DANIEL KURR

Retrofit for the Smart Factory

When the two sons joined the family business H. K. Heun, they wanted to change course: new machinery, digital solutions and more automation. And their father Marc Willgenss cleared the way for their ideas. When they decided on a holistic solution from TRUMPF, he let them do it.

"We are just as stubborn as our father." That's what Raphael and Yannick Willgenss say about themselves. Fortunately, stubbornness often has a good objective: the success of their shared business. Father and sons discuss, argue, look for solutions and then everything is fine by the end of the day. Even stubborn decisions do not detract from the good cooperation between the three. In 2020, Raphael and Yannick proposed replacing the entire existing machinery with TRUMPF machines. Marc Willgenss trusted in the trendsetting plans of his future successors.

A takeover with consequences

In 2000, Marc Willgenss took over the management of the metalworking company H.K. Heun from Fritz Heun. Heun is based in Dillenburg, Hesse. His son Yannick joined the company in 2009, and then in 2012, the IT specialist Raphael followed. H.K. Heun currently employs 55 people and is a classic job shop. The company manufactures individual customer parts in a batch size of one and as complete assemblies. Raphael Willgenss explains: "We offer consulting, design and manufacturing from a single source and supply companies in the construction industry, among others. We also specialize in container construction and manufacture enclosures for machinery." In 2013, when the opportunity arose to take over a section of a nearby company that specialized in commercial kitchen construction, the Willgenss did not hesitate, but seized it right away. Raphael Willgenss explains: "The resulting company Primetall complements Heun perfectly. Here, 45 employees manufacture mainly stainless-steel parts. In addition to the gastronomy sector, customers also come from the medical and aircraft industries." While the employees at Primetall process thin sheet metal of up to four millimeters, Heun uses mild steel with sheet thicknesses up to 25 millimeters. Together, the two companies cover a wide range of customer requirements.

Not only do state-of-the-art machines such as the TruLaser Cell 7040 of the HEUN Group move the company towards the future. By using intelligent programming software from TRUMPF, Raphael Willgenss wants to optimize throughput times: "Manual programming on the machine simply costs too much time. Here we expect a considerable increase in production for both laser cutting and bending."

Two generations - one common goal: For Yannick, Marc and Raphael Willgenss (left to right), the success of the company comes first.

The brothers Raphael and Yannick Willgenss are not only creative when it comes to designing manufacturing processes. With their own ideas, they themselves planned the administration building, which was completed in 2020.

Two companies - two sets of machinery

In order to accommodate both companies under one roof, the Willgenss expanded the existing production hall by a further 4,600 square meters. But despite the joint production site, Heun and Primetall have been operating separately from the start. Yannick Willgenss explains: "We first wanted to see how things were going with Primetall before we merged the companies. As a worst-case scenario, we could have divested Primetall without endangering Heun." But the concern turned out to be unfounded. Both companies have been developing splendidly to this day. Raphael Willgenss explains: "We now operate as the HEUN Group. Nevertheless, both companies will continue to exist independently - as sister companies. But, of course, we use synergies wherever possible."

Along with Primetall, eight TRUMPF machines and a STOPA warehouse also move into the new production hall and form a contrast to Heun's machinery. Raphael Willgenss explains: "We had machines from another manufacturer for years. The machines were good, and we were used to them, but in direct comparison, we were struck by TRUMPF's excellent service. The predictability and reliability of maintenance and repairs impressed us."

More automation and digitization will continue to be important topics for us in the future. The possibility of linking my programs in the ERP with solutions from TRUMPF via standardized interfaces is exactly the right direction for me.

Raphael Willgenss, IT Specialist at the HEUN Group

A spontaneous shopping tour

When an important customer offered the Willgenss a framework contract for the production of tubes for ladders, Raphael

and Yannick's long-cherished dream of acquiring a tube laser cutting system came true. Yannick Willgenss reports: "We previously manufactured the tubes for the customer in the classic way with sawing, drilling and chamfering. The framework agreement gave us the security of a 30 to 40 percent capacity utilization of a tube laser cutting system. This allowed us to bring a new technology into the company without risk and to further expand our portfolio."

The Willgenss family visited a manufacturer near Stuttgart and spontaneously decided to take this opportunity to stop by TRUMPF in Ditzingen. Raphael Willgenss remembers: "We didn't have TRUMPF directly on our radar as a supplier of tube laser cutting machines, but we had an opportunity for a convenient detour." And then everything happened very quickly: all three are thrilled with the TruLaser Tube 7000. The excellent accessibility of the machine is particularly impressive. And when TRUMPF offered the right conditions, the decision was made and the order signed and sealed in no time.

Treating people decently is a top priority at our company. Yannick Willgenss explains: "We were brought up as Christians. This determines how we act, and, as much as we are able, how we do things in the company."

A TruLaser 3030 is loaded and unloaded semi-automatically with a LiftMaster.

Discussing, arguing and seeking solutions together: the good cooperation between sons and father has taken the company a long way, on course for the Smart Factory.

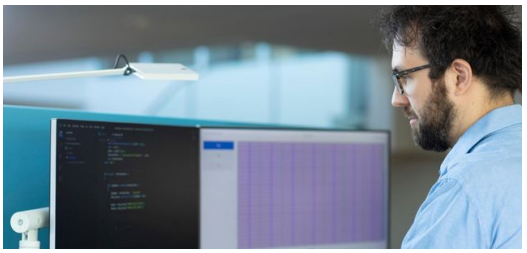
Less electricity thanks to new machines

A few weeks later, during the operator training for the TruLaser Tube 7000, Raphael Willgenss seized the opportunity to take a look at the Smart Factory at the TRUMPF Customer Center in Ditzingen: "As an IT specialist, this was, of course, very interesting for me. In the company, I'm the one who drives the digitalization topics forward. I can program a lot of things myself thanks to our open ERP system, but I was impressed by the possibilities offered by ready-made solutions such as production control and programming software from TRUMPF."

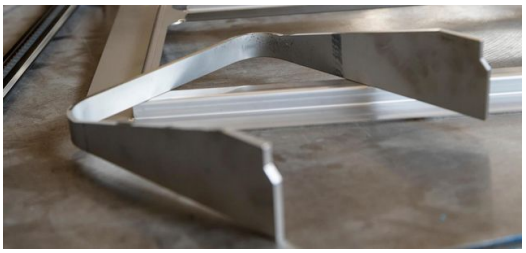
Raphael Willgenss has already optimized a number of upstream and downstream processes in his production unit. "Paperless manufacturing is my hobbyhorse," he explains and continues: "But despite automated order processing, automated warehouse management and quite a few other optimizations that I've already been able to implement, we found that we weren't getting orders from customers because our old machines were too slow and our fixed costs were too high." Analyzing the electricity consumption of all their machines, the brothers found that they are incurring electricity costs of up to 18,000 euros per month. They considered investing in a photovoltaic system, but after further calculations decided that they would rather reduce electricity costs by investing in new efficient machines. Yannick Willgenss explains: "The expected savings in electricity costs enabled us to finance two new machines. And because they work much more productively than the old ones, we replaced three existing machines with the two new acquisitions."

When purchasing these machines, the Willgenss then made a fundamental decision: "For almost sentimental reasons, we briefly considered buying one machine from our previous supplier and one from TRUMPF. But in the end, we concluded that, in the long run, a holistic solution from one manufacturer is the right way for us," explains Raphael Willgenss.

The brothers Raphael (left) and Yannick Willgenss have clear ideas about the future of the HEUN Group.



IT specialist Raphael Willgenss deliberately opted for an open ERP system: "I programmed many of the optimizations in the upstream and downstream processes myself."



Bei den Lasermaschinen soll es nicht bleiben. Auch die vorhandenen Biegemaschinen sollen in Kürze durch Maschinen von TRUMPF ersetzt werden. Yannick Willgenss: „Dann gehört auch das Rüsten der Maschine der Vergangenheit an. Das übernehmen künftig automatische Werkzeugwechsler."

Achieving more together in the future

A TruLaser Cell 7040 has been in production at Primetall since May 2021. Two TruLaser 3030s are moving in at Heun. One machine is loaded manually, the second TruLaser 3030 is loaded and unloaded automatically by a LiftMaster. The TruLaser Tube 7000 has its own home on the joint company premises in a separate hall with tube storage.

In the next step, the TruTops Fab production control system, which is already installed at Primetall, will also be running at Heun in the summer. And it will not stop with the new laser systems: The brothers are also replacing the existing bending machines with TRUMPF bending machines. "More automation and digitalization will continue to be important topics for us in the future," explains Raphael Willgenss, adding, "The ability to link my programs in the ERP with solutions from TRUMPF using uniform interfaces is exactly the right direction for me."

The production facilities of the HEUN Group now shine in rich blue and the two sister companies merge in the new joint administration building. With its wide range of manufacturing options, modern machinery and software geared towards digitalization, the group of companies is in an excellent position. And there are still plenty of ideas and the power to implement them, says Raphael Willgenss: "Our father has always invested all the profits in the company. Yannick and I are very similar. Our goal is to make the HEUN Group a company ready to face the future and to continue offering our employees secure jobs."

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