

Hurco Programming with VisualMILL

Gröbner Fertigungs-GmbH produces prototypes and standard parts for the motorcycle and semiconductor industry. For the company's owner, Andreas Gröbner and his team, quality, precision and the constant improvement of the production processes are very important.



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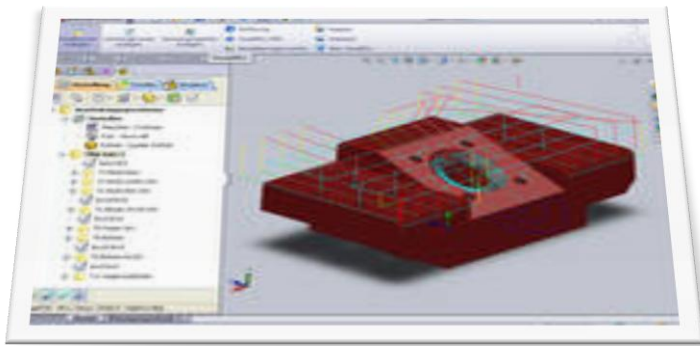


Presently, the company has 10 workers operating on a 450 m² shop floor that includes numerous 3-5 axis CNC milling machines from Hurco and Hermle as well as a Hurco CNC turning machine. The broad range of machine tools and varied configurations (from standalone use to in-line serial production) requires the utmost adaption capabilities from the staff.

In the past, parts were programmed either directly on the machine tool, on external programming workplaces, or by means of a 3D CAD/CAM system. Every part had to be decided in advance if the programming was to be done on the shop floor in the machine-dialog-format or via a CAD/CAM system, with later export in DIN-format. They quickly learned that creating CNC programs on the machine tool offered the most flexibility for program changes and optimized machine tool performance. On the other hand, creating an NC program in the CAD/CAM system not only offered improved time efficiency but also reduced the risk of errors through the direct reference to the part's 3D geometry. CAD/CAM also offered the unique ability to program complex, free-form surfaces with very little effort. One of the drawbacks to using CAD/CAM however was that programming changes and optimizations often required reprocessing back through CAD/CAM and another postprocessor-run-through. This was not the most efficient use of time and typically slowed production. Unfortunately, a combination of both methods: shop floor programming and CAD/CAM programming, was not an option at that time.

The Search for CAM

To solve this problem, the company decided to switch to a new CAM system called VisualMILL-for- SolidWorks. One of the many unique features of this CAM system is that it runs directly inside SolidWorks CAD software. This allows for a very familiar and easy-to-use interface. Another powerful capability of VisualMILL is that it is presently the only CAM system that offers complete programming capabilities for 3D models / DFX files and can post out in the Hurco-Dialog-Format.



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Gröbner Fertigungs - GmbH

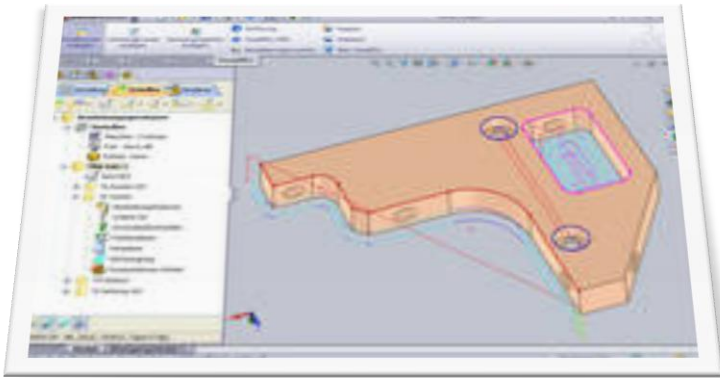


Versatile machining requirements

For Gröbner Fertigungs-GmbH it was important to be able to combine 2,5D-machining (outline-milling, pocketing, drilling) with 3D-machining on an as needed basis. The CAD/CAM systems they had used previously could only do a mediocre job in programming a part. Due to the program's inefficiencies, external programming at the machine tool was required which was tedious and time-consuming. In addition, this required a large amount of training and practice for their new staff members.

Machine Tool Output in Hurco Format

This is where VisualMILL provided another significant advantage. The exported CNC programs from VisualMILL use a native machine tool format - as if they were programmed directly on the machine – so they can easily be edited by the machine tool operator. This has allowed workers to be much more comfortable with the new system and to choose how they want to incorporate it into their daily work. For example, some workers choose to do the roughing work in VisualMILL while preferring to program the finishing work directly at the machine tool. Regardless of their unique needs and comfort level, VisualMILL is a tool that grows with them.



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Gröbner Fertigungs-GmbH references all available milling tools in an electronic library on their network. By referencing the library, there isn't a need to create a new tool profile and programming can be complete quickly and accurately. In addition, since all tool information is posted the CNC program, the machine tool operator knows exactly what tool is needed for each operation.

Value to Our Customers

Through the implementation of VisualMILL, time spent on programming and outfitting the machines was significantly reduced. Gröbner Fertigungs-GmbH is now well prepared for future tasks, especially for producing complex parts geometries.



We would like to offer special thanks to System-Logix for sharing this case study of their customer.

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