



Everybody wins

Within just one year, Ralf Stirl managed to transform an insolvent job shop into a promising business well on its way to becoming a smart factory. He was aided by his farsightedness – and the TruConnect consultants from TRUMPF.

Ralf Stirl knows a lot about not only steel processing and large welded structures, but also promising investments. A brief visit was all he needed to recognize the potential in Schmidt GmbH, a company in Dahlewitz, near Berlin, that had gone bankrupt in 2016. He purchased the business without a moment's hesitation. "The eight employees were absolute experts. What's more, the company's products and quality of manufacture were excellent. And their clientele, which included the German railway company Deutsche Bahn, was appealing," he says. But Stirl knew from day one that he would need to revolutionize the job shop in order to prosper. "The problem lay in the blanks, all of which the Schmidt company procured from cooperation partners. That resulted in very long production times and dulled the company's competitive edge. So that was the first thing I had to address," Stirl adds.

— The first step: TRUMPF comes to town

In early 2017, the insolvent Schmidt GmbH was reborn as FBT Feinblechtechnik GmbH. And Ralf Stirl started searching for solutions. He was, of course, aware that TRUMPF is the market leader in sheet metal processing, so he traveled to Ditzingen to look into laser cutting systems. While Stirl was reading an issue of TRUe, the magazine for TRUMPF customers, he came across an article about TruConnect consulting. "I then realized that merely addressing the procurement of blanks would not go nearly far enough. I regarded the company's fresh start as an opportunity to scrutinize every single workflow and process. It became clear that TRUMPF's TruConnect consulting, innovative machines and professional support make it an ideal solution provider," explains Stirl. He then scheduled a meeting with Daniel Haller, a TruConnect consultant at TRUMPF. Soon thereafter, Haller and two colleagues paid a visit to Dahlewitz, where they began by analyzing manufacturing processes at Stirl's company to identify optimization potential.





----- Examining workflows to identify bottlenecks

As Daniel Haller explains: "Our first step was to analyze the indirect processes during production and figure out where the logjams were." Haller and his colleagues examined each and every process step, ranging from inquiries, order confirmations and production planning to programming and outgoing goods. They focused on who does what and how, using which systems. At the same time, they used a typical part to map a workflow. They started at the finish: shipping. Working backwards from there, the TRUMPF specialists traced the flows of information and materials from one operational step to the next, paying close attention to how long each step lasts. Haller says: "This helps us gather information on all potential optimization measures. Naturally, it's impossible to put them all into practice right away. Like many fairly small companies, FBT asked us to quickly implement an initial round of measures. And that's precisely what we did."

Creating structure for connected manufacturing

The first measure was aimed at optimizing the flow of processes by rearranging units in the production facility. Lean manufacturing, as this approach is known, streamlines processes so that the workforce wastes as little time and energy as possible. Production workers are more efficient if they don't have to walk far or spend any time searching for something, for instance. Haller says: "As obvious as it may sound, reasonable structures are the first step on the path toward connected manufacturing and smart factories."

----- Searching was yesterday; out with the old machinery

"TRUMPF didn't tell us what we should do and how. Instead, they helped us help ourselves. Their consultants presented potential solutions, which our employees then examined, discussed, refined and ultimately implemented," says Stirl. FBT made space by selling machines that were outdated or no longer matched the company's production profile. They then arranged the remaining machines to form a U based on the sequence of production processes. "Everything is in the right place now. And we execute all our processes in accordance with defined standards," Stirl says. Although it isn't yet possible to quantify the productivity increase resulting from the U configuration of the machinery, the workflows are definitely smoother now. "We certainly spend a lot less time searching for materials and tools," he adds.

—— Done in a day instead of 15

In March, FBT workers started using their new TruLaser 3030 to cut thin sheets and blanks to size. They program their TruLaser using TruTops Boost software, which makes generating production schedules a breeze. This is the perfect solution for FBT, as TruTops Boost simplifies operation and automates all calculations – all of which makes Ralf Stirl happy: "External procurement often used to cost us 5 to 15 days. Now we get the job done within 24 to 48 hours, which is the market benchmark for cutting and bending."

But speed isn't everything. Making the systems more interconnected and efficient is one of the next steps the TruConnect experts from TRUMPF have planned. But for his own sake and that of his workforce, Stirl doesn't want to make too many changes too quickly. His philosophy is simple: take one step at a time down the path toward a smart factory, with TRUMPF by his side. They are off to a great start.





In March, FBT workers started using their new TruLaser 3030 to cut thin sheets and blanks to size.
 $<\!$ br/> $\!$ Image: Stephen Duscher



They program their TruLaser using TruTops Boost software, which makes generating production schedules a breeze.

hrage: Stephen Duscher



"TRUMPF didn't tell us what we should do and how. Instead, they helped us help ourselves. Their consultants presented potential solutions, which our employees then examined, discussed, refined and ultimately implemented," says Ralf Stirl.~br/>lmage: Stephen Duscher



ANIKA BANK