

The 5th Generation Is Banking on 4.0

The great-great-grandfather worked on the extension of the rectory in Langerwehe as a carpenter and joiner. The 5th generation in the family business Möbel Herten is doing pioneering work in the digitalisation of work processes in joinery.

A current example: the installation of a new Striebig CONTROL, equipped with the ExpertCut CON option – and its integration into the data flow, from job preparation to the HOMAG 5 axis Venture 316 CNC. “Square eggs are our speciality”, says Felix Herten, a trained product designer in charge of the carpentry workshop. By this he means above all the high proportion of individualisation and adaptation work for kitchens. He manages the company together with his cousin Thomas Herten, who is in charge of kitchen and furniture sales. “We do a good 25% of all our joinery work for kitchens. Even if they are industrially manufactured, individual optimisations are necessary in almost 90% of cases”, Herten explains this key part of the service portfolio. Further focal points: interiors, furniture construction and renovations. The customers are primarily private households, some of whom have been loyal to the joinery for decades.

Panel cutting is key to all joinery work. At Möbel Herten, there was a problem that needed fixing. The existing panel saw was 30 years old and out of date. The initial idea of investing in a horizontal cut-to-size line was quickly abandoned. “Möbel Herten is growing. Again and again, the building was extended and rebuilt, and space is scarce”, explains Bastian Hörnchen. The technical sales consultant of the Düsseldorf specialist dealer Maschinen Kaul knows the company. Together with the Herten employees, the requirements in terms of economic panel cutting were analyzed. Due to the space available, only a vertical saw could be used.

A complete solution for continuous data flow between cutting, CNC and edge machining technologies was needed. “Of our 27 employees, 15 are trained carpenters. Everyone is responsible for the job preparation of their own projects”, says Felix Herten with regard to planning of workflows. The data from the job preparation should be sent directly to the saw, and from there be transferred to the CNC without any issues. And the solution that meets all the requirements? The new Striebig CONTROL, equipped with ExpertCut CON.

There were no issues adapting the OSD software package used at Herten for the Striebig cutting optimisation software and the transfer of the data from the saw to the CNC via a barcode scanner. “The quartet made up of software partners, trade partners, the Lucerne sawing experts and us worked together perfectly. Everything works as intended”. Felix Herten is satisfied. Although the training phase is still in progress, it can already be said that the saw and software are very practical and easy to operate. “Striebig has created a software solution for working joiners, not for IT guys”, adds Bastian Hörnchen.

The ExpertCut CON option (see illustration) ensures that the cutting process on the CONTROL is almost completely automatic. Joiners Georg Bartz and Pascal Klehr sometimes work up to 7 hours a day with their Striebig when cutting panels. They prepare the data records required for cutting with the OSD software as part of job preparation, then optimise them with the Striebig cutting optimisation software. The plans are transferred directly to the saw via the LAN connection. The operator guidance on the 12" touch screen of the saw makes working much easier. "Just do what the saw indicates. Everything is very easy to operate", says Pascal Klehr. Using the START button, the operator positions the saw unit and the length stop (EPS.x). The saw automatically moves to the chosen section. With the cut completion the label printer prints the appropriate label - Georg Bartz is a fan of this feature. "Previously, we always had to keep an eye on the cutting and material list, search for individual parts and mark them by hand. That's over now. There really can no longer be any confusion", he explains. The transfer of the cut panel to the CNC is also carried out without any problems. Read the label with the barcode scanner, enter the data into the CNC, done.

The overall solution impressed Herten management. But he doesn't want to wait another 30 years for the next saw replacement. "The constructive interaction between ourselves, Maschinen-Kaul and Striebig was just excellent. We are the first joinery in the area to use such a modern vertical saw". In his opinion, modern technology – especially of the 4.0 variety – is also an advantage for attracting new trainees. Like many of his colleagues, he'd like to hire more of them.

But his current staff have still managed to find one small fly in the ointment. The management chose not to take the 4SB automatic lower trimming option. Klehr and Bartz conclude in explaining that this would have made the work more ergonomic and back-friendly. Kaul's expert advisor was keen to find a solution, so that working at the machine continues to be the pleasure that it is, and not a potential cause of aches and pains.



Fig. 1: CONTROL processes the cutting plan almost automatically. Pascal Klehr only removes the cut panel parts.



Fig. 2: Clear cut plan display on the 12" touch screen.



Fig. 3: Bastian Hörnchen (left) and Felix Herten using CONTROL. Maschinen-Kaul und Möbel Herten have been trustworthy partners for decades.



Fig. 4: Hand-in-hand and software-controlled. Pascal Kehr saws, Georg Bartz scans the data for the CNC. Living and breathing 4.0 in the joinery trade.



Fig. 5: Searching is a thing of the past. Sawing cut for cut, the right label comes directly from the printer.



Fig. 6: One for almost everything: CONTROL with the ExpertCut CON option. 12" operating terminal, EPS.x electronic positioning system, ASP automatic saw beam positioning, label printer mounted directly under the operating terminal, LAN connection and cutting optimisation software ensure comfort and economy when cutting panels.