedule and track movements easily as well as transparently. Designed to meet the unique requirements of the pharmaceutical industry, Swisslog's integrated Place&Trace solution frees you up to focus on your core business. The growing variety of pharmaceutical products and decreasing batch sizes require special requirements for storage and handling such as temperature control, ergonomic pick stations and enhanced security. We optimize the storage space and pave the way for a controlled and efficient production process. So you can deliver the right materials. In the right quantities. To the right location. At precisely the right time.

Medical Device Industry

In addition to the increased SKU's and smaller batches the Medical Device Industry has to deal with short delivery times for express-

deliveries for hospitals for urgent surgeries. Additional challenges as carton or item-picking, very high return rates or obsolesces require action.

Swisslog Solutions: Our commitment. Your competitive advantage.



We shape the future of your intralogistics.

Creating solutions powered by a single platform.

Industry 4.0 enforces product safety and supply chain security

Industry 4.0 is driving changes of intra-logistics with automation and robotics, connectivity and increased use of data. The development of the digital world leverages the possibility of managing GxP-critical information and data integrity in Pharma manufacturing as well as quality operations where compliance and validation are vital. Advanced data management enables not just compliant record keeping but also future-oriented analytics and monitoring to support quality decisions and continuous improvement along the entire supply chain.

Swisslog is leading the digital transformation

Our experience with flexible and data-driven solutions spans decades. Bringing transparency and efficiency to your Pharma warehouse with our Industry 4.0 concept is our mission. Swisslog designed its software architecture and testing procedure so that your intralogistics can evolve safely: from a large rigid system into modular, software-driven solutions. Solutions that can be adapted as needed. And grow as the market demands. Backed by KUKA, Swisslog is ready to lead you on the journey to achieving the highest intralogistics transparency without sacrificing security in a digital age.

At the heart of our solutions? Powerful software.

SynQ, our material handling software, encompasses warehouse management, material flow and automation control system functionality in a single platform. Our comprehensive Pharma knowledge and the experience gained in international Pharma projects have been captured in SynQ and successfully implemented in GxP environments. Our software implementation processes are frequently audited by major pharmaceutical customers. SynQ visualizes your system in 3D providing business intelligence tools such as condition monitoring. Intelligent services – for a smart future.

Swisslog success stories

Proven expertise for leading businesses.
Get ahead. Stay ahead.

F. Hoffmann–La Roche AG Switzerland

Roche, Switzerland

Founded in 1896, the multinational healthcare company is one of the world's largest Pharma enterprises.

Customer Challenge: Expanding existing cold storage warehouse to complete operations at same location – from sterile production to packaging and shipping.

Result: New high bay cold storage and deep freeze warehouse that meet strict ergonomic guidelines and ensure closed cold chain for temperature-sensitive pharmaceuticals.



Livzon Pharmaceutical Group, China

Focused on producing APIs and Intermediates for Antibiotics as well as food additives, Livzon is a leading pharma company in China.

Customer Challenge: New production and distribution site to handle increasing quality requirements and company growth.

Result: New automated high bay warehouse, operated by Swisslog's proprietary management system – for economical distribution, high quality and maximum storage locations with minimum of space.

B | BRAUN SHARING EXPERTISE

B. Braun Melsungen, Germany

Founded in 1839, the German medical and pharmaceutical device company is now located in more than 50 countries.

Customer Challenge: Modular concept to facilitate future expansion of its logistics operation at the headquarters in Melsungen.

Result: Automated high bay warehouse for pallets and bins, operated by Swisslog's warehouse management system. Automated guided vehicles (AGV) handle the transfers between production and storage.

Solutions for your entire supply chain. Future-ready in a changing pharma market.

Design

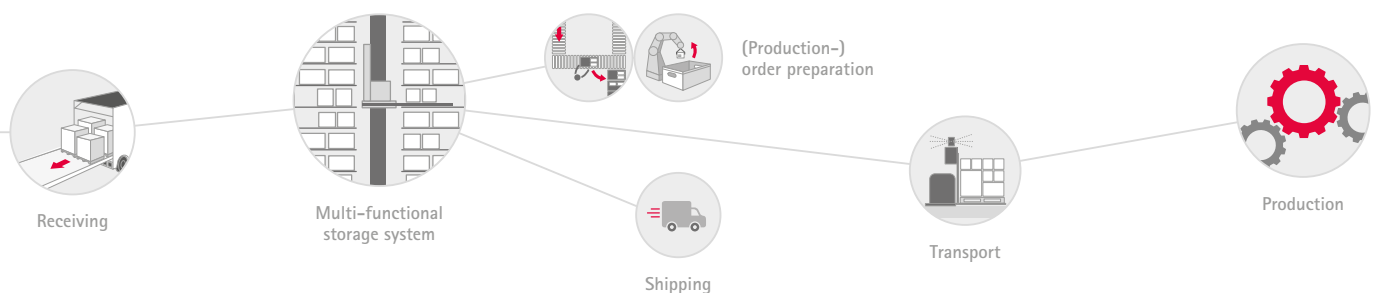
Understanding and analyzing your data to maximize the performance of your operation. For a solution with a perfect fit.

Develop

Flexible, adaptive logistics solutions so warehouses can improve reliability and traceability in the highly regulated Pharma market.

Deliver

Everything you need to optimize your logistics: outstanding service, support and future-ready technology for high-quality results.



swisslog

www.swisslog.com