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Supplying production with AutoStore

Cms electronics GmbH

One-stop shopping for high-quality electronics: development, material purchasing, the assembly of printed circuit boards, automation and reliable test procedures. The range of services offered by cms electronics is as diverse as the industries that the specialist manufacturer supplies with its products. Medicine, energy, industry and automotive are among the fields of activity of the precision electronics specialists. The manufacturer stores the components and individual parts for this broad portfolio at its site in Klagenfurt in an AutoStore facility, which was implemented by a team led by Markus Grabner, Senior Sales Manager at Reesink Logistic Solutions (RLS) Austria.

Electronic components for the most demanding applications are manufactured by cms electronics at its headquarters in Klagenfurt am Wörthersee. The supplier assembles printed circuit boards using modern processes such as pressure assembly/through-hole technology (THT) and by applying electronic components known as surface-mounted devices (SMD). The company requires a large assortment of tiny resistors, capacitors and integrated circuits for production supply. The manufacturer keeps around 4,000 items, packed in a good 34,000 units, permanently in its warehouse. This high demand for parts has been achieved by cms electronics with double-digit growth rates over several years.

As a result, the previous production site also became too small for the company's development. At its new location in Klagenfurt, the specialist supplier has therefore attached great importance to a high growth reserve and has doubled its production area to now around 4,400 square meters. If required, it can almost double the storage capacity of its AutoStore warehouse, which currently has 2,000 containers in use. At the same time, 800 additional containers can be added with little effort. In any case, the AutoStore concept

allows extremely high material density in a small space.

"In this configuration, the automatic small parts warehouse from cms electronics is one of the smallest existing AutoStore systems ever built" reports Markus Grabner

Fail-safe system

Beyond the significantly increased capacity, the new system represents enormous progress for CMS: With the AutoStore warehouse, the electronics producers achieve extremely high availability. "Since commissioning, we have not had a single downtime or malfunction to date," reports Robert Jamnig, Head of Logistics at cms electronics. In addition, the entire AutoStore system is designed to protect the sensitive components from electrostatic discharge (ESD). For this purpose, the system stands on a special floor that prevents charge transfer. In addition, Markus Grabner's team replaced the standard AutoStore containers and the partition walls inside them to divide them into eight areas with ones made of ESD-protected plastic. This safeguards production against latent damage that would start insidiously and therefore not be noticed during quality control in production.

cms electronics has also invested a great deal of care in the goods receipt and removal process for production: Via the merchandise management system, the manufacturer ensures that all received components are provided with their own label including the expiration date of the individual components. Together with the storage date, the software uses this information to enforce compliance with the FIFO (first in, first out) storage strategy.

"This way, we can be sure that even components that are rather rarely needed will be processed on time,"

explains Robert Jamnig. In addition, the label enables pick verification of electronic components before they are used in production.

Safe process configuration

The scanner-guided picking process has also proven to be an exact match for the electronics manufacturer's requirements. This is because goods are removed from the miniload on an order-by-order basis.

The system therefore provides all the components required for a production order together with a retrieval order. The merchandise management system also automatically specifies the exact quantity to be removed from each container. No items are required individually and spontaneously. For this reason, it is also sufficient for the system to be equipped with three robots and two ports – one each for incoming and outgoing goods. This configuration has proven to be absolutely practical. And it includes an advantage that means significant time savings for cms electronics: The system automatically carries out the inventory as a so-called putaway inventory, thus saving a two-day weekend deployment of the entire 14-member team. With the system that Markus Grabner and his team have implemented, cms electronics is optimally equipped for all production supply tasks.

The Senior Sales Manager of Reesink Logistic Solutions (RLS) Austria was able to meet all important requirements:

- one warehouse for all production logistics tasks
- short storage distances
- easy handling
- optimal use of space
- transparent inventory management
- simple parts traceability.

In practice, the system has long since convinced the users of cms electronics: "AutoStore has helped us to achieve an enormously high level of process reliability, and incorrect removals are virtually eliminated," emphasizes Robert Jamnig.

"The compactness and simplicity of the system are absolutely convincing; it is also enormously reliable and fits our processes perfectly. In short, we would choose AutoStore again and again,"

sums up the Head of Logistics at cms electronics with satisfaction.

