

A NEW LEVEL OF MANUFACTURING QUALITY

A year ago, the steel and metal construction specialist Mbm-Batzel expanded its portfolio to include mechanical processing. For the entry into milling and drilling, a machine was sought that could quickly and precisely process a wide range of batch sizes. The decision was made in favor of the BX60i machining portal from HURCO.



“I can say in the meantime: it has contributed to our crisis resilience. We have reached a new level of production quality with the machine,” reports Eugen Batzel. Together with his brother Eduard and father Alexander, he manages the family-owned company Mbm-Batzel in Hohenahr in central Hesse. The company manufactures components – mainly from steel and stainless steel – for a wide range of industries, including the automotive and lighting industries as well as mechanical engineering, plant construction and shipbuilding. Eugen Batzel: “Even though we are not active

in mold making: Exact fits and a high surface quality are indispensable for us. This manufacturing quality combined with the fast and uncomplicated WinMax control of the BX60i is simply worth its weight in gold for us.”

Attractive machine hourly rate

Founded twelve years ago, Mbm-Batzel initially focused on steel and metal construction for mainly private customers. In 2015, the “sheet metal world” was added, as Eugen Batzel tells us. Today, sheet metal processing is still one of the company’s main areas of expertise. Metal sheets of all kinds are brought into the right format by modern laser cutting systems and then further processed by forming into the desired industrial component. “But we also wanted to offer our customers sophisticated mechanical processing of the workpieces,” explains the trained construction technician.



After thorough research and several visits to trade shows, the management decided on the 3-axis portal

machining center BX60i from Hurco. The machines of the BX series work extraordinarily precise and fast and have a very good thermal stability thanks to a highly developed measuring and control sensor technology, but especially due to their design. Eugen Batzel: "The BX60i is ideal for our production line due to its medium size and outstanding performance. With it, I can produce very small components in series production and equally large, complex individual parts, i.e. workpieces between 10x10x1 (mm) and 1500x1200x600 (mm), at an attractive machine hour rate and in the required quality."

He rates the new solution as an economical one overall: Several copies of a component can be machined in one setup. Thanks to the easy-to-program control system, optimal tool use can be realized directly at the machine. This saves a lot of time when setting up the machine and especially when running the program. "With the Trochoidal Milling feature, I reduce the machining time per component by up to an additional 50 percent on average," he reports.

Through the crisis without downtime

Despite Covid-19, Mbm-Batzel is working at least 1 shift. Under normal conditions – without the pandemic-related rules for companies – the plant could run 16 hours a day, says Eugen Batzel. He owes his good order situation in no small part to orders he receives via bid portals. He adds. "But anyone who inquires online there expects a contract manufacturer with state-of-the-art machinery. Fast processing of digital part data, for example via solid model import, is a prerequisite. Anyone who can't do that doesn't even have to bid there."

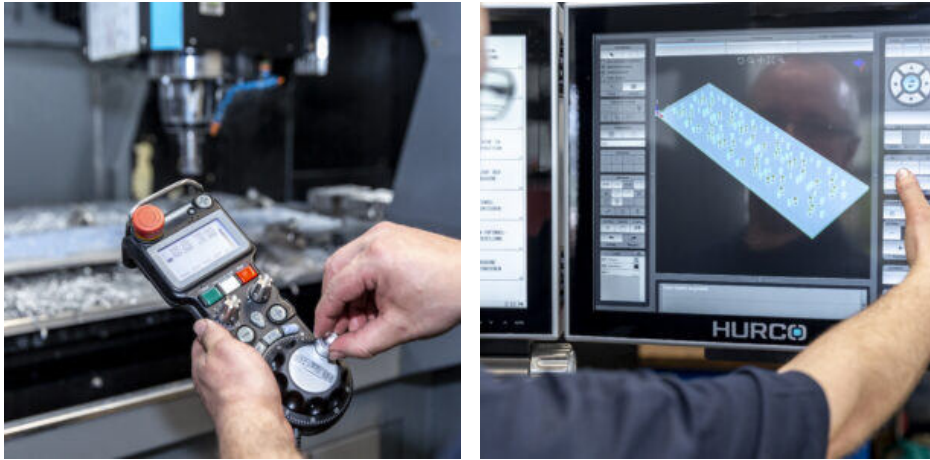


The company wants to position itself with particularly fast order processing and therefore invests exclusively in state-of-the-art technology. No machine in the recently rebuilt hall is more than one and a half years old. All equipment is networked and customers have access to a digital interface. Larger industrial customers in particular take advantage of the offer and supply the specifications for their orders directly via data transfer. The digital exchange as well as a variety of programming aids used ensure that production orders can be carried out efficiently. "The majority of components require combined 2D and 3D machining with several systems. Our entire machine park is used for this," explains Eugen Batzel, adding, "Producing a contour and efficiently integrating mechanical machining is one of our strengths. For each workpiece, the workflow is determined individually."

Flexibility in order processing

For programming 2D machining, Mbm-Batzel swears by the user-friendliness of the WinMax control. There is

nothing better for him, says Eugen Batzel. If DXF files are available, they are imported directly into the production network and then called up by the machines as required. In 3D contour and mold machining, the paver prefers to work with CAD/CAM programs. "We are also very happy to use HURCO's Solid Model Import option," says Eugen Batzel.



Solid Model Import allows 3D models that are available as STEP files to be imported directly from HURCO machines. Eugen Batzel: "With the BX60i, we have become much more flexible in order processing. Since its acquisition, the machine has not yet had a standstill. I can say: It has made us a little more crisis-proof."

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