

Arvato – DOUGLAS Group

Top-Tier Omnichannel Fulfillment for Premium Beauty Products





Optimal storage density for the 3PL system

When it comes to automated logistics solutions, both Arvato and KNAPP share a passionate focus on the customer, their requirements and the specific requirements of the sector. As one of the leading third-party logistics providers (3PLs), Arvato uses innovative technologies to develop bespoke solutions for their B2B and B2C customers. Working together, we have already implemented numerous systems for customers in tech, fashion, beauty and healthcare – and our focus is always on the customer. This approach is also exactly how we developed our automation solution for the DOUGLAS Group in Hamm, Germany. The DOUGLAS Group is Europe's

leading omnichannel provider of premium beauty products, with 1,860 stores in 22 countries and various online shops. Perfumes, skincare, makeup and hair care are the beauty retailer's core products. Under the motto "one warehouse, all channels", their new system went live in 2022, consolidating **6 warehouses into one central one** to support the DOUGLAS Group's omnichannel strategy and facilitate continued growth. For customers in Germany, Austria and Switzerland, the system now processes different order structures for both B2B and B2C. The highly complex solution is quite special thanks to the large number of integrated technologies, which

are intelligently networked and set up compactly to save warehousing space. Our bespoke all-in-one solution offers simple processes, a flexible and scalable system design as well as shorter lead times – not to mention high system availability. The key feature of the solution? Our integrated Evo Shuttle system. It's the largest of its kind in the cosmetics sector worldwide and offers top flexibility while making the most of the available space.

Sector: 3PL for beauty, lifestyle, retail

Annual turnover: € 2.5 billion in 2023

Business areas: Supply chain management and e-commerce for consumer products, tech, healthcare, automotive industry and publications

Business areas in the warehouse: Omnichannel, B2C and B2B for the DOUGLAS Group

Warehouse location: Hamm, Germany

Warehouse employees: 400

In operation since: 2022

Warehousing space: 35,000 m² (375,000 ft²)

Storage locations (in automatic storage system): 132,000

SKUs: 70,000

Delivery area: Germany, Austria, Switzerland

Orders / hour: 5,500

Lines / day: 275,000

Items / day: 400,000

Delivery window: Same-day and next-day delivery

Technical solution: Decanting stations, MultiScan, automatic document and flyer insertion, Evo Shuttle 2D, work stations of the Pick-it-Easy Evo series, manual picking stations with Pick-to-Light, 3 cross belt sorters, automatic carton erectors and closers with height reduction, 7 km (4.3 mi) of Streamline conveyor



System
video



What the automation solution offers

01

Simplified processes

Visual aids and technological support for processes help employees complete their work and keep the training period as short as possible. Peak periods for B2B and B2C orders are also easier to smooth out.

02

Reduction in order cycle times

The automated logistics solution fulfills incoming B2B and B2C orders much faster. During peaks, 5,500 orders leave the warehouse each hour.

03

High system availability

Our automation solution offers maximum reliability and efficiency. Additionally, a team of KNAPP Resident Engineers is deployed permanently to the site to look after and maintain our system.

04

System flexibility

The automation solution provides efficient processing of different order structures (B2B and B2C) to allow the system to respond to changing demands such as extreme variations in order volume. Furthermore, the scalable solution design leaves plenty of room for further growth.

05

Capital costs optimized

In Hamm, six warehouses were consolidated into one central one notable for its optimal storage density, which was made possible with our 2D shuttle solution. The result was a drastic reduction in the amount of warehousing space needed for the DOUGLAS Group.

06

Sustainability

B2C orders are picked into nine different sizes of cartons. During the automated carton closing process, their height is reduced as necessary to ship as little air as possible. This decreases the number of delivery runs by optimally filling the transport vehicle and thus saves costs.



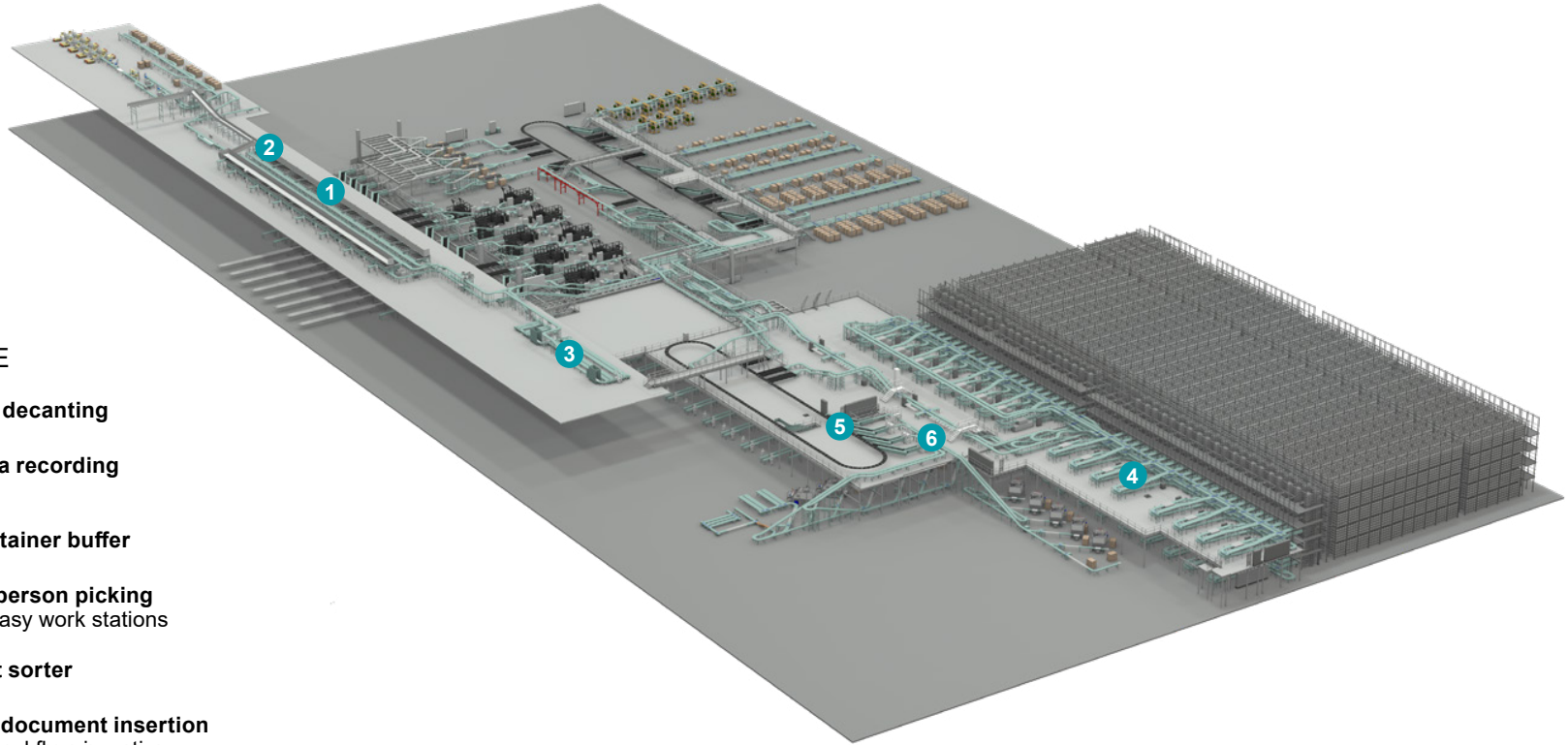
**“I am very satisfied with the KNAPP system.
This solution is everything we could wish for
with respect to our existing requirements.”**

Pedro Duran Garcia
Director of Logistics Planning
Arvato

The system at a glance

MEZZANINE

- 1 Goods-in / decanting
- 2 Master data recording
MultiScan
- 3 Empty container buffer
- 4 Goods-to-person picking
16 Pick-it-Easy work stations
- 5 Order start sorter
- 6 Automatic document insertion
Document and flyer insertion



The system at a glance

GROUND FLOOR

1 Automatic storage system

Evo Shuttle 2D
22 aisles
25 levels
16 modules
550 2D shuttles
132,000 storage locations

2 Goods-to-person picking

16 Pick-it-Easy work stations

3 Automatic carton erectors (B2C)

4 Automatic container erectors (B2B)

5 Distribution sorter

6 Pallet picking

12 Pick-to-Light stations

7 Sample picking

24 Pick-to-Light stations

8 Value-added services

VAS stations

9 Manual picking of bulk orders (B2B)

10 B2B shipping

11 Transport securing (B2C)

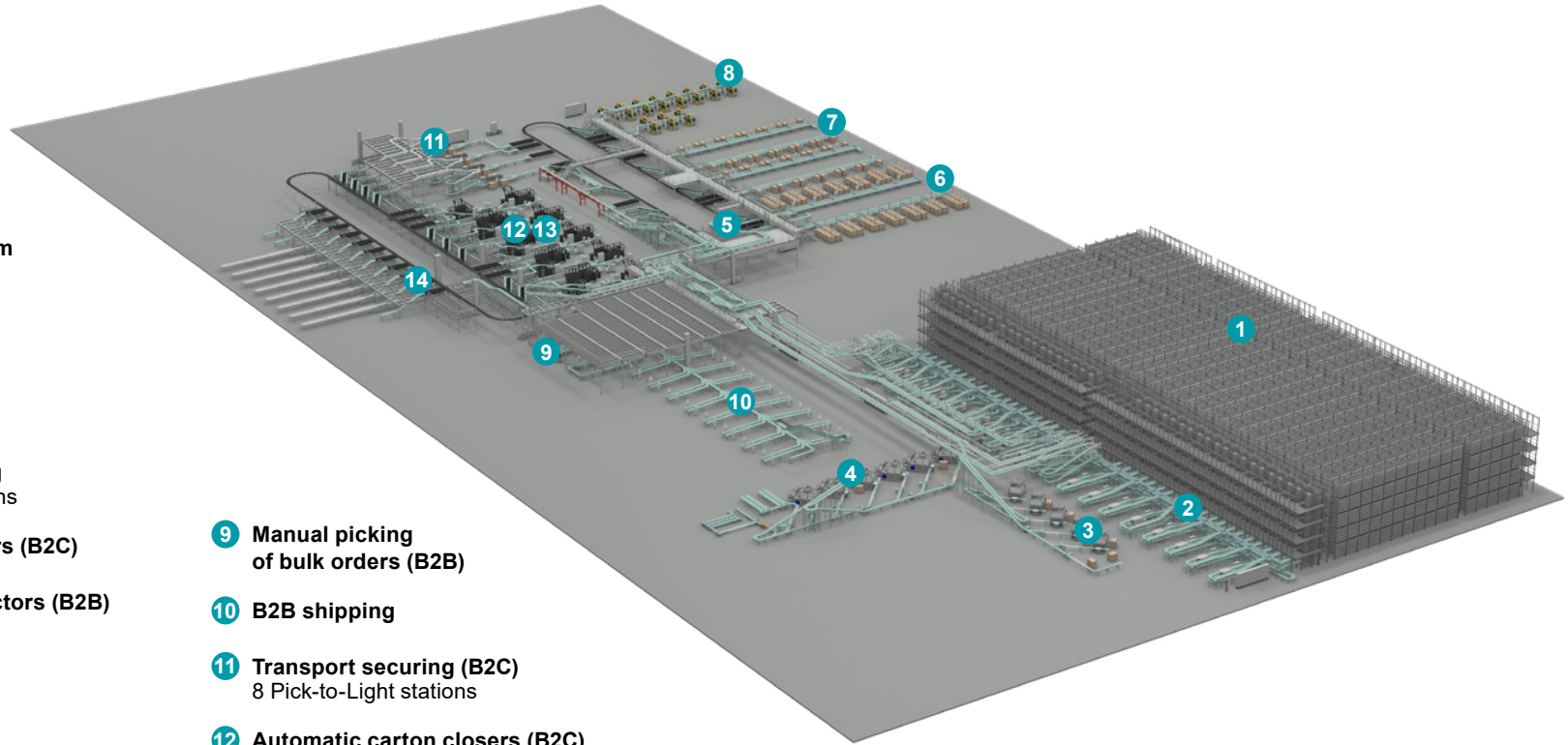
8 Pick-to-Light stations

12 Automatic carton closers (B2C)

13 Automatic labeling (B2C)

14 B2C shipping

Goods-out sorter



Central warehouse processes

1| Goods-in

The incoming cartons are either stored in narrow aisle pallet racking or are conveyed directly to one of the 28 decanting stations. **MultiScan** automatically records important master data, such as weight and volume, for unknown items and transmits it directly to the WMS. This makes the further processing of items in the warehouse highly efficient and simplifies decisions such as the right storage location or optimal shipping carton. At the **decanting stations**, the system suggests one of the four container configurations for storing the items. Empty containers are supplied to these stations either from the **empty container buffer** or from the shuttle system. The filled new storage containers are pushed onto the take-away conveyor by an employee and transported towards the shuttle system.



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2| Storage

In Arvato's small parts warehouse, the 550 shuttles of the **Evo Shuttle 2D** store and retrieve 12,500 containers per hour across 25 levels and 22 aisles. Almost all of the 70,000 SKUs are stored double-deep in this huge shuttle system. After retrieval, containers are transported to the corresponding lift system, which sends them onward for further picking at goods-to-person work stations. This system flattens peaks and makes stark differences in order structure easy to manage.



3| Picking

Furthermore, **nine different carton sizes** are available for B2C orders. Depending on the order size, the right carton is automatically erected and fed via the **order-start cross-belt sorter** to one of the 32 **work stations of the Pick-it-Easy Evo series**. These goods-to-person work stations allow employees to access two source containers and four order cartons simultaneously. After goods are retrieved from the shuttle and picked at the Pick-it-Easy work stations, cartons can be conveyed to the **fast-mover area** or the **sample area**. The manual picking stations in these areas utilize a **Pick-to-Light system**. Up to 15,000 samples can be picked in the sample area per day and other value-added services can be handled at the value-added service stations. Large items for B2B orders are added at the manual stations, where **oversize products are picked**.



Central warehouse processes

4| B2B shipping

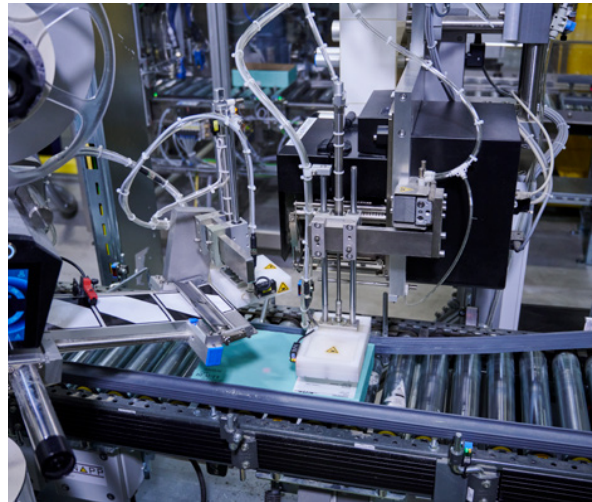
After being **manually secured for transport** and **automatically given a shipping or dangerous goods label**, the B2B orders are shipped to the DOUGLAS Group stores in Germany, Austria, and Switzerland.



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5| B2C shipping

Once picked, the B2C orders go directly to transport securing, where filling material is added to the carton. This process is carried out at eight **Pick-to-Light stations**. At the **goods-out sorter**, the orders are diverted to the **automatic carton closers** and **automatic labeling stations** and finally on to the shipping ramps from which they are loaded.





Making complexity simple: a comprehensive, complete omnichannel solution

The omnichannel automation solution for the DOUGLAS Group focuses on maximal automation and handling premium beauty products gently while storing them securely, as they are considered dangerous goods. It is an exceptional, comprehensive automation solution thanks to the variety of different technologies featured, which are all physically integrated and intelligently networked together. Along with the world's largest shuttle solution in the cosmetics sector, the system includes three cross belt sorters, 76 IT-supported work stations, devices for automatically recording master data, a number of carton erectors and closers and automatic flyer insertion machines. It provides optimum support for the DOUGLAS Group's omnichannel strategy of "one warehouse, all channels."



World's largest 2D shuttle solution for the cosmetics sector

Our all-in shuttle is at the center of the comprehensive automation solution. The Evo Shuttle 2D is a flexible small parts warehouse that combines important warehouse processes such as storing and retrieving containers as well as efficiently storing both stock and overstock. It also buffers, sequences and provides replenishment for other work zones. Our Evo Shuttle is perfectly suited for streamlining the logistical processes in the warehouse and boosting warehouse performance.

We designed the system for the double-deep storage of **132,000 source containers**. In the 2D system, each of the **550 shuttles** remains on one of the **25 levels**, but can move crosswise between the **22 aisles**. Every source container can be transferred to the respective lift system to ultimately arrive at the selected goods-to-person work station. The pre-zone in the system is reduced to a minimum, which in turn makes optimal use of space to achieve a greater storage capacity.

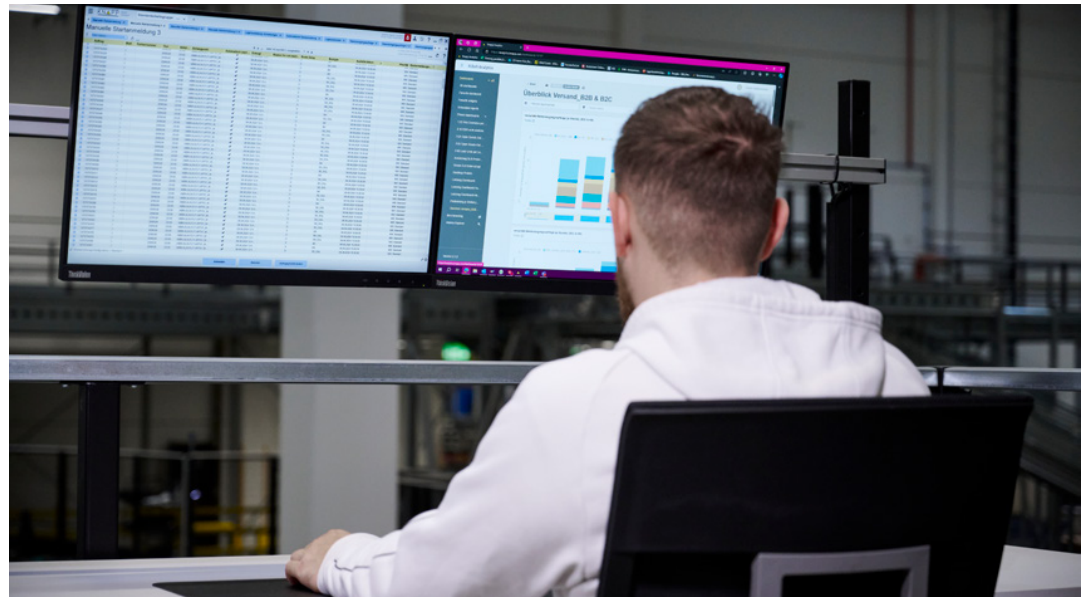
“KNAPP’s KiSoft software is the brain of the system and ensures that it performs optimally.”

Pedro Duran Garcia
Director of Logistics Planning
Arvato

Software excellence for smooth, efficient processes

Excellent software solutions are a must for ensuring smart and error-free warehouse processes. That’s why Arvato chose our warehouse logistics software, **KiSoft One**. KiSoft One regulates the workload in the entire system and controls the interaction of manual and automated areas.

Our **KiSoft Analytics** solution allows Arvato to keep track of all the relevant system data, helping Arvato detect trends and create prognoses while also providing important real-time data during the startup phase.



Seamless support for maximum availability

We stand by our promise to be a reliable and responsible partner for our customers. It's very important to us. So when unexpected problems occur, Arvato can always rely on our **Service Desk**. Our experts are available around the clock for the 3PL to get the system up and running again as soon as possible if operation is interrupted.

Arvato can rely on trained KNAPP personnel on site, too. A team of **Resident Engineers** working on site in Hamm make sure that the entire system is available and performing as it should. They also take care of maintenance and servicing tasks with the help of our digital service solution, KiSoft CMMS. The computerized maintenance management system assists Arvato in decisions surrounding maintenance and spare parts management. All of these preventive measures mean that KNAPP can guarantee a specific level of system availability.

But if a malfunction does occur, our software solution KiSoft SCADA is there to assist. **KiSoft SCADA** visualizes the affected system block in the blink of an eye and creates the corresponding task for our Resident Engineers, allowing them to quickly find and fix the problem.

Successful together since 2011

Our partnership with Arvato began back in 2011. Over the years, we have implemented numerous systems in various sectors together. We have always combined our knowledge about the sectors, market demands and technologies to develop the best solutions for Arvato's customers.

Arvato places customers, people and technologies, as well as the optimal interaction of all three, at the center of their strategic activities. Sebastian Altrogge, Key Account Manager at Arvato, emphasizes: *"KNAPP supports us in attaining our strategic goals with their future-oriented logistics solutions."*

Together, we have implemented a total of **9 custom logistics solutions** for Arvato's customers, ranging from projects with conveyors and our Pick-to-Light technology all the way to the fully automated shuttle storage system for the DOUGLAS Group.



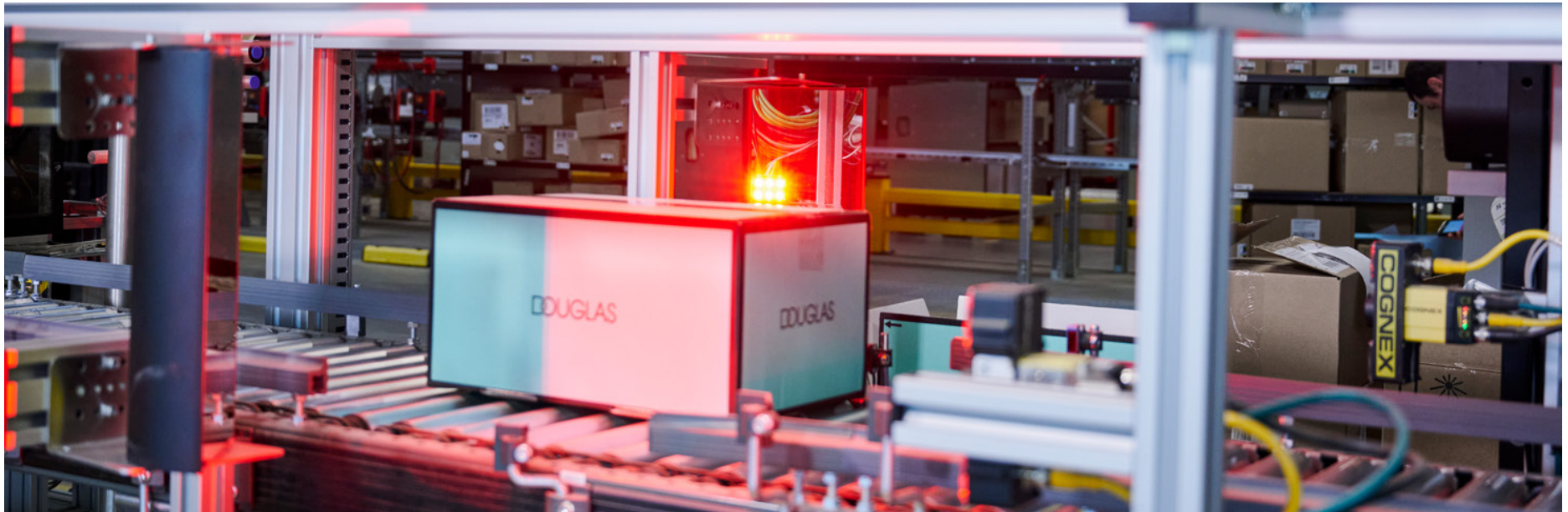
The dream team

A major milestone in our successful partnership with Arvato is implementing the omnichannel automation project for the DOUGLAS Group together in Hamm. Our ability to work well together was also a major success factor for this project and we implemented the solution in just 25 months. The time pressure for the project was intense and, due to the complexity of the required solution, we repeatedly faced challenging situations throughout the project. Hannes Kracher, Head of Sales and Key Account Manager for Arvato at KNAPP, says it best: *“Challenging times reveal the true strength of a partnership. With Arvato and the DOUGLAS Group, we proved that even under pressure, we could get along and get the job done with great success.”*

Our previous collaboration helped us specify requirements quickly and precisely. It also made it possible for our expertise in beauty, omnichannel retail and logistics to blend together beautifully – and profitably.

Arvato's customer, the DOUGLAS Group, also views the collaboration positively. Kévin Mignon, Director of Supply Chain Management at the DOUGLAS Group, explains: *“The collaboration between Arvato, KNAPP and the DOUGLAS Group is a close partnership anchored in trust, expertise and efficiency.”* Together, we built an ultra-modern system that fulfilled the DOUGLAS Group's requirements, uniting technical excellence with customer orientation and optimally supporting the beauty retailer's business model.









Fashion



Food Retail



Healthcare



Industry



Retail

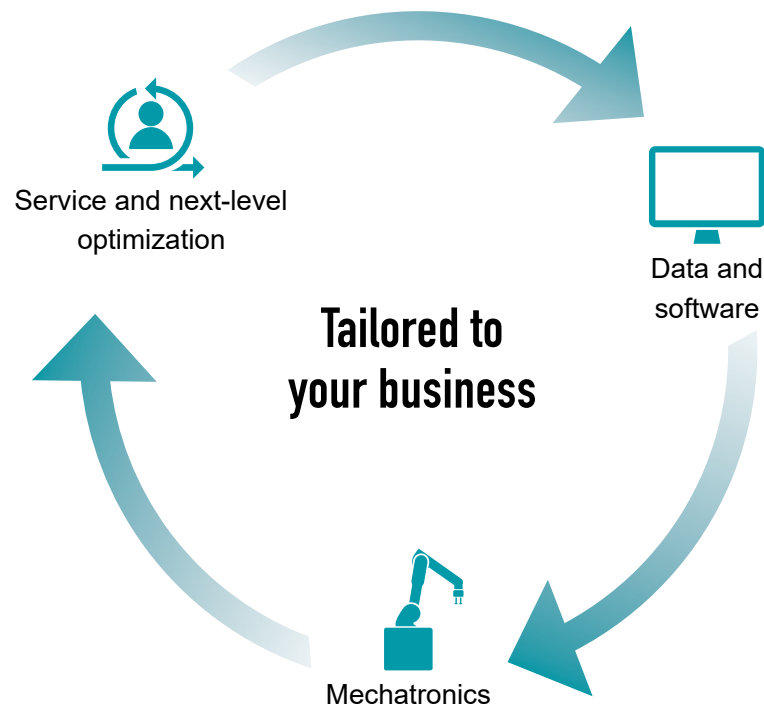


Wholesale

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, our systems are not just off the rack. Instead, we take the time needed to learn about your needs, business model and challenges. 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.



We look forward to
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