TruLaser Center 7030: Independent allround solution

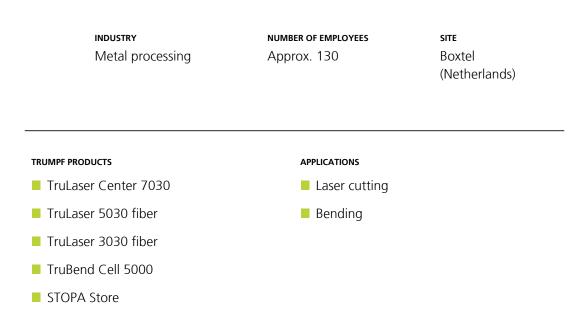
When Hans Sanders leaves his production facility on Friday evening, he feels good about it. His fully automated production hall is equipped with machines that he can rely on 100 percent. In addition to several highly productive laser cutting and bending systems from TRUMPF, three TruLaser Center 7030s are also in operation in three shifts. Unlike all other machines, however, the full-service laser machines can do more than just cut quickly and precisely. They carry out all laser cutting processes independently and to the highest quality standards, including the reliable removal and sorting of parts and the stacking of finished parts on pallets. This takes the stress off employees, allows Sanders to deploy his skilled workers more efficiently, and speeds up the entire production process.



VDL Technics B.V.

www.vdltechnics.nl

VDL Technics, located in Boxtel, the Netherlands, is a subsidiary of the VDL Group, specializing in the manufacturing and series assembly of complex metal assemblies. Its customers include companies from the agricultural, transport and mechanical engineering sectors. VDL manufactures the components, some of which are highly complex, in batch sizes ranging from 20 to 1,500 units. In addition to design consulting, the company's portfolio includes laser cutting and welding, punching and bending. VDL offers online ordering of laser parts and bending parts on the OrderOn.com platform. In recent years, VDL Technics has made massive advances in both automation and digitalization, laying the foundations for the company's continued success.



Challenges

Hans Sanders has several highly productive lasers in his production facility. VDL Technics has a TruLaser 3030 fiber with four kilowatts of power, a TruLaser 5030 fiber with six kilowatts, and a

TruLaser 5030 fiber with eight kilowatts connected to the STOPA store. But truly quick and efficient production requires more than just fast machines. Hans Sanders is also aware of this and approached TRUMPF years ago with the request for a machine that could handle parts removal and sorting of finished parts independently. "This," he was certain, "would not only take the pressure off my employees, but the subsequent processing steps could also be carried out much faster than before." The TruLaser Center 7030 has fulfilled Sander's wishes. The first full-service laser machine was installed at VDL Technics in 2021. The system was so successful in practice that Sanders has invested in two more machines in the meantime. His colleagues from the affiliate companies VDL Industrial Modules and VDL NSA Metaal have each purchased a TruLaser Center 7030, meaning that a total of five full-service laser machines are now in operation in the VDL group of companies.



"There are no more microjoints. This makes the machine more process-reliable and eliminates post-processing." HANS SANDERS MANAGING DIRECTOR, VDL TECHNICS B.V.

Solutions

The TruLaser Center 7030 full-service laser machine handles all laser cutting processes independently and reliably. "We have highly automated production here in Boxtel. Process reliability is crucial for this," he explains. "If a part were to get stuck during unattended cutting, it would create a problem." That is why he is fascinated with the TruLaser Center 7030 safety concept. For example, the SmartGate integrated into the brush tables prevents parts from tipping over. "Microjoints are therefore unnecessary. We can avoid post-processing. Punching slugs and scrap drop into a container, with no significant interruption to the cutting process," adds Sanders. "I am simply fascinated by something like this."

After removal, the SortMaster Speed stacks parts on as many as eight pallets and transports them to the deposit position. "Then it proceeds automatically to the TruBend Cell 5000, advancing to the next process step," explains Sanders. He adds: "This is how I imagined it. "The only thing that is still done manually here is the storage of raw sheets in the STOPA high bay storage racks."

The system is programmed offline using the TruTops Boost programming software. The TruLaser Center 7030 makes it easier than programming conventional automated laser cutting systems. "My programmers adapt to the systems quickly, and the end result of the process is a fully finished part," Sanders says. Depending on the material thickness and the type of component, a TruLaser Center 7030 processes between 54 and 650 kilograms of material per hour. This is a significant yield over a single weekend with three machines. Hans Sanders is happy about this, because his three full-service laser machines tidy up their parts properly.

Implementation

After the start-up of the first TruLaser Center 7030 in 2021, the machine performed its first unattended 24-hour shifts after around ten weeks. The employees were trained in Ditzingen and Grüsch. "It is important to me that everyone involved with lasers and bending machines has the same level of knowledge. This enables them to be stationed on the machines as required," explains Sanders. All three TruLaser Center 7030s are connected to a STOPA high-bay warehouse with 580 storage locations currently in use.







Forecast

"In recent years, we have specialized more and more in laser cutting and bending," explains Hans Sanders. He continues: "We are thinking about building a production hall exclusively for these two technologies." The company has had a business relationship with TRUMPF since 1982. This is not about to change: "I appreciate the direct contact with my contacts at the TRUMPF site in the Netherlands, because short distances are important to us. The more complex machines become, the more we depend on competent and fast service."

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