

TruLaser Center 7030: A self-sufficient multi-tasker

When Hans Sanders leaves his factory on Friday evening, he does so with a sense of satisfaction. His fully automated production hall is fitted with machines that he can trust completely. In addition to several highly productive laser cutting and bending systems from TRUMPF, three TruLaser Center 7030 machines also work in 3-shift operation. Unlike all other machines, however, the full-service laser machines are capable of more than just quick and precise cutting. They handle all laser cutting processes independently and to the highest quality, including reliable part removal and sorting and stacking the finished parts on pallets. This reduces the workload of Sanders's employees and allows him to deploy his skilled staff more efficiently, as well as speeding up the entire production process.



VDL Technics B.V.

www.vdltechnics.nl

VDL Technics, based in Boxtel, Netherlands, is a subsidiary of the VDL Group specialising in the manufacture and series production of complex metal assemblies. Their customer base includes companies from the agricultural, transport and mechanical engineering sectors. VDL manufactures the components, some of them highly complex, in lot sizes from 20 to 1,500. Design consulting as well as laser cutting and welding, punching and bending are all part of the company's portfolio. VDL offers online ordering of laser parts and bending parts via the OrderOn.com platform. VDL Technics has made significant advances in both automation and digitalization in recent years, paving the way for the company's continued success.

INDUSTRY	NUMBER OF EMPLOYEES	LOCATION
Metal processing	Around 130	Boxtel (Netherlands)

TRUMPF PRODUCTS	APPLICATIONS
■ TruLaser Center 7030	■ Laser cutting
■ TruLaser 5030 fiber	■ Bending
■ TruLaser 3030 fiber	
■ TruBend Cell 5000	
■ STOPA store	

Challenges

Hans Sanders has several highly productive lasers in his production facility. In addition to a TruLaser 3030

fiber with four kilowatts of power and a TruLaser 5030 fiber with six kilowatts, a TruLaser 5030 fiber with eight kilowatts is also connected to the STOPA store. But you need more than just fast machines when it comes to quick and efficient production. Hans Sanders is well aware of this, and approached TRUMPF several years ago to request a machine capable of autonomously handling the removal and sorting of finished parts. He is confident that such a solution "would not only alleviate the workload on my employees, but also enable much faster subsequent processing steps." The TruLaser Center 7030 fulfills Sanders' wishes. The first full-service laser machine was installed at VDL Technics in 2021. The system is so impressive in practice that Sanders has now invested in two more. Colleagues from sister companies VDL Industrial Modules and VDL NSA Metaal have followed suit, each acquiring a TruLaser Center 7030. Consequently, a total of five full-service laser machines are now operational within the VDL group of companies.



"The absence of microjoints enhances the machine's reliability in the process and reduces the need for post-processing."

HANS SANDERS

MANAGING DIRECTOR, VDL TECHNICS B.V.



Solutions

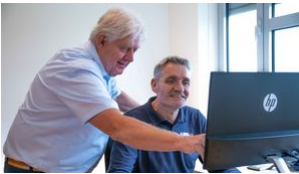
The TruLaser Center 7030 full-service laser machine handles all laser cutting processes independently and reliably. "We have a highly automated production facility here in Boxtel, so process reliability is the name of the game," he explains. "If a part jams somewhere during unattended cutting, we have a problem on our hands." It goes without saying that he is delighted with the safety concept of the TruLaser Center 7030. For example, SmartGate integrated in the brush tables prevents parts from overturning. "That makes microjoints superfluous. No post-processing is required. Punching slugs and scrap fall into a container without appreciably interrupting the cutting process," adds Sanders. "I just find it all so fascinating."

After removal, the SortMaster Speed stacks parts on up to eight pallets and places them in the deposit position. "It then moves automatically to the TruBend Cell 5000, the next step in the process," explains Sanders, adding: "It's exactly how I imagined it. The only thing we still do manually is putting the raw sheets into storage in the STOPA high bay storage racks."

The system is programmed offline using the TruTops Boost programming system. Programming is much easier with the TruLaser Center 7030 than with conventional automated laser cutting systems. Sanders states, "My programmers handle the systems adeptly, and, in the end, a fully finished part emerges from the process." The TruLaser Center 7030 can process between 54 and 650 kilograms of material per hour, depending on the material thickness and the type of component. With three machines working over the weekend, this is a lot of material. Hans Sanders is thrilled as his three full-service laser machines arrange their parts neatly.

Implementation

After the first TruLaser Center 7030 was commissioned in 2021, the machine performed its first unattended 24-hour shifts some ten weeks later. The employees were trained in Ditzingen and Grösch. "It's important to me that everyone who works with the lasers and bending machines has the same level of knowledge. This means that they can be deployed to the machines in line with demand," explains Sanders. All three TruLaser Center 7030 machines are connected to STOPA high bay storage racks with 580 storage locations currently in use.



Forecast

"In recent years, we have increasingly specialised in laser cutting and bending," explains Hans Sanders. He continues: "We are considering building a production hall exclusively for these two technologies." The company's business relationship with TRUMPF started back in 1982. And this is not about to change: "I really value the direct contact with my contacts at TRUMPF's Dutch site, because we believe in production with short distances. Because the more complex machines become, the more we depend on a professional, fast service."

Date: 2023-12-20

