



## The Universe of Scanners

When customers order spare parts, it's almost all-digital today.

A consumption part hast to pass several stations before arriving at the customer.

Order preparation

Until a year ago, TRUMPF's international logistics center was still housed in a converted spice mill. But the company has grown so much that bigger premises were needed to store spare parts and consumables for its machines. The new logistics center provides plenty of space for both present and future requirements – the 13,000-square-meter warehouse holds well over 30,000 products. As in Gerlingen, the customer is the linchpin of operations: no process is started without an order. And in the logistics center, as in the punching tool factory, all processes are digital and connected.

But unlike in Gerlingen, no products are manufactured in the logistics center. Its sole purpose is to distribute parts of all kinds to customers, including nozzles for laser cutting machines. The system sends a request to the automated small parts store (AKL), which keeps such products in 23,000 shelf spots.

The logistics center also contains a four-level, manual shelving system for slow-moving items, i.e. rarely ordered parts, and several pallet racks for outsize and bulky parts.



"The employees use paperless, digital processes to manage all incoming and outgoing material flows."

----- Order picking





One of the blue crates custom-designed for TRUMPF's automated small parts store contains the sought-after stock of laser cutting nozzles. It is automatically selected by the order picking system, placed on a conveyor belt, and sent to the manual order picking station. With the support of a luminous display and a picture of the ordered product on his monitor, an employee takes out the required number of nozzles, clicks on a button to confirm this action, and the crate is sent back to its storage location.



The blue crate containing the ordered laser nozzles has arrived at the packaging station, after traversing the building on a conveyor belt. The distance traveled depends on the number of other orders being processed at the same time, and which ones have priority. The logistics center is very flexible in this respect: an ingenious combination of automated and manual warehouse management processes makes it possible to respond rapidly to changes such as fluctuating order volumes and still deliver the merchandise as quickly as possible.



The new TRUMPF logistics center has a surface area of 13,000 square meters, a ceiling height of 18 meters, and delivers more than 60,000 stock items per month.



Order Preparation. Picture: Claus Morgenstern



The automated small parts store (AKL) keeps products in 23,000 shelf spots. Picture: Claus Morgenstern



Order Picking. Picture: Claus Morgenstern



Packing. Picture: Claus Morgenstern

----- Checkout

Once the goods have been neatly packed and labeled, the scanner is used one last time to check out the package. This is the key feature of the new processes: every time a product is moved from place to place, every time it is handled in the warehouse, the action is recorded using the scanner. This makes everything transparent, and above all absolutely reliable. To





expedite the packages without delay, the number of goods receiving and dispatch gates has been increased to fourteen in the new warehouse, as opposed to three in the old one. And this is where the laser cutting nozzles embark on the last leg of their journey.



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