

UPDATE

COMPANY MAGAZINE



END-TO-END TRACEABILITY

Throughout the entire
logistics supply chain

AUTOMATED PICKING & READING SOLUTIONS

Guarantee full tracking and tracing
for Slawex and Bidafarma

INTELLIGENT ROBOTICS APPLICATION

For high-speed picking and
maximum process stability

SPECIAL EDITION HEALTHCARE & COSMETICS

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Smart piece picking robots ensure both high speed and precise identification

Dear readers,

High-value products, complete and traceable documentation, along with a complex operational framework place high demands on the intralogistics of manufacturing and distribution in both healthcare and cosmetics industries. Compliance guarantees essential patient safety and can make the decisive advantage in competitive markets. SSI Schaefer is firmly committed to safety by providing complete documentation of prescription drugs throughout the entire warehouse. This traceability guarantees protection against counterfeiting and ensures the reliability of the supply chain.

Software solutions from SSI Schaefer support batch and serial number tracking and are the backbone of every reliable and flexible warehouse. Innovative technologies like our broad shuttle portfolio, robotics, and pouch sorter systems allow efficient and fully automated storage and retrieval of bins and single products. Tailored and efficient processes allow tracking of batches and serial numbers in both goods-in and returns processing. In addition, piece picking with robotics and goods-out handling with the Schäfer Scan Machine is also supported.

In close partnership with our customers, we unlock the potential of automation and digitalization. For the pharmaceutical wholesaler Slawex, we integrated an intelligent picking system including our Schäfer Scan Machine to perfectly fulfill the demanding regulatory track and trace requirements. Quality control is also key to Bidafarma, who trusts the SSI Order Verifier – controlled by the logistics software WAMAS®.



Smart piece picking robots define the next step in efficient logistics 4.0. High-speed picking that includes scan features enables high throughput rates while ensuring precise identification and regulatory compliant verification of products. To understand more, read the article on pages 10-11.

Healthcare and cosmetic experts at SSI Schaefer are ready to assist you in order to define and implement efficient storing and picking solutions with proven software technology. Let's talk.

Yours sincerely,

Klaus Murko
Vice President Healthcare & Cosmetics
SSI Schaefer

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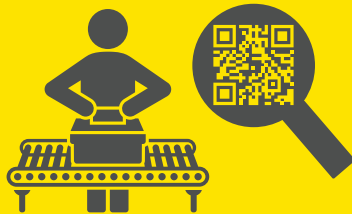
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HOW TO ENSURE END-TO-END TRACE- ABILITY THROUGHOUT THE WAREHOUSE

Legal requirements (FMD, FDA) and guidelines characterize the healthcare industry – and intralogistics too. From goods-in to goods-out pharmaceutical products need to be proved and verified seamlessly to ensure essential patient safety. SSI Schaefer offers a comprehensive portfolio of manual to semi-, and fully automated technologies to read serial numbers, batch numbers and expiration dates.



PICKING & VERIFICATION



- 1 Radio Frequency Picking**
Manual product scanning
- 2 Pick to Tote**
Semi-automated order picking
- 3 A-Frame**
Automated single product picking and scanning. Combination for verification: Schäfer Scan Machines, SSI Order Verifier
- 4 Piece Picking Robot**
Automated solution with integrated product scanning
- 5 SSI Order Verifier**
Automated quality control of manually or automatically picked orders



FROM STANDARD PRODUCTS TO COMPLEX SOLUTIONS

In addition to track and trace applications, SSI Schaefer seamlessly supplies the whole range of manual, semi-, and fully automated products and systems to meet individual customer challenges with tailor-made intralogistics solutions.



FROM A SINGLE SOURCE

- Manual, semi-automated, and fully automated picking systems
- High-quality bins and trays
- Intelligent racking systems, such as static racks or flow racks
- Wide range of products for goods-to-person systems
- Handling systems for a fast and efficient material flow
- Automated guided vehicles and robots for both picking and palletizing
- WAMAS® and SAP software solutions for manual, semi-automated, or fully automated warehouses
- Tailored service and support for maximum reliability



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HEALTHCARE LOGISTICS REDESIGNED FROM THE GROUND UP

To ensure the company can fulfill demanding regulatory requirements in terms of tracking and tracing for pharmaceuticals, Slawex has integrated a state-of-the-art picking system, including the Schäfer Scan Machine, into its processes. By implementing this solution for fully automated picking and reading of individual products, the pharmaceutical wholesaler has assumed a leading role in the Polish market and is also strengthening its position in the wider EU region.



Slawex was founded in 1990 with its headquarters located in Lublin. The pharmaceutical wholesaler stores and distributes around 16,000 different items, including over-the-counter (OTC) medication and prescription (Rx) medication, which can be delivered the same day. Slawex has responded to the statutory provisions (FMD) by building a new storage and picking facility at its Klaudyn site, as well as reorganizing the picking and documentation process, which was previously entirely manual.

Automated picking and recording

The newly commissioned, three-story logistics unit covers approximately 1,700 m² and includes static and dynamic flow racks. Employees now pick orders from these racks using handheld RFID terminals. Roughly 25 % of the order lines are, however, picked using a fully automated A-Frame picking system. In conjunction with the Schäfer Scan Machine that is connected directly to the system, a system-wide individual product picking and recording solution was implemented.

Automated picking systems improve performance

Since going live, approximately 2,000 orders averaging 30,000 order items have been processed per day. The twelve A-Frames are modular in design and have a total of 864 channels. This creates high product density, allowing the available space to be used to its full potential. An additional advantage of the solution is the decoupling of the replenishment process and the picking itself. The A-Frames

are filled at off-peak times and fully automated picking takes place at peak times. The resulting efficient deployment of personnel is enabling a significant increase in productivity.

Full tracking and tracing guaranteed

After the products have been ejected onto the collecting belt of the A-Frame, each individual product is reoriented and scanned on all six sides by highly sensitive cameras. Any reading errors are flagged and affected bins are automatically redirected to an inspection station. Depending on the order structure, the system can read up to 10,000 items an hour while identifying and documenting serial numbers, batch numbers and expiration dates. The Schäfer Scan Machine is many times faster than conventional manual methods. It also impresses in terms of safety: Full verification is possible, meeting EU requirements in relation to documented, seamless tracking and tracing.

Turnkey solution from bins to IT

In addition to A-Frames and Schäfer Scan Machine, the turnkey project includes racking systems, the provision of bins and the delivery and installation of a bin conveying system to efficiently connect the different warehouse areas. The jointly designed concept is complemented by the integration of radio frequency picking, de-stackers, lidding and address insertion machine and strapping machine. SSI Schaefer's proprietary logistics software WAMAS® controls the whole system and links all of the components together.

Working with SSI Schaefer also means that the company has a partner with a strong local presence and knowledge of the global pharmaceutical sector as well as country-specific regulations.

Grzegorz Matuszewski
Operational Director at Slawex

Exemplary pharmaceutical logistics

Grzegorz Matuszewski, Operational Director at Slawex, sums up: "We see the innovative system design as an important stepping stone in our efforts to align our processes with Industry 4.0 and for the further growth of the company. Short cycle times allow us to expand our services, such as same-day delivery. In addition, Slawex in Klaudyn is now perfectly placed to handle more demanding patient safety regulations in an efficient and flexible manner moving forwards."





SSI ORDER VERIFIER FLEXIBLE SOLUTION FOR A WIDE RANGE OF APPLICATIONS

With the SSI Order Verifier, items from an already picked customer order can be identified, counted, checked, verified, and documented in a single step – regardless whether the article is cubic or cylindrical, packaged in a blister pack, tube, or bag.

In a first step, picked orders are delivered in bins and emptied onto a conveyor belt. The products are separated and then transported to the scan machine where highly sensitive cameras scan the products from six sides reading 1D and 2D barcodes (matrix codes) as well as RFID transponders. In a final step, the products are compiled again in bins and conveyed to goods-out. Unidentified items are automatically diverted to a check station.

With a throughput of up to 5,000 items an hour, the system has proven itself to be a reliable quality control, eliminating costly manual checking processes. As an end-of-pipe solution, the SSI Order Verifier can easily be integrated into any existing warehouses and is available in a fully automated and semi-automated version.



AUTOMATED ZERO-ERROR QUALITY CONTROL

Bidafarma is one of the largest pharmaceutical wholesalers in Spain. For its distribution center in Madrid, SSI Schaefer worked closely with Bidafarma to develop a strategic solution for highly automated picking including quality assurance with the SSI Order Verifier in order to comply with the legal provisions on documentation and traceability for medical products.



The overall implemented solution of SSI Schaefer provides the perfect integration of our SAP system and the logistics software WAMAS®. Also, we would like to emphasize the implementation of the SSI Order Verifier, which enabled us to carefully check our picked products while adhering to all delivery schedules.

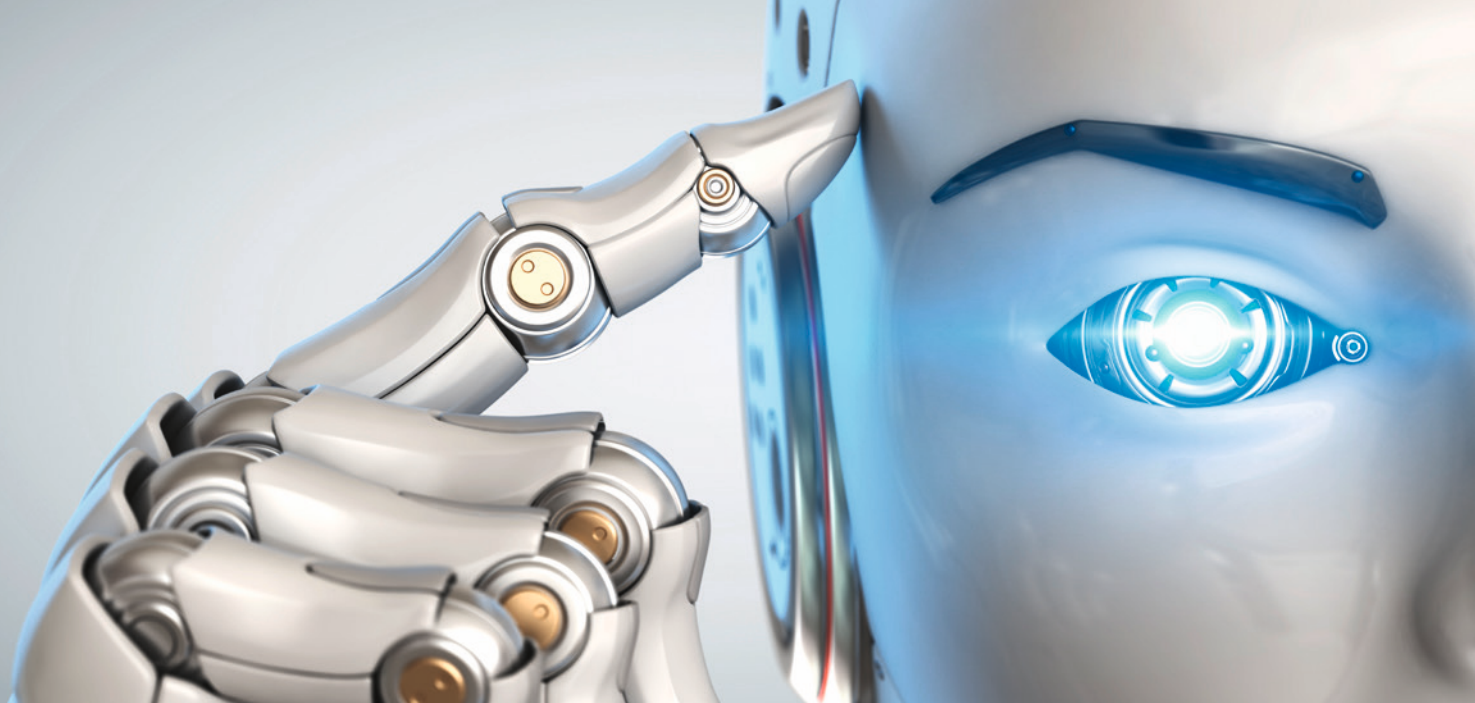
Francisco Vega Lucero
Industrial Manager at Bidafarma

YOUR BENEFITS

- Automated zero-error quality control
- Conforms to track & trace regulations
- Automated check processes
- High-performance with an return on investment of approx. two years
- Easy integration into existing warehouses
- Custom solutions possible due to modular design

MAIN PRODUCT FEATURES

- Fully automatic identification and documentation of batch number, serial number and expiration date
- Reading 1D and 2D barcodes (matrix codes) as well as RFID transponders
- 6-side scan at a speed of 2.5 meters/second
- Throughput of up to 5,000 products/hour



SMART ROBOTICS APPLICATION FOR HIGH-SPEED PICKING AND GUARANTEED PROCESS STABILITY

The wide range of modular, scalable automation solutions by SSI Schaefer covers the steadily growing requirements for goods handling in the healthcare and cosmetics industries. Modern piece picking robots with integrated scan functionality ensure efficient picking as well as precise identification and verification of products to conform with regulations for tracking and tracing.

Especially in the healthcare industry, there are a number of regulations with regard to pharmaceutical drug safety standards to protect patients. At the same time, perfect traceability of goods must be ensured throughout the course of stringent quality management processes. In this challenging environment, cutting-edge robotics act as a fixed component for efficient and economical logistics 4.0. SSI Schaefer offers a new piece picking application – a fully automated solution for picking, identification, documentation and control.

Next generation piece picking

The high-performance piece picking robot for automated single-piece picking integrates seamlessly into holistic logistics systems. These precise picking components cover all kinds of order structures and guarantee a constant performance – independent of ambient conditions or ergonomic requirements. Integrated cameras gather every individual product and ensure 100% verification at all times. This enables consistent track and trace of Rx pharmaceutical items.

Software modules for holistic logistics applications

The mastermind of the industrial image processing solution is the Vision software module contained in the standard logistics software WAMAS®. The software solution guarantees safe and error-free identification of individual pieces. Another central element is the Robot Material Flow Controller (RMC). With processed 3D data, movements of the robotic system are adapted to the profile of the current workflow. Combined with WAMAS®, an intelligent system covering all tasks, from picking sequences to mastering data administration, is created and enables sequenced order picking. Users benefit from maximum flexibility and optimum results by perfectly coordinated IT systems.

Intelligent overall system

The piece picking application is especially suitable for slow and medium movers, and can be combined with different conveying systems to form an intelligent overall system. Applied in pharmaceutical wholesale applications, the robot can seamlessly integrate into a bin conveying system. Order goods are thus picked directly from the storage bin into the order bin. Meanwhile, products are scanned to enable unambiguous verification of serial and batch number as well as the expiration date. In online business, as an example mail-order pharmacies, the robot picks order items directly into a pouch sorter and forms a highly dynamic and efficient solution for picking and sorting for e-commerce applications. The scanning process to comply with EU regulations for tracking & tracing is done at the same time. Robotic applications can also be combined with automated guided vehicles and piece good sorters.

YOUR BENEFITS

- Process safety
- Constant performance: independent of product size and weight, working times, ambient conditions or ergonomic requirements
- Low error rate
- Possibility to check serial number, batch number and expiration date automatically thanks to intelligent product scanning technology
- Consistent 24/7 performance
- Hardware, software and industrial image processing from a single source





**FORWARD THINKER,
LONG-TERM PARTNER,
AND MANUFACTURER. FROM
STANDARD PRODUCTS TO
COMPLEX SOLUTIONS:
WELCOME TO SSI SCHAEFER.**

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