Existing system expanded with automatic shuttle warehouse to save space

VVA significantly expands order picking capacities through innovative automation

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Guetersloh - The VVA Group, part of Arvato Supply Chain Solutions, has modernized and expanded its distribution centre in Guetersloh during ongoing operations. An automated shuttle warehouse with order picking system has been built in the existing facility by long-time partner SSI Schäfer in a limited space, expanding the capacity in the area of immediately available item containers to a total of more than 60,000 spaces. At the same time, the new shuttle solution is a further step in the digital strategy with which Arvato is currently driving forward the automation of its worldwide locations.

The trigger for the capacity expansion was, on the one hand, the business growth of VVA (Vereinigte Verlagsauslieferung) in recent years. On the other hand, the business is characterized by a significant increase in picking intensity. As a partner and service provider, the company delivers media products from its three German locations in Guetersloh, Verl and Gilching to retailers and end consumers worldwide for more than 200 clients. In the central logistics centre in Guetersloh alone, about 70,000 different items are stored - in addition to books, CDs and DVDs, also magazines, calendars as well as stationery and toys. "With our existing system, which is already designed for very high performance, we have now reached the limits of our capacity," explains Harald Horstmann, Vice President Publisher at Arvato Supply Chain Solutions. "We wanted to continue using the existing system and not invest in a completely new solution. That's why we decided to modernize and expand together with SSI Schäfer."

The intralogistics specialist, who had already installed the existing system in 2006, met the high requirements best. A storage and order-picking system for a throughput of 16 million articles per year was realized on an area of only 900 square meters. A highly dynamic modular shuttle system with approx. 40,000 bin locations was developed. The new shuttle warehouse is located in a 24-metre high extension directly next to the existing 60,000-pallet high-bay warehouse and is designed according to the patented 3D-Matrix Solution® from SSI Schäfer. By installing the workstations on the warehouse cube at a height of 16 meters, it was possible to realize an optimal use of space. A total of 84 SSI Flexi single-level shuttles ensure efficient storage and retrieval processes and 20 integrated lifts enable fast material flows on the vertical system level. By integrating the system into the warehouse cube, the number of lifts and thus the performance could be increased compared to conventional solutions. Each workstation has access to the entire article spectrum of the 3D-Matrix Solution® and thus enables a one-stop pick solution according to the latest ergonomic standards. In total, the new system expands the capacities in the area of automatically immediately available article containers to more than 60,000 places. At the
same time, the number of goods-to-person picking stations is increased by 60 per cent.

**Installation during operation**

A particular challenge was the system expansion during ongoing operation, which took place in three steps: First, the order start in the old system had to be relocated and further automated. In a second step, the direct conveyor connection of the fully automated high-bay warehouse to the existing and future storage and order-picking systems took place. The third and most important project step was the construction of the shuttle warehouse including the connected workstations. Business was not affected by the project work at any time.

The system has already passed its first test. Due to the special Corona situation and also numerous top titles in the Christmas business, the high demand for books at the end of last year led to the largest order volumes at VVA since the company was founded. In some cases, even the newly created capacities were completely utilized. Nevertheless, VVA was able to maintain the highest level of delivery reliability. If the trend continues, VVA will be able to expand flexibly thanks to the forward-looking, scalable solution," confirms Stephan Schierke, President Publisher at Arvato Supply Chain Solutions.

**Ergonomics and social responsibility**

Arvato Supply Chain Solutions placed particular emphasis on the ergonomics of the workstations. Together with SSI Schäfer and the start-up Cellumation, new types of workstations were developed in which, among other things, source and destination containers are served on one level. The new workstations in the shuttle warehouse are multifunctional and, in addition to order compilation, also enable the return sortation of returns. The workstations are also characterized by individually adjustable working heights, ergonomic arrangement of the operating elements, touch-friendly materials, optimal presentation of information and innovative lighting systems.

**About Arvato Supply Chain Solutions/VVA:**

Vereinigte Verlagsauslieferung (VVA) delivers books, CDs, magazines, stationery, office supplies and games from its three locations in Gütersloh, Verl and Gilching (publisher service Munich) to retailers and end consumers for more than 200 clients. Through complementary solutions in logistics, distribution and finance, we realize an individual and market-driven complete service from a single source together with our customers. As a publishing distribution company, we have decades of experience in the logistics business. As a wholly owned subsidiary of Bertelsmann SE & Co. KGaA and integrated into the Arvato Supply Chain Solutions division, we are a strong partner in the world of media.

Arvato Supply Chain Solutions is an innovative and international leading service provider in the field of supply chain management and e-commerce. Partners come together with industry specialists in the fields of
Telecommunication, HighTech, Entertainment, Corporate Information Management, Healthcare, Consumer Products and Publisher. About 15,000 employees work together to provide practical and relevant solutions and services worldwide. Using the latest digital technology, Arvato develops, operates and optimizes complex global supply chains and e-commerce platforms, as the strategic growth partner for its customers. Arvato combines the know-how of its employees with the right technology and appropriate business processes to measurably increase the productivity and performance of its partners.

For more information, please visit [www.arvato-supply-chain.com](http://www.arvato-supply-chain.com).