

CASE STUDY

HIPPOCRATES

Healthcare ecosystem
thrives on modern logistics



Installation
video

Flexibility, efficiency and scalability for a flourishing future

Founded in 2018, Hippocrates Holding is a pharmaceutical wholesaler and operator of their own independent pharmacy platform, currently with around 480 pharmacies in Northern Italy. The benefit corporation is focused on people, patients, the community and the environment. Hippocrates' mission is to create a healthcare ecosystem that fulfills the needs of people and guarantees a reliable supply of medicines and pharmaceuticals with the accompanying patient consultation.

To help fulfill their goal of being able to provide a high degree of supply security while still keeping their company processes flexible and scalable, the Hippocrates management team decided to

build a modern, highly automated distribution center. Located south of Milan, the new DC began operation in 2024.

In addition to traditional pharmaceutical wholesale, Hippocrates wanted to integrate the online pharmacy business into their strategy from the outset. Customers who already benefit from the service and expert advice at the pharmacy would also be able to enjoy a positive experience when shopping from the comfort of their own homes.

To meet all these requirements, an efficient logistics solution was needed. The concept for the distribution center in Livraga was designed,

engineered and then implemented in phases. There were several hurdles to clear, including a mix of B2B and B2C deliveries with significant differences in both order and item structure, as well as consolidating the heavy volume of cross-docking items. Furthermore, scalability, efficiency and flexibility were important to Hippocrates. These requirements helped form a framework for the solution, a customized automation solution that KNAPP implemented together with Hippocrates to provide efficient, high-quality performance and capacity for future growth.



HIPPOCRATES
HOLDING

Sector

**B2B PHARMACEUTICAL WHOLESALE,
B2C ONLINE PHARMACY, OMNICHANNEL**

Business area

**PHARMACEUTICAL
DISTRIBUTION**

Location

**DC IN LIVRAGA AND 480 PHARMACIES
IN NORTHERN ITALY**

In operation since

2024

800 MILLION EUR

Annual turnover

Delivery area

**480 PHARMACIES
IN ITALY**

Technical solution

**EVO SHUTTLE,
PICK-IT-EASY WORK
STATIONS, CENTRAL
BELT SYSTEM WITH SDA
EJECTORS FOR FAST-
MOVING ITEMS, AUTOMATIC
SHIPPING LABELING**

2,460

Employees

9,000 M²

Warehousing space



Must-haves: Efficiency and flexibility

01

Effective performance

Warehouse management is highly efficient thanks to the automated high-performance Evo Shuttle system. Fast-moving items are processed in the Central Belt System (CBS), an A-frame system featuring SDA ejectors. Items arriving from various storage locations are picked efficiently and precisely at the ergonomic Pick-it-Easy work stations.

02

Special requirements for e-commerce

Artificial peaks and handling items several times must be avoided. Orders that include non-prescription items require separate checking. Additionally, the legal component of processing through a parafarmacia – i.e. a pharmacy that is structurally separate but integrated into the process – had to be accounted for in the process.

03

Intelligent solution for crossdocking

Approximately 50 percent of B2B orders include items that are cross docked, arriving at the DC just to be added straight to an outgoing B2B order. The challenge this presented was elegantly solved by taking cross-docking into account in logistics and inventory management.

04

Scalable design for further growth

By the 2030, the DC will be supplying around 800 pharmacies, up from the current 480. The layout and engineering of the system are already geared for this and will allow for expansion during full operation. Extensions to the system will be implemented flexibly according to how the business develops.

05

Maximum flexibility

The solution can also handle the different business models developing at different rates. Elasticity in the design was also needed to provide balance between the two pharmacies. There are two different picking lines, one for pharmacy delivery and one for e-commerce orders.

06

Growing step-by-step

System engineering was based on the calculated figures for 2030 and development up to that point. The overall concept provides room for flexible expansion – depending on growth – which is possible at any time.

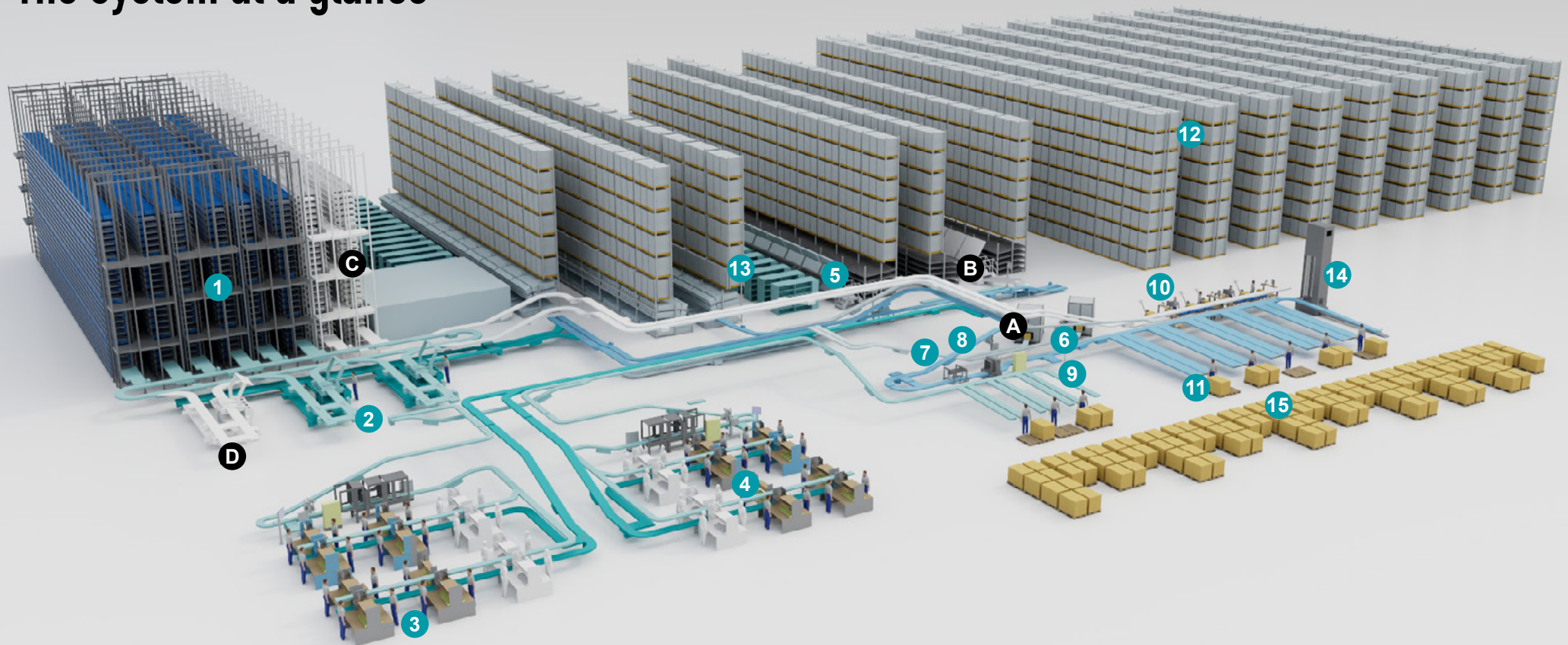




„We found what we were looking
for in the KNAPP solution:
reliable, flexible, precision automation.”

Maria Assunta Sgrò
Direttore Operations Pharma
Hippocrates Holding S.p.A.

The system at a glance



- 1** Evo Shuttle 1D
2 rack line systems
- 2** Pick-it-Easy work stations
- 3** Parafarmacia (1)
- 4** Parafarmacia (2)
- 5** Automated picking
CBS A-frame with SDA ejectors,
1,632 channels

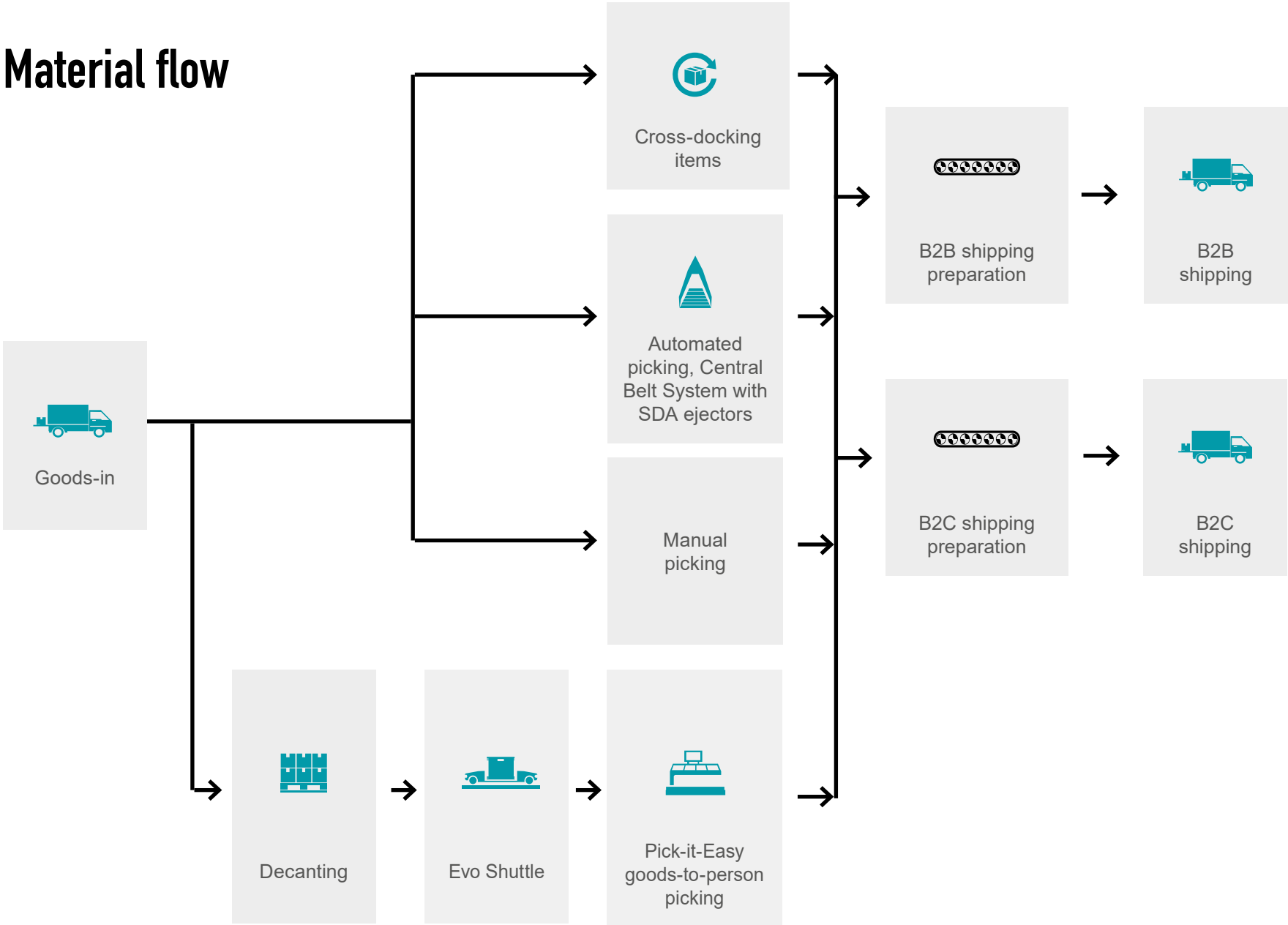
- 6** Order start station
- 7** Shipping container
closing
- 8** LBA labeling station
- 9** Strapping machine
- 10** Decanting

- 11** Shipping container
destacking
- 12** Pallet storage for overstock
- 13** Racks
- 14** Lift
feeding of shipping containers
- 15** Shipping B2B

PLANNED EXPANSIONS

- A** Automatic carton erector
- B** Automated picking: CBS A-frame
with SDA ejectors
- C** Additional Evo Shuttle 1D rack
line system
- D** Pick-it-Easy work station

Material flow



Central warehouse processes



Storage

Items are normally delivered in cartons on pallets and, once registered in the inventory control system, are stored in either the pallet storage system (overstock) or in the racks. Some of the stock is also repacked at the decanting stations and stored in the Evo Shuttle. Currently, there are 8,640 storage locations in the Evo Shuttle automated storage system.



B2B picking

Fast-moving items are picked automatically in the Central Belt System (CBS) A-frame with SDA ejectors. The CBS is continuously replenished from the racks, with RF terminals supporting the process. Other items are retrieved automatically from the Evo Shuttle, conveyed to a goods-to-person work station of the Pick-it-Easy Evo series, and prepared for shipping. Cross-docked items are added manually to the orders at the order start station.



B2C picking

In the direct-to-consumer business, comprising online pharmacy orders, the order is assembled from the Evo Shuttle and the manual racks and then conveyed to one of the parafarmacie areas, where the orders are checked and packed into cartons. Personalization of the packages is also carried out here.



Shipping

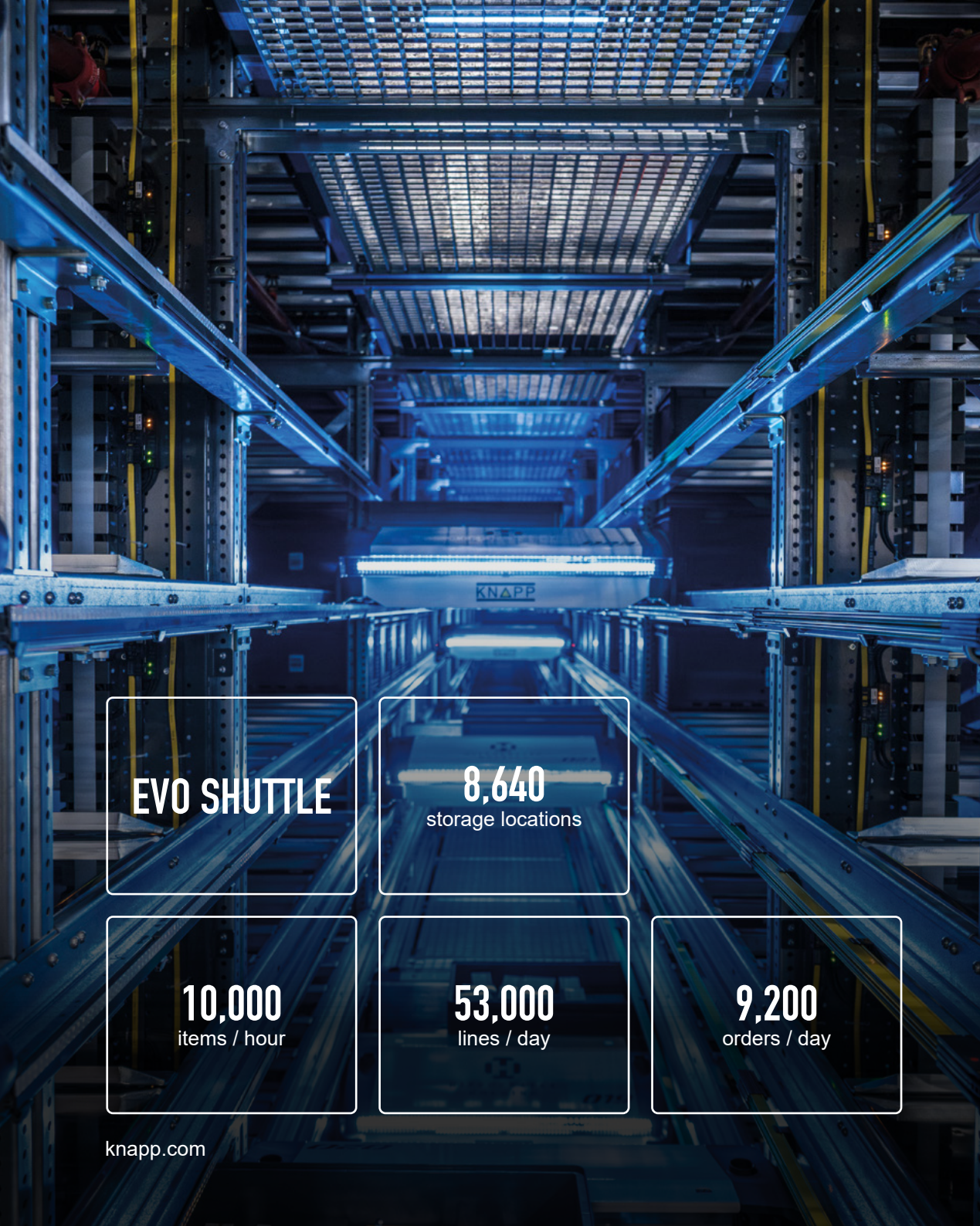
In preparation for shipping, the shipping containers (B2B) are automatically closed and secured with two bands. The address label is also applied fully automatically. Shipping containers for B2B are conveyed directly to the shipping area, where they are stacked on pallets, with shipments made several times a day.

For e-commerce, there is a separate shipping area where packages are transferred to the courier service.

ALL-IN-ONE – Automated high-tech warehouse is ready for several business models

The flexible system architecture and complete integration into the KNAPP software world allow the system to be adapted to meet present and future demands optimally and ensure efficient order management in every step of expansion. This flexibility was one of the key requirements because it would support the holding company's growth trajectory, as the young company has insufficient history in the individual sales channels.

With this in mind, the concept was designed to provide space to expand the Evo Shuttle 1D automated storage system by another aisle and to add another CBS and more Pick-it-Easy work stations. Depending on how the business develops, the company is set up to be able to respond rapidly to changing conditions and developments and to be able to expand – even while the system is operating in full swing.



EVO SHUTTLE

8,640
storage locations

10,000
items / hour

53,000
lines / day

9,200
orders / day

**CENTRAL BELT
SYSTEM A-FRAME
WITH SDA EJECTORS**

**27,000
SKUs**

**INCREASED
PERFORMANCE
BETTER QUALITY**

Proven technologies for complete success

KNAPP shuttle technologies form the backbone of scores of automation solutions in various sectors. Racks up to 30 meters high (98 ft) and multiple-deep storage provide optimal storage density and utilize space efficiently. The system's low vibration makes it ideal for storing sensitive goods and provides gentle handling for all sizes of items. The integrated software provides a complete overview of the inventory and furthermore handles important warehouse processes such as storage and retrieval, picking, buffering and sequencing goods and orders.

This is also required by Hippocrates' omnichannel fulfillment, where an ever larger selection of items needs to reach the recipient very quickly.

Along with the Evo Shuttle, the CBS A-frame with SDA ejectors is an important component of pharmaceutical distribution. For items with a high inventory turnover rate and specific physical characteristics, Hippocrates was able to boost quality, throughput and picking performance with the system, which also saves space.

Order fulfillment was optimized using goods-to-person work stations of the Pick-it-Easy series, which provide a modern, attractive work environment for employees and allow them to work efficiently, avoid errors in order processing and bring a net gain to overall output.



Data is the key to success

The software, functioning as an integrated intelligence, connects all the processes, technologies and people involved in the automation solution and connects different steps along the value chain. Without the right software, good automation is impossible.

At KNAPP, this is something that we understand very well. From the beginning, Hippocrates wanted to have a clear overview of their logistical processes with real-time data from the machines, to better understand the various data and KPIs of their business and to equip them to make data-based decisions.

KiSoft Analytics provides management with the opportunity to depict complex warehouse processes in numbers and to derive trends and extrapolate prognoses, providing a broad basis of data to use in making long-term strategic decisions. But Hippocrates doesn't just benefit from digital tools from KNAPP software lines – they also profit from a broad palette of service products.

**INTEGRATED
INTELLIGENCE**

**SOFTWARE CONNECTS
PROCESSES,
TECHNOLOGIES &
SERVICES**

**LOGISTIC PROCESSES
WITH REAL-TIME DATA
ON MACHINE-LEVEL**

**KISOFT ANALYTICS
PROVIDES COMPLEX
PROCESSES AS
NUMBERS**



Proactive service for a long service life

Hippocrates benefits from a comprehensive package of reactive and preventive services. Should an unforeseen problem occur in the system, our KNAPP Service Desk is ready to help. Incidents are initially clarified and categorized by our 1st Level team, the Communication Center. Based on this information, a technician on the 2nd Level team handles the issue. Should the 2nd Level technician need support, 3rd Level experts from Software Development or Engineering are brought in to help. This, however, only happens in exceptional cases, as 95 percent of incidents are resolved by our 2nd Level team.

The package also includes two preventive maintenance visits each year by our qualified technicians from our Italian subsidiary, KNAPP Italia S.R.L., to ensure the long life of the system. Thanks to our digital SAP Field Service Management Tool, our technicians are organized and efficient in their work. All system components are serviced according to a detailed plan. Wear parts are replaced and repairs are made as needed. The required spare parts taken from stock are always documented in the tool, which informs the KNAPP Spare Parts Team if any parts need to be reordered.

After a maintenance visit, Hippocrates can access the maintenance report and important information on our e-insight service platform. It not only provides Hippocrates with at-a-glance information on everything from product roadmaps to current and completed incidents and much more, but also serves as a means to provide feedback, as we are committed to continually improving our services.

KNAPP SERVICE DESK

1st Level

Incident is clarified and categorized in the communication center.

KNAPP SERVICE DESK

2nd Level

Team handles the issue.

KNAPP SERVICE DESK

3rd Level

Support from experts from software development or engineering.



From left to right: Maria Assunta Sgró, (Direttore Operations Pharma Hippocrates Holding S.p.A.), Stefano Novaresi (Managing Director KNAPP Italia), Marco Branchini, (CFO Hippocrates Holding S.p.A.), Iacopo Iacopini (CIO Hippocrates Holding S.p.A.)

It all began with a blank sheet of paper

The Hippocrates Group, together with their owners and shareholders, wants to develop an enduring social infrastructure consisting of up to 800 of their own pharmacies to fulfill the healthcare needs of the Italian population. Developing the required logistics was therefore one of the group's most important strategic projects and a partner was sought who could create a resilient, reliable and flexible system with room for increasing capacity. *"Right from the start, KNAPP focused on a customized approach, which, combined with a great deal of passion and a high degree of perfectionism, was exactly what we wanted,"* explains Marco Branchini, CFO of Hippocrates Holding. For Hippocrates, the 11,000 m² (118,400 ft²) automated distribution center was the first of its kind, so their in-house experience and knowledge was very limited. The KNAPP team responded with an incredible level of commitment, bringing in experts and a great deal of specialist knowledge to draw up an initial plan during the tender phase – long before the contract

was awarded. When asked to summarize the partnership with KNAPP, Marco Branchini responds: *"Top performance, satisfaction and trust."*

The well-oiled start phase was also surprising. Iacopo Iacopini, CIO of Hippocrates Holding, remembers: *"We had expected a long starting time, but we were actually ready to go after just a few weeks."*

Now that the system has been running for almost a year, many processes have become well established, output has increased significantly, and the error rate in order picking has clearly gone down. Iacopo Iacopini is certain that *"further benefits will become apparent in the medium and long term."*



**„We work shoulder to shoulder with the KNAPP team.
This is what made it possible to start up the system in
such a short period of time and to work autonomously.”**

Iacopo Iacopini
CIO
Hippocrates Holding S.p.A.

A man with a beard and glasses, wearing a dark suit, is standing at a pharmacy counter. He is looking towards a female pharmacist who has curly hair and is wearing a white lab coat. She is smiling and appears to be handing him something. The background shows shelves stocked with various pharmaceutical products. A cash register is visible on the counter.

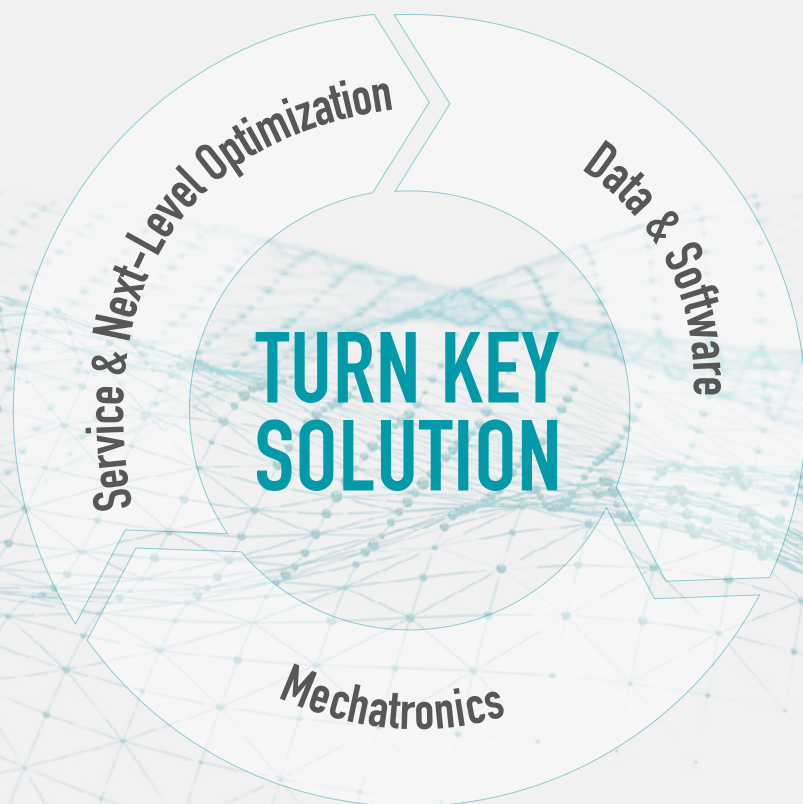
„Logistics is foundational to providing the products and services that the customers and patients demand. KNAPP is a crucial partner for strengthening this foundation.“

Davide Tavaniello
CEO & Co-Founder
Hippocrates Holding S.p.A.





VALUE CHAIN TECH PARTNER



Expand your competitive advantages

We work together with you to design and build a system tailored to suit your logistics requirements, growth targets and investment strategy.

At KNAPP, we don't deliver systems off the rack; we take the time that's needed to learn about your needs, business model and the challenges in the industry. Whether you want micro or macro, a semi-automatic system to help you get started or a fully automatic distribution center for top performance – we have just the right all-in-one solution for you.



Healthcare



Retail



Fashion



Industry



Food Retail



Wholesale

We look forward to
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