

DANIEL KURR

Thin sheet is big business: How MERZ is tripling its sheet metal processing

Whoever has doubled the amount of their manufactured parts in just a few years has done something right. Tim Ungerer from MERZ GmbH is an example. With modern machinery, extensive automation and the Oseon production control software from TRUMPF, he is swiftly propelling his sheet metal processing toward the future.

Many people swear by making changes gradually, especially when it comes to the automation and digitalization of production processes. Tim Ungerer sees it differently. The Head of Product Management for sheet metal technology at MERZ GmbH is a passionate self-starter and once he has made a plan, he sees it through - even if it is painful for a moment. "Whoever claims that the introduction of a new production control is easy, is not telling the truth", he says. "All processes change. We had to rethink everything. But after six months of persistency, the curve to success grew exponentially week after week. Today we process three times more sheet metal per day than before and do so with half of the team. Employees can finally devote themselves to other tasks."

15 tons of sheet metal in a 3-shift operation

MERZ GmbH, based in Gaildorf, Baden-Württemberg, is a leading manufacturer of mobile electricity distributors, testing-, connection- and supply technology as well as switching devices. Since 2005 MERZ has belonged to the globally operating PCE Group based in Austria. Together with the two sister companies Merz Schaltgeräte GmbH & Co. KG and Moser Systemelektrik GmbH , MERZ has positioned itself with a diverse product range. MERZ achieves a high vertical range of manufacture not least through its own sheet metal processing where, among other things, housing for the power distributors is produced. Tim Ungerer is responsible for around 110 employees, who in a 3-shift operation, process around 10 to 15 tons of thin sheet daily. A large variety of parts with quantities of 1 to 1,000 as well as high time pressure is daily work for him. His customers are not only colleagues from the most diverse areas of his own company but are also external customers, for whom MERZ is a job shop. "In order to manage this workload, everything must run smoothly in production and it did not until a few years ago", explains Ungerer and adds. "Then we processed just three tons of sheet metal a day and were far from transparency." Ungerer is clear: "In order to make our sheet metal processing competitive in the future, comprehensive

automation and digitalization measures were absolutely necessary."



Done! Tim Ungerer Head of Product Management for sheet metal technology at MERZ GmbH has doubled the amount of output of his sheet metal processing with extensive modernization measures and the introduction of Oseon production control in just a few years.



The employees were on board from the beginning. "This was important and correct, to implement such an extensive conversion at this pace", explains Tim Ungerer, Head of Product Management for sheet metal technology at MERZ GmbH.



There is no longer a bottleneck when bending at MERZ. The Oseon production control offers bending pools, in which all bending orders are collected. This allows each bender to be assigned entire order queues over several weeks.



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Automation creates order

In the planning of the extensive project Ungerer sought the support of TRUMPF. "The analyzed my entire production with concentrated competence and presented me with a really great concept," he explains. This and Ungerer's persistence finally also convinced the PCE shareholders. In 2017 MERZ initially invested in more automated punch laser machines from TRUMPF. "Until then we had no significant automation", says Ungerer. "I had three forklift drivers and three to four employees who removed the finished parts from the laser machines. It was not necessarily chaotic, but regulated processes look different." The new machines were positioned in the production hall so that later they can be integrated into a fully automated STOPA store with 400 spaces. That followed twelve months later and impressed Ungerer from day one: "The high bay storage racks were a milestone. It made us more flexible. Earlier if an employee was absent it was a real organizational challenge. Now the machines are supplied with material completely unattended. Through this our production has accelerated enormously and the procedures have become much smoother."

New software requires strong nerves

Tim Ungerer also hopes this for all other processes in his production. With the introduction of the Oseon production control software from TRUMPF he also wants to ensure assigned material flows on the floor and efficient,transparent procedures. Up to now MERZ was working with an aging ERP system. For Ungerer, the production process is largely a black box, as he says: "Where and in what position an order was and where the semi-finished parts were was not so easy to determine. We could also not say exactly how long a work step would take, so for example the set up of a machine. All in all, the situation was extremely unsatisfactory for me."

Therefore even with Oseon Ungerer does not take half measures. His goal is a seamless flow of material and information along the entire production chain. He therefore opts for a comprehensive package - from work preparation and production

planning to the automated programming of orders with the TruTops Boost software through to a digital message that an order has been completed. Every workstation is equipped with tablets und each work step, until the end, is registered via an app. The mobile access to all information makes daily work easier for all employees. And to know where an order is at the drop of a hat and when is it completed, is a dream for every production manager", says Ungerer.

Him and his colleagues grew a few gray hairs before everything worked effortlessly, but looking back, is was worth it in Ungerer's opinion. The orders became more transparent and with the help of Oseon he also discovered bottlenecks in his production, which until now had slowed it down. "For us, for example, it was the case when bending. With Oseon we had the opportunity to manage so-called bending pools. All bend orders are collected there and I can assign each bender entire order queues over several weeks. That makes this work step much easier to plan." Ungerer is also impressed by the amount of information that Oseon provides: "I always have an overview of the machine availability and am informed of any machine downtime. This helps me to continually optimize my production."



Tim Ungerer, Head of Product Management for sheet metal processing at MERZ and Stefan Pollanka, head of the prefabrication department, constantly pitched in during the conversion to the new Oseon production control. This is why the company successfully and quickly became fit for the future.



The fully automated STOPA store with 400 spaces is one of the highlights of the extensive automation measures from Tim Ungerer.



Employees at every workstation register every work step from beginning to end on a tablet in an App The mobile access to all information makes daily work easier and brings transparency to the procedures.



With the introduction of the Oseon production control software Tim Ungerer, Head of Product Management for sheet metal technology at MERZ has also ensured assigned material flows on the floor and efficient, transparent procedures.



In their own sheet metal processing MERZ processes between 10 and 15 tons of thin sheet daily in a 3-shift operation. A large variety of parts with quantities of 1 to 1,000 as well as a high time pressure are challenges that come with daily work.

Downtime? Absolutely not!

Some calm has now returned to the sheet metal processing at MERZ. "I still have a parking space reserved in front of my production hall for the TRUMPF specialists, but nowadays by employees manage the new procedures and programs very well and are pleased that everything is now much easier and more manageable", explains Ungerer with a grin. The turbulent

introduction of Oseon did not deter him at all - in fact the opposite. "It is clear to me that TRUMPF generally implement such projects in small steps. This way a conversion certainly runs more smoothly" says Ungerer and continues with a wink "But were are even hardcore users. We wanted the entire package in a very short time and that was also a new experience for TRUMPF."



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