



# Meeting customers' needs with reliable processes

MEVACO GmbH in Schlierbach, a manufacturer of expanded metal and perforated plate, supplies its processing machines by means of a highly reliable STOPA COMPACT automatic storage system. Although the company has experienced a roughly 400 percent increase in orders for one to ten items, the system enables it to maintain its high delivery quality. Parts are ready for shipment no later than four days after an order is received, regardless of the article and quantity. The company's particular situation caused it to analyse its workflow. The result was a new, highly efficient storage strategy: instead of a warehouse served by forklifts it opted for a STOPA COMPACT automatic storage system.

## Flexible movement profiles

The investment in the STOPA sheet metal storage system turned out to make good economic sense. Since it was commissioned, many non-productive tasks have been dispensed with, including searches and roughly 23,000 forklift trips per year. Having now optimised its processes,

MEVACO expects to recoup its investment in six years. This calculation is based on lower costs for manual chores and the elimination of machine idle times thanks to direct connections between the production facilities and the storage system.

Just as MEVACO can react flexibly to its customers' needs, the STOPA COMPACT storage system is able to adjust its movements to the company's storage and retrieval requirements. The movement profiles of the sheets can be stored in the master data of the warehouse management software. This improves safety, for example when handling slippery material, and it shortens the cycle times for supplying the processing machines. Depending on the given requirement, the twin-mast storage and retrieval unit (SRU) can perform its tasks at high or low accelerations and speeds. For example, the maximum travel speed of 150 metres per minute is good for empty runs. Gentler handling is necessary especially for galvanised material and items that tend to slide.



**MEVACO, a manufacturer of expanded metal and perforated plate, achieves a high level of delivery quality with its STOPA COMPACT automatic storage system**



## Efficient management of material

The STOPA COMPACT at MEVACO, which makes optimum use of space, consists of 20 blocks arranged in double rows. Measuring over 7.5 metres in height, 5.5 metres in width and almost 49 metres in length, it holds sheets in small, medium and large formats at 654 storage locations. Flat pallets with capacities up to 3,000 kilograms serve as load carriers. MEVACO processes some 90,000 sheets per year through the storage system. A real-time soft PLC, integrated in an industrial PC, controls the components of the system, which operates in three shifts and achieves an availability of almost 100 percent.

Sheet metal stacks are delivered by truck, picked up by forklifts and placed on an unpacking table. Later they are moved to a scissor lift table with plungers at the incoming

storage system is equipped with tandem stations, which means that the SRU can bring forward a flat pallet with material while the machines are still working on sheets from another pallet. The company does not return finished or semi-finished parts to storage, only pallets with leftover blank sheets. The material is weighed on the SRU and the warehouse management system updates the stock accordingly.

## Manufacture of parts from sheet metal and coils

MEVACO manufactures expanded metal on a stretching machine. Smaller quantities are made from sheets that the STOPA COMPACT retrieves from storage on a scissor lift table. The table's platform rotates by 180 degrees, aligning the flat pallet in such a way that the operator has only a short distance for manual transfer of the sheets to



**The STOPA COMPACT storage system can adjust its movements to storage and retrieval requirements**

and outgoing goods station. Incoming goods are booked in the company's ERP system by the warehouse management system, which was developed by STOPA.

The company's production planning system initiates removal operations to the connected machines: three TRUMPF TruPunch 5000 stamping machines and a stretching machine. This system is a part of the ERP system and communicates with the warehouse management system. The

the stretching machine.

For larger quantities, the material is taken from a coil. Here the warehouse control system retrieves a pallet that is installed on a roller conveyor. The strip is unwound from the coil and pulled over the roller conveyor to keep it from sagging. This considerably simplifies insertion of the strip into the machine because tensile forces do not arise.

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