



Pneumatic tube systems for transporting laboratory samples, blood products, medications, and other medicinal products.

# **TranspoNet** pneumatic tube systems

- Increased efficiency
- Enhanced quality of care
- Better patient outcomes







# Healthcare challenges

The core responsibility of healthcare providers is to improve patient outcomes through efficient, quality-controlled care.

## Challenges

- Increasing costs
- Patient outcomes
- Quality of care
- Compliance and security

In today's increasingly competitive healthcare market, hospitals are facing considerable challenges: demographic developments, rising treatment costs, shortening patient length of stay without compromising quality, and increasing efficiency. For these reasons, the optimization of internal logistics is becoming increasingly important.



## Internal logistics as a critical success factor

The transport of goods plays a central role in hospital logistics. The quality of this transport is a critical aspect. Incorrectly delivered goods or improper handling during transport can have serious consequences for logistical processes, staff efficiency and patient care.

## Streamlining processes and increasing efficiency

Transport automation in hospitals improves the quality of goods transportation by optimizing processes and increasing hospital efficiency. Manual transport, which is both time-consuming and expensive, is eliminated, allowing nursing staff to refocus on core tasks. This increased emphasis on patient-related activities results in an overall improvement in the quality of care.

### Benefits

#### Focus: patient care

- Deployment of nursing staff in line with their core competencies.
- Increase of time that is dedicated to patient care.

#### Streamlining processes

- Data and goods are available more quickly for diagnosis and treatment.

#### Investment for more competitiveness

- Fast return-on-investment
- High flexibility and scalability
- Integration of additional solutions





# Optimized workflow efficiency means more time for patients

TranspoNet pneumatic tube systems safely and reliably transport materials throughout the hospital, offering numerous benefits for health systems.

## **Increase process efficiency**

Healthcare facilities cannot always plan or predict transport needs. Automating spontaneous transports with a pneumatic tube system means reducing any process interruptions, and increasing efficiency.

## **Provide more time for patients**

Pneumatic tube systems release staff from transport responsibilities. Instead of carrying out pick-up and delivery tasks, employees can concentrate on caring for patients.

## **Speed up diagnosis and treatment**

Pneumatic tube systems reliably transport goods in minutes – 24 hours a day, seven days a week. This saves valuable time and improves turnaround times. Laboratory results and medications are available faster.

## **Achieve fast returns on investment**

TranspoNet pneumatic tube systems pay for themselves within a few years, depending on the project. The combination of high profitability and improvement of process quality and patient care leads to a significantly higher competitiveness of your healthcare facility.

## **Support chain of custody for ultimate safety**

The security of goods transports is significantly increased thanks to permanent and seamless traceability of the pneumatic tube boxes by means of RFID tag, optional access restrictions and user authentication.



## System overview

- 1 Transported goods**  
 Laboratory samples, blood products, frozen section specimens, medications, infusion bags, documents, medicinal products, and other materials are transported via pneumatic tube systems.
- 2 TranspoNet stations**  
 Our stations are used for receiving and sending carriers. We offer many different stations tailored to customers' needs.
- 3 Tubes**  
 The pipes of the system can run at ground level as well as over several floors, through fire protection sections or over open areas, underground or in suspended ceilings. Retrofitting in existing buildings is just as feasible as installation in shell construction.
- 4 Carriers**  
 Carriers transport goods throughout the healthcare facility. Depending on the requirements, different carrier models are available: The LeakResistant carrier offers increased leakage protection for the transport of contaminated liquids. The SmartOpen carrier enables automated unloading in the laboratory.
- 5 Medical personnel**  
 The pneumatic tube system relieves caregivers of transport tasks. The TranspoNet has the added value of being easy to handle and operating at an ergonomic height.



# Using **TranspoNet** for blood transport

TranspoNet meets the high demands of blood banks and laboratories.

Blood banks have three main requirements. Quick availability, traceability across the transport path, as well as visibility and documentation:

- The chain-of-custody solution enables complete monitoring of all handling and transportation activities throughout the supply chain.
- Costs are accurately calculated and documented, and they can be allocated to specific departments and/or patients.

Fast transport, careful transport of critical samples, and efficient handling are crucial in the laboratory environment:

- The PowerLine system ensures fast transport.
- Stations specially developed for laboratories ensure careful transport and receiving of samples.
- Integrated, customer-specific laboratory solutions optimize process workflows.



# More efficiency in the pharmacy

Ideally, a pneumatic tube system connects all wards and functional departments of a healthcare facility with the pharmacy. Medications are transported through the system. Instead of running errands, medical staff can refocus on their clinical tasks.

## Customized configuration

We provide tailored solutions based on individual needs. A medication can leave the pharmacy shortly after the electronic prescription arrives, ensuring maximum availability.

## Interface with packaging and dispensing systems

If the facility has a solution for the automated packaging and dispensing of medication, an interface to TranspoNet is the obvious choice. This establishes the transfer and connection to the pneumatic tube system. The patient-specific medication is transported safely and ready for administration directly to the ward.

### Our approach: Closed-loop medication management

Automated solutions for hospital pharmacies optimize medication management and distribution. They ensure that the right medications reach the right patients at the right time.

#### Higher efficiency and seamless traceability

The integration of automation solutions enables the smooth interaction of staff, technology and transported goods.

Combined with an automation solution in the central pharmacy, patient-specific medications can be administered in a closed loop from goods receipt through the pharmacy and ward to the patient's bedside.

## Chain-of-custody solutions for pneumatic tube systems

Our chain-of-custody solution is an application with high customer value. It combines both the interaction of employees and technologies as well as transactions in various processes between care and functional departments. Improved processes and reduced process costs increase the profitability of the chain-of-custody solution.



The chain-of-custody solution monitors every single transport. Transport times are improved through the identification, tracking and monitoring of transactions.





Swisslog Healthcare

Sobha Sapphire - Unit 1209

Business Bay, Dubai, UAE

Phone +971 (0)4 558 8145

[healthcare.mea@swisslog.com](mailto:healthcare.mea@swisslog.com)