

Master of Speed

How to produce complete orders within 48 hours

Günther Schweiger helps carpenters and joiners with unloved jobs - cutting, rebating, drilling, glueing edges. His promise: Within 48 hours you will have the finished parts in your company. Around 18,000 specialist companies in Germany, Austria and Switzerland now use the services of Speedmaster. To manage this and even withstand expert inspection, Speedmaster needs some unusual equipment and tools.

T & F Robert Kittel



Up to 30,000 running meters can be cut with the Leitz diamond splitting cutters used by Speedmaster.

or almost 20 years now, Speedmaster has been offering its services, says Managing Director Günther Schweiger: "Our customers are carpenters, we deliver and produce within 48 hours ex works. We manufacture as if the customer himself is producing, so he doesn't have to change his mind." In the two plants in Austria and Germany, every effort is made to meet high standards of craftsmanship and quality: "After all, our customers are specialists," Schweiger emphasizes.

The four Homag nesting lines and the panel saws are fed from the two-storey high, approximately 160 m long panel storage of the Austrian plant, parts are processed and forwarded to edge banding machines arranged in lines. All around are still grouped single devices for special productions. Different panel materials are processed, coated, veneered or painted. Given the large number of materials, a consistently high processing quality is important, which is why a calibration cycle is inserted approximately every ten orders, explains the head of maintenance, Bernhard Holzer:

"For the clamping we use waste plates, our exhausted vacuum pumps have enough power to suck workpieces through this plate, which allows a very flexible nesting of parts. During the maintenance cycle, the plates are trimmed and the dimensional accuracy of the machining is checked on the basis of test pieces".

30 kilometers with one cutting edge

The tool changers of the nesting lines are accordingly clearly arranged, smiles Werner Schalk, technical consultant at Leitz: "Cutoff milling with 12 mm diamond nesting cutters in lengths of 25 mm and 12 mm, drills and a jointing cutter for the clamping plates - that's it. The tools at Speedmaster are all mounted in shrink chucks. Special tools for splitting are used in all systems. The tool bodies consist of solid carbide, equipped with diamond cutting edges." "The carbide tool bodies have advantages, he explains: "On the one hand, less wear due to friction, but also a reduction in vibrations. Together with the shrink chuck, we achieve a very high level of machining accuracy. Holzer adds dryly that Speedmaster places a lot of emphasis on this: "But there is also something else that needs to be done and the tools should last as long as possible with consistent quality. We run a feed rate of 24 m at 24,000 rpm and the average power per cutting edge is currently around 30,000 running metres. The tool can also be sharpened four times," Holzer is satisfied.

Edging of 8 mm panels

It is clear that Speedmaster consistently relies on zero-joint laser edges to meet this quality standard, comments Holzer on the edge banding lines. "The most important thing is that we join an absolutely fine edge, so that the transition between plate and edge is perfect." To do this, Leitz and Speedmaster have developed a special jointing cutter. "So that we have a perfect jointing quality for different panel qualities, but also for different panel thicknesses."The aim was "to edge 8 mm boards as well, which of course was very difficult at the beginning. Then a jointing tool was created which has several steps and is adjusted to the correct height by a lifting spindle by program". Leitz consultant Schalk explains how this works: "With our Leitz Edge Expert cutter, we covered several thicknesses with the cutting edge arrangement one zone for 8 mm, one for 25 mm and two for 19 mm, each with a cut on both sides". Holzer points out the wide range of materials processed at Speedmaster: "You have normal, coated plates, you have veneered and also lacquered surfaces. It was particularly important for us to be able to use the jointing cutter within the cutting zones so that we always had a new cutting edge when cutting delicate materials". Leitz made this possible in cooperation with machine manufacturer Homag, Holzer emphasizes. "We're the only ones currently offering these possibilities - 8 mm edge and cutting recess."

The four nesting lines, each with two machining tables, are continuously fed from a panel storage system located behind them.





"Leitz is great"

"We are very satisfied with the tools. We have a continuous development, Leitz helps us enormously with productivity", praises managing director Schweiger and smiles: "Leitz is great."

The $\ensuremath{\mathsf{nesting}}$ lines transfer to the edgebanding lines visible in the background

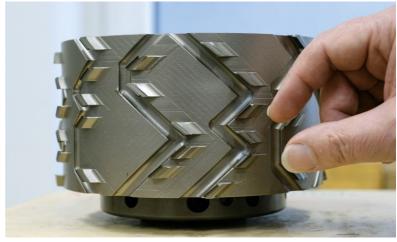


Quiet production - according to Bernhard Holzer, there is no noisy workplace in the entire hall, so hearing protection is not necessary





For the edgebanding lines, Leitz has exclusively developed a jointing cutter for laser edges, which even allows the processing of 8 mm panels



Werner Schalk and Bernhard Holzer (from left) work together very well in the development of the tools

