



Kempf GmbH

www.kempfgroup.de

Kempf GmbH is a second-generation family-run company with headquarters in Kraichtal-Gochsheim. The contract manufacturer for sheet metal and tube technology supplies customers from sectors including mechanical and plant engineering, fixture making, medical and rehabilitation technology as well as the automotive and electrical industries. In 2020, brothers Kevin and Marcel took over the company, which was founded by their father Andreas Kempf in 1997, and have continued to develop it. The company's 70 employees handle all aspects of the sheet metal process chain – from component design to surface finishing. Kempf is renowned for its high quality standards and fast delivery times. It is also known for the entrepreneurial courage of the two brothers, who see beyond mere cost calculations and place their trust in motivated employees and their gut instincts. The Kempf team is united by a collective dedication to and enthusiasm for innovation.

INDUSTRY

Sheet and tube technology

NUMBER OF EMPLOYEES

70

LOCATION

Kraichtal-Gochsheim (Germany)

TRUMPF PRODUCTS

- TruLaser Weld 5000
- TruLaser 5030 fiber
- TruLaser Tube 5000
- TruMatic 6000
- TruArc Weld 1000
- Various machines in 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 deadlines, cost pressures, a shortage of skilled workers and heightened competition demand sustainable solutions for the future in every company. One such solution is automation. Years ago, brothers Kevin and Marcel Kempf were already toying with the notion of automated laser welding. But it was only when TRUMPF launched the TruLaser Weld 5000 laser welding cell with the FusionLine option that the pair seized their opportunity. "With FusionLine, TRUMPF has reduced the previously stringent requirements for part accuracy required for laser welding. That's what piqued our interest," explains

Kevin Kempf, while his brother Marcel recalls, "In 2018, we faced challenges similar to those we see today. We had a solid order book but struggled to find skilled staff. Welders, in particular, are as scarce now as they were back then. We also wanted to make ourselves less susceptible to staff shortages by using automation solutions." The brothers were equally enthused by technology. "Although we initially only had a few parts that were suitable for laser welding, we could see the bigger picture. If you lack the machines for modern technologies like laser welding, you won't be able to attract customers for them," Kevin Kempf explains pragmatically.



"Once a customer has seen a laser-welded seam, nothing else will do."

MARCEL KEMPF (LEFT)
CEO OF KEMPF GMBH



Solutions

When TRUMPF launched the TruLaser Weld 5000 and FusionLine function in 2016, they reduced the previously stringent requirements for part accuracy required for laser welding. FusionLine makes it possible to compensate for inaccuracies in a part, such as those resulting from a previous bending process. This allows parts to be joined even if they haven't been optimised for laser welding. FusionLine easily seals gaps up to one millimetre wide. Switching between FusionLine and traditional laser welding methods, like heat conduction and deep penetration welding, is possible without retrofitting the system. "We hesitated for a long time to venture into automated laser welding, primarily due to the high demands in terms of part preparation," reflects Kevin Kempf. "TRUMPF removed this hurdle when it launched FusionLine."

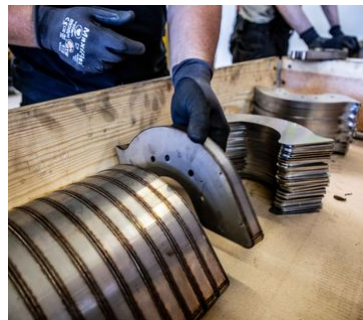
Another aspect that had long commanded the brothers' respect was the fixture setup, which previously required intensive milling and the addition of copper plates for heat dissipation. "If you tell a customer that the fixture for a single part costs a few thousand euros, they'll dismiss the idea," says Kevin Kempf. But here, too, times have changed. Today, modular sheet metal fixtures and reusable standard clamping systems are more than sufficient. We were confident we could build the sheet metal fixtures ourselves," Marcel recalls. Kevin adds with a grin, "It wasn't easy at first, but we got there in the end."

The TruLaser Weld 5000 features a dual station table that allows for high-speed welding of large quantities at Kempf, operating parallel to production. "The machine is so fast that we spend considerably more time on preparation than the system does on the actual welding process," says Kevin Kempf. At Kempf, the rotate and tilt positioner is used for the two-sided processing of parts, particularly for welding more complex parts. "We had components that took over an hour for TIG welding and the necessary post-processing. Using laser welding, we can complete them in just ten minutes. The TruLaser Weld 5000 allows us to accomplish in a single shift what would have previously taken an entire week", Kevin Kempf sums up enthusiastically.

Implementation

The Kempf brothers have come up with a neat idea to get a grip on their machine utilisation rate. "Initially, our employees showed little enthusiasm for redesigning parts for automated welding and building the required fixtures. That's when we came up with the idea of awarding a bonus for each part they managed to optimise for laser welding. I need an NC program, the appropriate fixture and documentation of the new process – in other words, how it was before and how it can be done now. And of course, we need the customer's approval," says Kevin Kempf. "If an employee accomplishes this, they receive a bonus." The plan is effective – employees quickly identify numerous parts suitable for laser welding, work on the programming, and design and construct the fixtures.

An increasing number of customers are now keen to use the technology. "Once customers have their parts redesigned for the process and have witnessed a laser weld, nothing else will do. They realise that the process represents a significant leap in quality compared to MIG, MAG and TIG welding, especially when it comes to manual welding," explains Marcel Kempf. Another decisive factor is that the TruLaser Weld 5000 not only processes orders quickly and punctually, it also delivers 100% reproducible welding results at all times. "That's the kind of reliability our customers appreciate," says Marcel Kempf.



Forecast

"We received excellent advice from TRUMPF, and Robin Stuhler from the welding department and Dominic Schuhmacher from sales are still on hand whenever we need support," explains Kevin Kempf, adding with a mischievous smile: "Mr Stuhler prepared us so well for laser welding that we're already constructing fixtures that inspire him to the point of taking photographs of them."

He also commends the employees at the TRUMPF Bank: "When we discussed the initially low machine utilisation rate, they promptly suggested reducing the rates for the first two years. Once everything is up and running smoothly, the rates can be increased. This made our investment decision even easier."

Kempf is currently expanding its production facilities from 2,500 m² to 4,000 m². The new building is scheduled for completion in 2025. The brothers have already invested in a TRUMPF automated bending cell, adding another layer of automation to their production process. "And who knows, perhaps we'll need a new laser welding cell at some point," says Kevin Kempf with a grin.

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