SABRINA SCHILLING

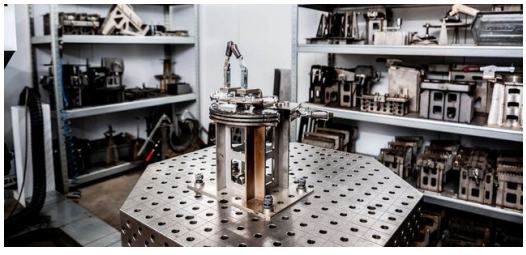
Closing ranks for laser welding - new technology boosts sales

By investing in a TruLaser Weld 5000 laser welding cell from TRUMPF, brothers Kevin and Marcel Kempf took an entrepreneurial risk. They only had a few parts optimized for the new process. With a clever idea, their employees were motivated to change this in a short space of time and the results were so good that many customers now only want laser-welded parts.

Kevin Kempf and his brother Marcel are passionate about sheet metal processing. Trying out new technologies and processes to further the development of their company is what makes the business so appealing to them. It also takes a bit of courage, and they certainly have it. "If we only ever took the bare cost calculations as the basis for our decisions, we wouldn't have been allowed to buy some of our machines in recent years," explains Kevin Kempf pragmatically, adding with a grin: "But we like looking at the big picture. We cannot offer our customers technologies which we do not have the machines for. And that means we are missing out on business. So that's why we sometimes take a risk."

As with the decision to invest in an automated laser welding cell from TRUMPF. The technology has long fascinated the brothers. When the TruLaser Weld 5000 with the FusionLine option came onto the market, things got really interesting for them. The FusionLine option makes it possible to compensate for inaccuracies in a component and thus automatically process components that are not optimized for laser welding. Gaps up to one millimeter wide can be closed easily without compromising the quality and strength of the weld seam. "That was what convinced us," says Marcel Kempf. "We ordered the system in 2018."

<p>With the expert advice and support of their TRUMPF contacts, Kevin



<p>Even with simple sheet metal fixtures, components can be clamped in

(2nd from left) and Marcel (3rd from left) successfully got started with automated laser welding.

In addition to laser tube processing with the TruLaser Tube 5000, Kevin and Marcel Kempf now also have automated laser welding in their portfolio. With the help of the TruLaser Weld 5000, they were able to expand their customer base even further.

such a way that they can be processed automatically with the TruLaser Weld 5000 laser welding system.

AUTOMATION GIVES YOU INDEPENDENCE

Andreas Kempf founded Kempf GmbH in 1987. In 2020, his sons Kevin and Marcel took over management of the business. The family business with its headquarters in Kraichtal-Gochsheim, Baden-Württemberg, is a contract manufacturer for sheet metal and tube technology. The company currently supplies around 500 customers from sectors including machine and systems engineering, fixture construction, medical and rehabilitation technology as well as the automotive and electrical industries. With around 70 employees, the company covers the entire sheet metal process chain - from component design to surface refinement.

The brothers invested in the expansion of the welding shop back in 2017. In addition to the standard TIG, MIG and MAG welding processes, it was now time to take the plunge into automated laser welding. “Everything fell into place in one fell swoop,” explains Kevin Kempf, enumerating. “With FusionLine, TRUMPF has lowered the previously extremely high demands on component accuracy in preparation for laser welding. What's more, it is no longer necessary to invest thousands in milled fixtures. And last but not least, the shortage of skilled workers, which is also a problem for us, has made it clear how important automated production processes are. The issue has become even more acute since corona.”

SUCCESS BONUS FOR COMPONENT DESIGN

When commissioning the TruLaser Weld 5000, the Kempf brothers initially encountered the same problem that still prevents many sheet metal fabricators from purchasing laser welding systems: they didn't have the right parts. The prospect of a new process is often rejected by customers. “Many people think only a thick seam can be stable. Although we have destroyed components and proven that it is the material rather than the delicate laser weld seam that tears, this evidence is often not enough to convince people,” says Marcel Kempf, explaining the dilemma.

Once you've seen a laser welded seam, you won't want anything else.

Kevin Kempf

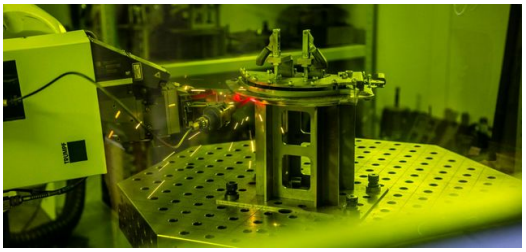
The Kempf employees were also initially not too keen on redesigning components for laser welding and building the devices required for the welding process. “That's when we came up with the idea of offering a bonus for every laser-weld-optimized part,” says Kevin Kempf. This piqued the interest of our ambitious employees. The specifications were simple: they had to present a processing program, the appropriate fixture and a short video or photo documentation of the new process. And, of course, they needed to be able to win over customers with their idea. “The work was worthwhile for both sides,” says a delighted Kevin Kempf. “For the employees, their ideas paid off in hard cash. And we have also profited: 80% to 90% of our parts are now optimized for laser welding."

LASER WELDING AS A MONEY-MAKER

Together with their sales team, the Kempf brothers have now also won over their customers. “When I showed a customer three laser-welded samples and he ended the meeting after what felt like five minutes, I was shocked and perplexed,” says Kevin Kempf. “Until the customer got in touch shortly afterwards and said that he had never seen such great samples before and that he would be sending an order.” The problem had been ironed out. “This customer is one of our biggest today. Without laser welding, we wouldn't be able to achieve the turnover we make with it,” adds Marcel Kempf.

Marcel Kempf (left) is delighted with the quality of the laser weld seams. And so are the customers: “Once you've seen a laser welded seam, you won't want anything else.".

Kempf's managing directors used success bonuses to encourage their employees to identify parts suitable for automated laser welding. This boosted their motivation, and now even fixture construction is easy.



The automated laser welding process is highly productive, delivering 100 percent reproducible quality and reducing employee workload. Kevin Kempf: “Parts that we previously would have worked on for an hour can now be done in ten minutes.”

The speed, quality and, above all, the reproducible results continue to inspire Kevin and Marcel Kempf. “We have components that took us over an hour with TIG welding and the necessary post-processing. We can do it in ten minutes with laser welding. We can do in one shift what used to take us a whole week,” Kevin Kempf sums up enthusiastically. Another decisive factor for the brothers is that the TruLaser Weld 5000 not only processes the orders quickly and punctually: it also delivers 100% reproducible welding results at all times.

The Kempf brothers have not regretted moving into automated laser welding. As a result, they were not only able to win new customers, but also win over existing customers. This gave them a competitive advantage. “Once you've seen a laser welded seam, you won't want anything else,” says Kevin Kempf with conviction.

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TRUMPF GROUP COMMUNICATIONS