## **Customer Interview:** *hyper***MILL® CAD/CAM Automation**



### Baumgarten Vorrichtungsbau

Manufacturing custom clamping fixtures and innovative special solutions for production processes, Baumgarten GmbH helps to make industrial processes more efficient and stable. Since its foundation in 1971, the company has been characterized by tailor-made developments and a clear customer focus. With hydraulic, pneumatic and manual clamping technology as well as a wide range of special solutions, including in the field of automation technology, Baumgarten GmbH offers its customers production advantages and reliable, smooth processes.

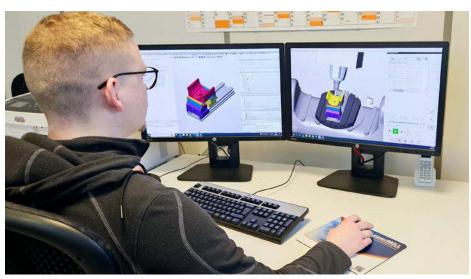
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Interviewee: Eric Baumgarten, Managing Director



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Thanks to hyperMILL® automation, the programming time for a single part reduced from 1.5 hours to around 30 minutes

# What prompted you to rely on *hyper*MILL<sup>®</sup> automation technology since 2024 and how does it make your CAD/CAM and manufacturing processes more efficient?

With the company's high level of digitization, it was only logical to further automate CAM programming. The aim was to minimize time-consuming activities such as manually inserting existing data. Now, this data is automatically merged from various sources, allowing our CAM programmers to focus on strategic and complex tasks. With *hyper*MILL®'s automation technologies, we can make our processes even more economical and stable.

## What challenges did the introduction pose in terms of employees and processes?

Our employees are familiar with the benefits of process optimization and know that automated solutions reduce routine tasks and make the workplace more attractive. The biggest challenge was whether the automation could be implemented exactly according to our ideas. Thanks to the competent and rapid support from the automation experts at OPEN MIND and their excellent understanding of the process, we were able to achieve this successfully.

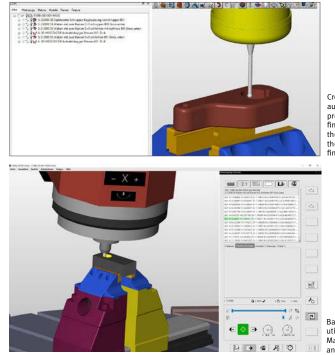
#### How did you integrate CAD/CAM automation into your production?

We leverage automation right from the CAD design stage, where all essential production information is stored. This data is extracted via a CAD interface and enriched with features for automated manufacturing. In addition, data from work preparation, such as the planned machine or the stock dimensions, flows directly through the process. With just a few clicks, the workpiece is prepared for automated CAM programming, and the complete work plan is created.

## Can you give us an example of the benefits of automation?

Let's take the creation of a tapered fit. The user simply selects the taper in the model, and the automation takes over all subsequent steps: from pre-drilling to roughing the taper fit. This also includes finishing with an allowance, measuring the taper and correcting the diameter value through to final finishing. All necessary data and jobs are generated automatically based on the original selection and configured accordingly. This makes the entire process faster, consistently reproducible and significantly more productive.





Creating a tapered fit: hyperMILL® automation handles all the steps from pre-drilling, roughing the tapered fit, finishing with an allowance, measuring the taper (left picture) and correcting the diameter value through to final finishing.

Baumgarten Vorrichtungsbau utilizes *hyper*MILL<sup>®</sup> VIRTUAL Machining for NC code simulation and optimization.

#### In which areas have you increased productivity since the introduction of *hyper*MILL<sup>®</sup> automation?

We are currently focused on developing and refining various automation strategies. This includes automating processes such as planning, roughing, and finishing for deep-hole drilling with different drill stages as part of the automated work plan creation. Initial results show clear efficiency gains: the programming time for a single part has been reduced from 1.5 hours to around 30 minutes. Sometimes, there are even greater efficiencies, depending on the complexity of the workpiece. Our employees no longer have to spend time manually entering a lot of key data, as this data is now automatically compiled by *hyper*MILL<sup>®</sup>.

## How do you manage automation with the *hyper*MILL<sup>®</sup> AUTOMATION Center, and what support does OPEN MIND offer you?

As we already had a clear idea of what the automation should look like, our main task was to implement and program it. With the *hyper*MILL<sup>®</sup> AUTOMATION Center, we were able to implement this quickly and independently. During the first training session, we learned the basics using our parts and were able to see how simple automation solutions can be implemented. As the *hyper*MILL<sup>®</sup> AUTOMATION Center is no code-based, we can program the necessary

adjustments indepentently. This allows us to remain flexible and optimize our processes indepentently. The competent support from the OPEN MIND experts helps us to discover additional functions and implement our ideas in a targeted manner. The decision to implement our automation with the *hyper*MILL<sup>®</sup> AUTOMATION Center was absolutely the right one!

Visit our website to find out more about our automation technologies!



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