Kempf GmbH

www.kempfgroup.de

Kempf GmbH is a second-generation family business with its headquarters in Kraichtal-Gochsheim. The contract manufacturer for sheet metal and tube technology supplies customers from sectors such as machine and systems engineering, fixture construction, medical and rehabilitation technology as well as the automotive and electrical industries. In 2020, brothers Kevin and Marcel took over the company founded by their father Andreas Kempf in 1997 and are continuing to develop it. With around 70 employees, the company can complete projects across the entire sheet metal process chain - from component design to surface refinement. Kempf is characterized by its high quality standards and fast delivery times. But also the entrepreneurial spirit of the two brothers: they are not only guided by pure cost calculations, but rely on motivated employees and their gut instincts. Their shared commitment and enthusiasm for new things welds the Kempf team together.

INDUSTRY

Sheet metal and tube technology

NUMBER OF EMPLOYEES

70

SITE

Kraichtal-Gochsheim (Germany)

TRUMPF PRODUCTS

- TruLaser Weld 5000
- TruLaser 5030 fiber
- TruLaser Tube 5000
- TruMatic 6000
- TruArc Weld 1000
- Various machines from the TruBend 5000 Series
- TruBend Cell 5230 S
- TruBend 7036

APPLICATIONS

- 2D laser cutting
- Punch laser machine
- 3D laser tube cutting
- Automated bending
- Automated laser welding

Challenges

Increasing deadline and cost pressure, the shortage of skilled workers and, of course, competition require sustainable solutions for the future in every company. One of these is automation. Brothers Kevin and Marcel Kempf have been toying with the idea of automated laser welding for years. But it wasn't until TRUMPF launched the TruLaser Weld 5000 laser welding cell with the FusionLine option that the two really got going. “With FusionLine, TRUMPF has lowered the previously extremely high requirements for component accuracy as a prerequisite for laser welding. That made things interesting for us,” explains

Kevin Kempf, his brother Marcel remembering: "In 2018, we had similar problems as we do today. The order pipeline looks good, but it's difficult to find good personnel. Welders, in particular, are as rare today as they were back then. We also wanted to use automation solutions to make ourselves less dependent on staff shortages." But the technology also fascinated the brothers. "Initially, we only had a few parts that were suitable for laser welding on an ad hoc basis, but we were thinking about the big picture. If you don't have the machines for modern technologies such as laser welding, you can't gain customers for them," explains Kevin Kempf pragmatically.

"Once a customer has seen a laser welded seam, they don't want anything else."

MARCEL KEMPF (LEFT)
CEO OF KEMPF GMBH

Solutions

With the TruLaser Weld 5000 and the FusionLine function, TRUMPF is lowering the previous maximum requirements for component accuracy as a prerequisite for laser welding in 2016. FusionLine makes it possible to compensate for inaccuracies in a part, such as those that occur during the bending process. This means that components not suitable for laser welding can be joined using laser metal deposition. FusionLine closes gaps up to one millimeter wide without any problems. Switching between FusionLine and classic laser welding, such as heat conduction and deep penetration welding, is possible without retrofitting the system. "It was above all the high demands on component preparation that for a long time made us hesitant to get into automated laser welding," says Kevin Kempf looking back. "With FusionLine, TRUMPF has removed this hurdle with FusionLine."

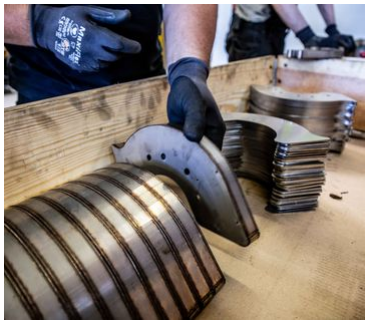
Another aspect that has long commanded the brothers' respect was the previously elaborately milled devices equipped with copper plates for heat dissipation that were necessary for the process. "If you tell a customer that the fixture alone for a part costs a few thousand euros, they'll wave you away," says Kevin Kempf. But times have changed in this was too. Today, modular fixtures made of sheet metal are perfectly adequate, as are reusable standard clamping systems. "We were sure that we could easily build the sheet metal fixtures ourselves," Marcel recalls, Kevin adding with a grin: "It wasn't quite that easy at the beginning, but we managed it."

The TruLaser Weld 5000 is equipped with a dual station table on which large quantities are welded at high speed at Kempf in parallel to the main welding process. "The machine is so fast that we need significantly longer for the preparation than the system needed for the actual welding process," says Kevin Kempf. The rotate and tilt positioner, which enables components to be processed on both sides, is used at Kempf for welding more complex parts. "We have components that we worked on for over an hour with TIG welding and the necessary post-processing. We can do it in ten minutes with the laser. With the TruLaser Weld 5000, we can do in one shift what used to take us a whole week," Kevin Kempf sums up enthusiastically.

Implementation

The Kempf brothers got to grips with the issue of machine utilization with a clever idea. “Our employees initially showed little enthusiasm for redesigning parts for automated welding and building the devices required for the process. That's when we came up with the idea of a bonus for every part optimized for laser welding. I required a processing program, an appropriate fixture and documentation of the new process - i.e. how it was before and how it works now. And of course the customer must give the go ahead", says Kevin Kempf. “If an employee delivers this, they get a bonus." Within a short space of time, the employees identified numerous parts suitable for laser welding, worked out the programming and developed and built the devices.

More and more customers are now also excited about the technology. “Customers who have had their part redesigned for the process once and have seen a laser weld seam don't want anything else. They realize that the process represents a quantum leap in quality compared to MIG, MAG and TIG welding, especially when it comes to manual welding,” says Marcel Kempf. The decisive factor is that the TruLaser Weld 5000 processes orders quickly and punctually. It also consistently delivers 100% reproducible welding results. "That is the type of reliability that our customers want,” says Marcel Kempf.



Looking ahead

“We received excellent advice from TRUMPF and to this day, Robin Stuhler from the welding department and Dominic Schuhmacher from the sales department are on hand whenever we need support,” explains Kevin Kempf with a cheeky grin. “Mr. Stuhler prepared us so well for laser welding that we are already creating fixtures that inspire him so much that he photographs them.

He also has high praise for the employees at TRUMPF Bank: “When we discussed the issue of the initially low machine utilization rates, they immediately suggested lowering the rates for the first two years. Once everything had settled down, the rates could be increased. That made our investment decision even easier.”

Kempf is currently expanding its production from the current 2,500 square meters to 4,000 square meters. The new building should be ready for use in 2025. The brothers have already invested in an automated bending cell from TRUMPF, adding another automation module to their production. “And who knows, maybe a new laser welding cell will be due at some point,” says Kevin Kempf with a grin.

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https://www.trumpf.com/en_US/solutions/success-stories/the-success-story-of-our-customer-kempf-gmbh/