



The controller is key

Together with Siemens, Mazak has adapted Sinumerik for some of its series and will continue to supplement its machine tool portfolio. After all, control systems and machine tools are a perfect match — as contract manufacturer Pausewang from Gingen an der Fils in Germany agrees.

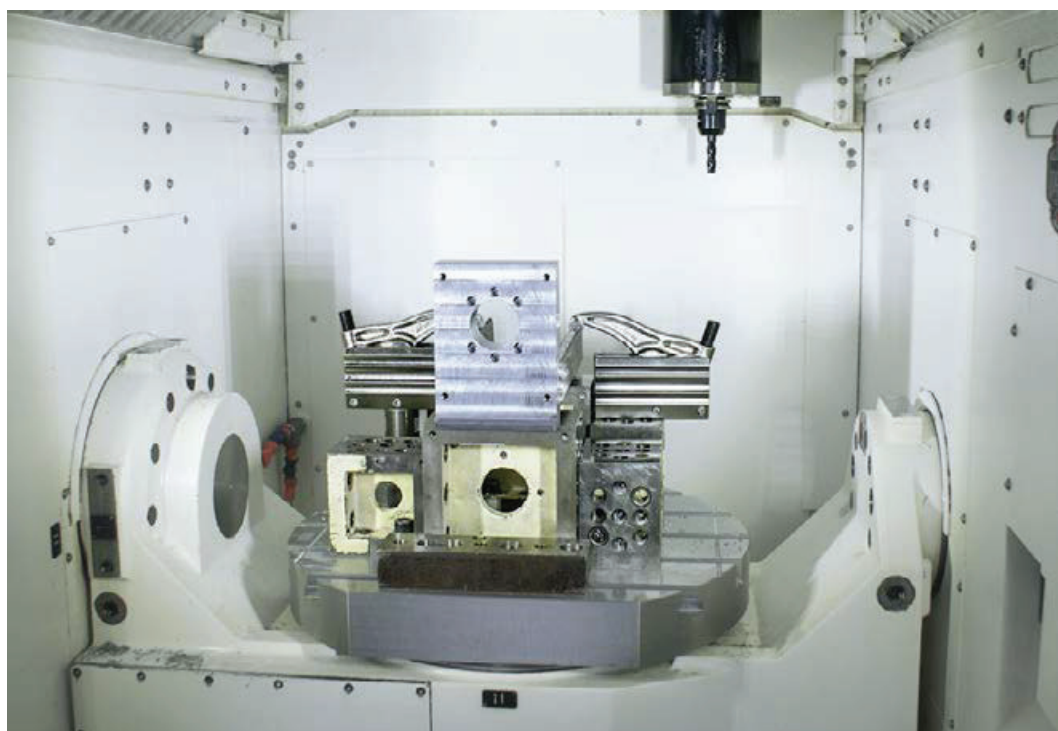
Holger Pausewang's path to self-employment was something of a gradual development. The qualified industrial mechanic gained initial experience with a medium-sized Swabian machine manufacturer, where he became a master craftsman and, as a deputy manager, was jointly responsible for tool and roller rack production. Pausewang then steadily worked his way toward his independence. His initial sideline job went well: he bought a used cold rolling machine, overhauled it in a garage (back then he did not have a workshop), and began to generate orders.

Growing the customer base

When Holger Pausewang finally found a workshop for rent, he bought a used Deckel FP4 milling machine with a Siemens 3M control system. Since then, Siemens control systems have been his first choice. As such, it was only logical that his first new acquisition, a Spinner milling

machine, also had Sinumerik CNC with ShopMill programming. He gradually gained more and more customers in the Göppingen area of Germany and, in 2012, took on his first permanent employee. The small company started specializing in prototype production, mold and fixture construction, test stands and contract manufacturing of machine components.

It soon became apparent that the increasing workload meant it was necessary to invest in a machining center. Pausewang analyzed machine concepts from various manufacturers, before opting for a Mazak VTC 800/30R. "Mazak is a big name in machine tools, primarily because of the stiffness of the cast bed and the associated high degree of machining accuracy," says Holger Pausewang. "That impressed me, and that was precisely the sort of machine I really wanted."



The Mazak Variaxis is a very flexible machining center that can precisely machine a wide variety of workpieces

Mazak



Holger Pausewang is delighted: investing in Mazak machines with Siemens control systems is securing the future of his company

»We sat down with the Mazak sales representative and quickly found a suitable machine.«

Holger Pausewang, Pausewang Metall- und Zerspanungstechnik

Tapping into new target groups

Pausewang initially made contact with Mazak in 2013 at the EMO trade fair. Although the VTC 800/SDR exhibited there was equipped with a bridge rather than a rotary table, Pausewang was convinced that the VTC 800 was the right addition to his production line. Another plus point was that although it had previously only been available with Mazak's proprietary control system, at that year's EMO, the VTC 800 was introduced as one of the first Mazak machines with a Siemens control system. Mazak was hoping this would win over new target groups. Traditionally, a lot of companies in Germany and central Europe have equipped their production lines completely with Siemens control systems. In addition, many vocational schools and training companies teach their trainees the basics of programming on machines with Siemens control systems.

With its flexible operating concept, Sinumerik can be adapted to the operating philosophy of modern machine concepts. Thanks to the open system in terms of the various areas of application — from milling and turning, to grinding and lasering, to additive manufacturing — the CNC can be optimally adapted to the technology of a machine. What's more, it offers a high degree of freedom in production automation. These are all advantages that the manufacturer was able to use to adapt the control system to its own machines.

Alan Mucklow, Group Product Manager for Europe at Yamazaki Mazak, adds: "We know that users who have been using Siemens control systems for a long time want to continue doing so and want to use a single programming solution in their factory. By offering Sinumerik CNC for our machines, we are enabling these customers to take advantage of the technology and quality of Mazak with all its benefits at the same time."

Accuracy attracts customers

For Holger Pausewang, the cooperation between Mazak and Siemens was a stroke of luck. In 2014, he installed his first Mazak VTC 800/SR machining center with the

Sinumerik 840D sl control system in the new workshop. At the same time, the second permanent employee joined the team, which largely consists of skilled toolmakers and industrial mechanics. "Finding a CNC miller is not an easy task. I've had good experience with training technically qualified people in CNC milling," reports Pausewang.

Thanks to its accuracy, the new machine attracted additional customers: "We almost only carry out single-item production and small batch sizes of up to five units, so retooling takes up a large part of the machining time. That was fine to begin with, but as we started taking more and more orders, we realized that we would not be able to manage with just one machine in the long term. So we sat down with the Mazak sales representative who had already provided excellent advice when purchasing the first machine, and quickly found a suitable machine."

As of early 2017, a second Mazak with Siemens control system has been in use at Pausewang — the Variaxis i-600 5-axis machining center. The machine is ideal for machining cubic parts up to 350 x 350 mm. "Mazak machines are up to any machining task," says Holger Pausewang. "We machine a very wide range of workpieces and also work with diverse materials."

Pausewang already has concrete plans for the future: "We want to further integrate the turning department in the future. A horizontal milling-turning center from the Integrex series would allow for turning and milling in one clamping. My dream machine, the Integrex 1250, would allow us to get into large-part machining. That is a market with much less competition. Our customers benefit from the enormous flexibility we are able to offer them as a smaller company. Of course, this machine will also be equipped with a Sinumerik CNC." ■

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