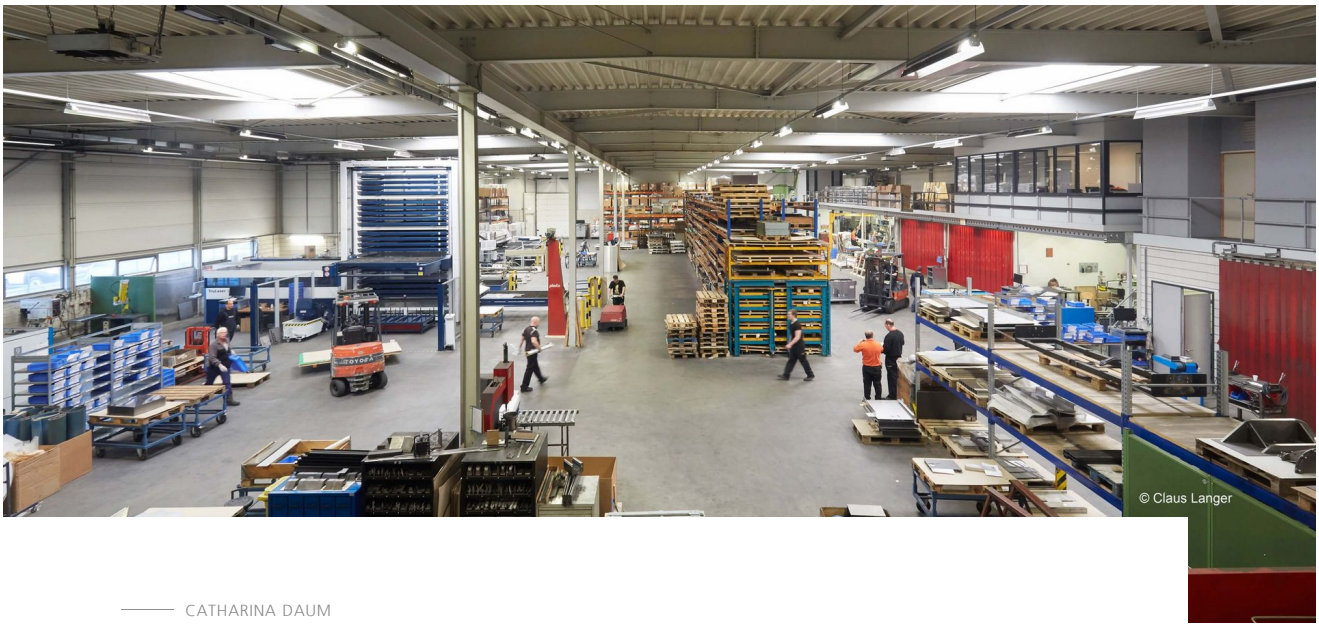

CATHARINA DAUM

Multiple pallet changer works quicker and better, overnight

Ton Koridon was the first European customer to equip his TruLaser 3030 with the new PalletMaster Tower. Ever since that innovation was installed, production processes are reliable while operations run around the clock.

When, at the end of the shift, people leave the production hall at Koridon Industriële Plaatbewerking in the Dutch town of Zaandam, manufacturing by no means comes to a stop. The TruLaser 3030 continues its service, working all night and on weekends, carrying out the pre-programmed job orders both precisely and reliably. Working with steel, stainless steel and aluminum sheet metal in a variety of formats and gauges, it cuts mid-sized lots just as reliably as it separates individual parts from remainder sheets. Since October of 2014 the PalletMaster Tower, a multiple pallet changer, feeds materials as needed.

The PalletMaster Tower is flexible enough to meet any requirement. Stored in the 20 spaces at Koridon are all the types of sheet metal required for the lights-out shift (Photo: Claus Langer).

All the sheet metal required for the lights-out shift is stored in its 20 compartments. The PalletMaster repeatedly removes one pallet with the desired type of material from the storage tower and forwards it, fully automatically, for processing in the TruLaser machine. Once machining is complete, the accessory unit returns the pallet to the tower and makes the next one available, almost as quick as lighting. The linked sorting station makes sure that finished products can be removed parallel to productive time. Owner Ton Koridon is more than satisfied: “I have long sought a solution like this.”

"I have long been on the lookout for an automation concept like the one offered by the PalletMaster Tower," says Ton Koridon, CEO at Koridon Industriële Plaatbewerking (Photo: Claus Langer).

Short delivery times thanks to purposeful automation

The specialties offered by Koridon Industriële Plaatbewerking are engineering, prototyping, and series production – along with mounting high-quality sheet metal parts and assemblies. The company largely supplies customers in the mechanical engineering field and offers them great manufacturing depth – with laser cutting, punching, bending, welding and postprocessing work.

„Flexibility and speed are our strengths. To be even better here, we are putting our faith in carefully planned automation. Augmented by the PalletMaster Tower, my TruLaser 3030 operates reliably around the clock."

Ton Koridon | Koridon Industriële Plaatbewerking

The company offers a high level of vertical integration. Bending and welding are just as much a part of the portfolio as laser cutting and punching - for example with the TruMatic 7000 punching laser machine (Photo: Claus Langer).

"Flexibility and speed are our strengths. To be even better here, we are putting our faith in carefully planned automation. Augmented by the PalletMaster Tower, my TruLaser 3030 operates reliably around the clock. We are more productive and our delivery periods are shorter. That's what counts, in my book," says Ton Koridon. The TruLaser 3030 cuts small to medium-length runs, a major part of Koridon's work. Koridon used to cut individual parts whenever the material was present in the machine. The consequence was that finished parts often had to be placed in buffer storage for several days. That is no longer a problem. "Stored in the fully automated PalletMaster Tower are 20 different types of sheet metal and the machine can request them at any time – even when small quantities need to be cut.

The TruLaser 3030 cuts the small to medium series that Koridon mainly produces (Photo: Claus Langer).

This makes possible just-in-time manufacture whenever required, regardless of the piece count. Since each type of material is stored on a separate pallet, the quality of the parts has also improved and, thanks to the automatic, lightning-fast change in materials, we also save time," Koridon explains.

Safe and simple handling for the operators

In addition to speed, flexibility and process reliability, automated loading and removal of the material during the day also eases the operator's work and improves occupational safety. "Our nighttime operations are entirely unattended and, during the day shifts, the tower ensures that my crew no longer has to lug around the heavy and cumbersome large format sheets.

The PalletMaster Tower is programmed with the standard software of the machine and the operation is simple (Photo: Claus Langer).

Handling the remainders from which we cut individual components was especially precarious in the past due to the injury hazard," according to Koridon. "The operation of the PalletMaster Tower is just as easy as TRUMPF promised," he adds. The Tower is programmed with the machine's standard software and operation is simple. "TRUMPF assembled the tower and made the connection to the TruLaser 3030. After a half day's training, my employees encountered no problems when working with this unit," Ton Koridon confirms.

Individually configurable and space-saving

The PalletMaster Tower can be matched flexibly to any of a variety of requirements. The maximum 20 storage compartments are installed at Koridon, but customers can also decide on six, ten or 15 storage slots. The pallets are designed for sheet metal formats up to 3 x 1.5 meters and for material thicknesses from 0.8 to 25 millimeters. Even though its footprint is only slightly larger than a normal pallet changer, the Tower can be as much as six meters tall, depending on the number of pallets stored one above another.

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