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„AutoStore has significantly advanced our CIP“ – TCL Consulting

TCL Consulting GmbH takes positive stock of the use of new „B1 BlackLine“ robots

From warehousing to picking and shipping to returns management: as a full service provider, TCL Consulting handles fulfillment for a large number of well-known customers from B2C e-commerce. With a fully automated AutoStore solution, the company from Umkirch (Baden-Württemberg) has now achieved an important step forward in terms of optimized order processing.

Founded in 2007, TCL Consulting primarily handles products from the world of fashion. This includes bags and clothing as well as a wide range of accessories – but the absolute focus is on shoes. What end consumers order from the online stores of the retailer Schuhe Lücke, for example, is picked from the stocks of TCL Consulting and delivered as quickly as possible.

Shoe boxes with storage pitfalls

Storing tens of thousands of shoe boxes in conventional shelving and picking individual orders has repeatedly presented TCL Consulting with major challenges in the past. Entrepreneurial success on the one hand, grew at the same time as the time required for the manual handling of ever larger inventories. “Thanks to CIP, we were able to optimize the details again and again, but the big hit was a long time coming,” reports Dominic Peters, Head of Logistics at TCL Consulting. With the fully automated AutoStore small parts warehouse, a suitable solution in principle had been available for some time, but the standard storage containers used in classic AutoStore systems, with external heights of 220 and 330 mm and internal dimensions of 403 x 603 mm each, simply offered too little space for their use to bring about any

significant progress. After all, shoe boxes are always labeled on the narrow side – so it only makes sense to store them on their edge in an AutoStore system so that the retrieved items can be conveniently scanned before they are removed.

Higher totes, faster robots

The Norwegian AutoStore inventors were well aware of the need for higher standard containers. However, handling them initially required the development of a new series of robots – the R5 RedLine robots previously used were not designed to meet the new requirements. Since last year, however, both 425 mm containers and more powerful robots have been available. Compared to robots of the R5 RedLine series, the new B1 BlackLine robots achieve a higher speed of 4 m/s (R5: 3.1 m/s) as well as a higher acceleration (1.4 m/s vs. 0.8 m/s).

TCL Consulting did not hesitate and was the first user in Germany to order an AutoStore system with B1 BlackLine robots. In a newly built hall complex, AM-Automation, as the leading national AutoStore distributor, installed a storage system that can accommodate up to 10,000 totes, each with an external height of 425 mm and internal dimensions of 406 x 403 x 603 mm (H/W/D). With a footprint of 24 x 17 m, the plant comprises a total of 14 levels and thus reaches a total height of a good eight meters. On the top of the system – the so-called grid – eight B1 BlackLine series robots handle the fully automatic storage and retrieval of the totes.

Plenty of “air upwards

The plant went into operation at the beginning of the year, and TCL Consulting is completely satisfied with the result of the investment. With the new robots and the higher bins, AutoStore has proven itself in every respect, says the company’s management, and creating such high storage capacities in such a small space is hardly conceivable in any other way. The picking of individual items in TCL Consulting’s AutoStore system takes place via three workstations, which, as so-called carousel ports, are specially designed for high throughput rates and enable an average of up to 300 totes to be added per hour.

Time-consuming routes and the manual collection of cartons from shelf racks are now a thing of the past for TCL Consulting. And if required, the AutoStore solution also offers plenty of “room to grow”, in that additional workstations can be set up or further automation is possible, for example, via the direct integration of conveyor technology.

“If we continue to grow as a company, AutoStore will grow with us without any problems,” sums up Dominic Peters, “for order processing in e-commerce, this is the ideal solution.”

