

WBE Werkzeug- und Maschinenbau GmbH & Co. KG **Digitization costs jobs? WBE proves the opposite**



Customer

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Products

Solid Edge CAMWorks PDM Studio

The machine manufacturer WBE from Bielefeld digitized the entire company within three years. Today, various integrated software solutions facilitate processes from manufacturing to design purchasing and administration. The result: highly efficient work and, as a consequence, an increased order volume. "Within just two years, we have created 30% additional jobs," says Managing Director Patrick Eikelmann, and can thus definitely be considered a role model for digitalization in medium-sized companies.

1975 marks the beginning of the history of WBE Werkzeug- und Maschinenbau GmbH & Co. KG - at that time still under the name of the founder as "Peter Brauer Werkzeugbau GmbH & Co. KG". For more than 45 years, the company has been expanding its position as a strong partner of industrial customers throughout Europe. As a result, the portfolio has also continued to grow successively: WBE not only manufactures precision parts using milling, turning or grinding processes as well as 3D printing. The company also takes care of the further processing of the parts, develops and assembles entire assemblies.

The in-house design team also supports customers in the planning, conceptual design, construction and production of individual machines. WBE's product range includes handling and stacking machines as well as special machines in the field of intralogistics and component handling such as modular belt conveyors, stacking magazines and robotics.

With the change in management in 2018, the topic of digitalization was also driven forward with great commitment at the machine manufacturer. In order to prepare the company as best as possible for the future in terms of automation, networking and computer-

aided processes, the new Managing Director Patrick Eikelmann was looking for competent advice. After discussions with several technical system houses, Solid System Team GmbH, SST for short, was chosen as the ideal integration partner.

Digitization: a new roadmap for WBE

First, the existing software structure in the company had to be scrutinized: At that time, WBE was still working with the CAD software Solidworks in the design department. However, since the focus was on the consistency of the processes, SST and WBE jointly defined a new roadmap at the beginning of 2020.



More flexibility by changing the CAD software

The first step was therefore to replace the existing software in the design department with Solid Edge from Siemens Digital Industries Software. Solid Edge offers extensive functions for 3D design and modeling of products as well as for the creation of technical drawings. In addition, the software offers a number of assembly modeling tools that allow users to create complex systems and simulate motion sequences. The biggest difference from other CAD systems is

the so-called Synchronous Technology. This type of modeling enables feature-based history-independent modeling and thus the approach of creating new files extremely quickly, making adjustments in the single-part environment and processing third-party data from other CADs as if they were one's own parts. This, in turn, enables continuous work with suppliers and partners who do not necessarily have to work with Solid Edge.

In this way, the software not only meets the needs of the industry, but can also be perfectly integrated within the company with many solutions from other areas – keyword: integrated processes. Managing Director Patrick Eikelmann looks back: "Already after the first project we found that both technical and human cooperation with SST brought the desired success."

Intelligent manufacturing connection

With the introduction of Solid Edge in the design department, steps were simultaneously taken about the connection of the manufacturing department, which was realized with CAMWorks. The software can be completely integrated into Solid Edge and also convinces with its simple and intuitive usability. CAMWorks captures and stores user manufacturing methods and experience, creating the foundation for automated and standardized NC programming and knowledge-based manufacturing. In addition, with 4/5-axis simultaneous machining, designers can create toolpaths on complex shapes that would overwhelm 3-axis machines. For the machine manufacturer WBE, which now works with five 5-axis CNC milling machines, this is an absolute must-have.

PDM: From a folder system to an end-to-end solution

After the design and production departments were equipped with the

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appropriate tools, the next to-do on the list was the integration of software for professional product data management in 2022. Until then, all files at WBE had been managed classically using a folder system. "It was totally timeconsuming to maintain drawings for components or to check which components were used at all and in which assemblies. In order to get an overview of all parts and to prevent identical parts, a corresponding system for data maintenance and collection had to be introduced. We simply didn't want to spend so much time searching," says Managing Director Patrick Eikelmann. Therefore, SST recommended the solution of the company's sister CAD Partner GmbH, PDM Studio, which is fully compatible with Solid Edge and thus easy to integrate. Data in a wide variety of formats is thus automatically stored in the correct structures, workflows are adhered to, and release inventories are carried along. "With PDM Studio, we have processed our existing data and all future data is managed directly via the system. Through e.g. predefined searches and the use of the so-called Automation Client, we were able to save several hours of time and thus achieve higher information quality with less effort," says Eikelmann.

End of 2022: Interface to ERP system WinLine

After the introduction of PDM Studio, the logical next step was not only to manage the data in a decoupled system, but also to transfer it to the ERP system used by WBE. This made it possible to dispense with the tedious manual

transfer of article and bill of materials (BOM) data. With the interface connection to the ERP system WinLine, the last step towards an integrated solution was implemented and the holistic support approach of SST was rounded off. Stephan Janas, Design Manager at WBE, adds: "A thoroughly optimized process enables a smooth flow of the production of our self-developed machines: from the creation of components,

assemblies and drawings, their management and revision, to the automatic tendering of specified data and the transfer of the maintained information to the ERP system and the work steps generated from it. It also helps us to correct errors and automatically distribute and pass them on to all the departments concerned so that they don't happen again. This saves time and nerves."

"Our positive business development and the associated growth of our workforce resulted in the creation of 30% additional jobs in just two years."

Patrick Eikelmann Managing Director WBE Werkzeug- und Maschinenbau GmbH & Co. KG

Holistic software approach as an order engine

Tim Dornbusch, Head of Key Account Management at SST, explains: "In this cooperation, too, the focus from our side was on providing the company with a holistic solution." In addition, SST not only provided consulting support, but also accompanied WBE during the integration, conducted training sessions and continues to support the company with its support experts as a reliable contact partner.

"The result is impressive. The immense optimization in the product development process can be seen immediately," Dornbusch continues.

WBE is thus an excellent example of how the common prejudice that digitalization leads to job losses is not true. When a strong vision with a clear concept is implemented together with a competent partner, the future is not only secured, but even generates growth.

