www.dds-online.de

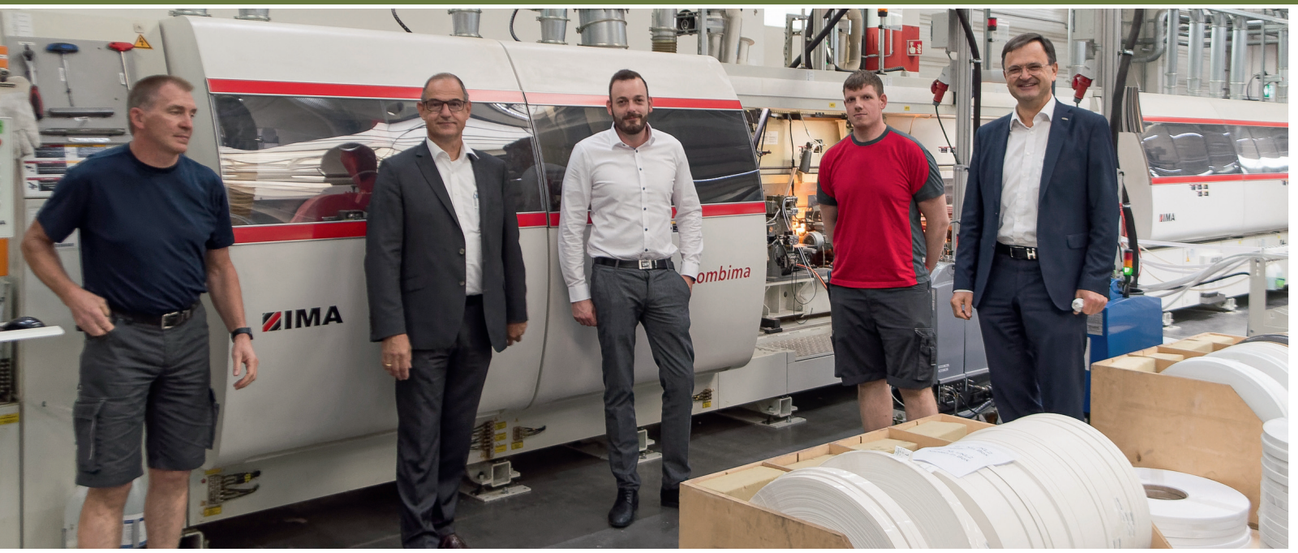
11 | 2020

dds

DAS MAGAZIN FÜR MÖBEL UND AUSBAU

FOCUS ON THE EDGES

SCHUELLER FURNITURE PRODUCTION USES LEITZ JOINTING CUTTER



dds-Fotos: Georg Molinski, Konradin Medien GmbH

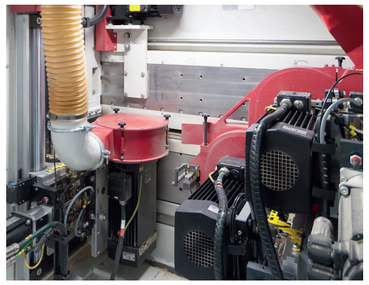
Focus on the edges

A zero joint can only be achieved if the jointing cutter cleanly cuts the peripheral sections of the edge. However, that is exactly where such a tool first becomes dull. Nevertheless, the cutting edges cannot be repositioned. The Schueller Company did not want to accept this.

ANDREAS KUTSCHERIAWI keeps an eye on the edge at the front panels in the production line at Schüller kitchen furniture manufacturer. The line runs in three shifts and processes edges with PUR at a feed rate of 28 m/min. On the first few centimeters slight irregularities can be seen. The hard coatings have dulled the cutting edges in the edge area. The task now is to bring unused sections of the PCD cutting edges into these areas.

This is caused by the first jointing cutter, which cuts the first 5 cm to final size. In order to protect the front workpiece corner, it runs in the opposite direction. This is followed by top and bottom hoggers, which remove the bulk of the material with feed, and finally, for the finish shape, a jointing cutter runs with feed for 16 and 19 mm front panels.

Andreas Kutscheriawi empties the system, stops it and removes the dusthood of the first jointing cutter. At the top of the tool three screws are now accessible, which can be operated with an Allen key. The two inner ones loosen and clamp the hydro sleeve of the vertically split, dust-protected tool, the third allows both halves to move together 1 mm per rotation. The zero line remains at the level of the tool centre making spindle adjustment unnecessary. The machine operator loosens the clamping screws, turns the third screw one turn to the left, tightens the clamping screws again and retightens the dusthood.



On the left the first jointing cutter in counter-rotation, followed by the top and bottom hogger ...

... the second and third jointing cutter in „with feed“ direction for 16 or 19 mm front panels

To reposition the cutting edges, the dusthood must be released

In front of the front panel production line you can see from right to left: Max Heller (Managing Director of Production and Technology), Andreas Kutscheriawi (machine operator), Jan Schleier (furniture sector Manager at Leitz), Andreas Kisselbach (R&D Manager at Leitz) and Klaus Buettner (purchasing resources)

In the centre of the tool there is a hydro clamping sleeve. One screw operates outwards on the tool, the other inwards on the spindle

The jointing cutter can be loosened and clamped with two screws. The third screw reduces the width of the tool. The zero line remains at the height of the tool centre

The tool can be readjusted a total of six times for a total of seven partial tool life cycles before it is resharpened by the Leitz Service. The system is running again. Sharp cutting parts now machine the marginal areas of the edge and ensure excellent quality.

Schueller manufactures its front panels itself

Schueller employs 1908 people, manufactures over 140 000 kitchens annually, produces its own front panels and has therefore developed a special sensitivity for edge quality. At the front panel, as the kitchen‘s flagship, customers would immediately perceive conspicuous joints between the surface and the ed-

PROFILE

User: Schüller Möbelwerk KG
91567 Herrieden, Germany
www.schueller.de

Tools: Leitz GmbH & Co. KG
73447 Oberkochen, Germany
www.leitz.org

The jointing cutter is exposed and can be easily adjusted from above with the Allen key

Hoggers remove the bulk of the material and relieve the jointing cutters

Schueller has equipped all machine lines with the width-adjustable jointing cutter including the service in manufacturer quality

ging strip as unpleasant. When the subject of zero joints arose almost ten years ago, Schueller equipped all machines with jointing cutters. This resulted in frequent and time-consuming tool changes. The alignment of the spindle itself took half an hour. The quality of the zero joint is determined by the jointing cutters. Their tool life is decisive for the productivity of the system. With conventional jointing cutters, it was not possible to achieve the required quality in line with expectations of efficiency. Therefore Leitz has developed the width-adjustable jointing cutter. This allows multiple tool life without having to change the tool and adjust the machine spindles to match each other again.

In the meantime Schueller has not only equipped all machines with the new jointing cutters but also with a service package around them. The Leitz Service sharpens and cleans the tools and also services the hydro sleeve. Like new, a cutter returns on time to its workplace. It is re-measured and immediately ready for use without the need for complex adjustment work. With serial number and RFID chip it is prepared for automatic data transfer.

> »The width-adjustable jointing cutter helps us to achieve excellent zero joints, without constant tool changes. From time to time we briefly adjust the tool and have it sharpened by the Leitz service after a tool life of around 90 000 m and overhaul.«
>
> Max Heller,
> Managing Director of
> Production and Technology

»Quality and efficiency in balance«

Max Heller, Managing Director of Production and Technology, says: „The cutting result of the Leitz jointing cutter is excellent over the entire tool life. It has increased from 10 000 to 90 000 m. The set-up times and thus the downtimes have decreased significantly. Quality and efficiency are once again in balance. Our employees are also satisfied.«

dds editor **Georg Molinski** visited Schueller Küchen. Max Heller, the Managing Director of Production and Technology, showed him a company with satisfied employees, smooth processes and outstanding product quality.