

## YOUR SOLUTION for wood processing at the LIGNA 2017.

Hall 14

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## YOUR SOLUTION over 5,000 sq.m.

HOMAG provides support for woodworking companies of every scale on their way into the future. The woodworking machinery specialist will be showing just how it's done at the LIGNA: With machines and technologies which grow with your business and which allow **joiners, cabinetmakers and industrial furniture producers** to address individual customer needs, deal with challenging products and process a wide range of materials.

HOMAG will be showcasing **50 machines in every performance category which are ready for Industry 4.0** – using smart technologies and processes which communicate with each other and with end-to-end software from the online shop through complete production lines to packaging.

Users who produce furniture, structural elements or flooring will find the solutions they are looking for in **Hall 14**. Carpentry firms will find the timber construction solutions they are looking for in **Hall 13**.

**Visitors can find out in Hanover the difference HOMAG can make to their business.**

**Take the “HOMAG trade fair tour” ...  
... described over the following pages!**



## FURNITURE PRODUCTION FROM SMALL TO LARGE.

With cohesive concepts from the compact entry-level workshop for small joinery businesses through to networked industrial entry-level workshops, companies working in the furniture and structural element production sector will find what they are looking for.

### Batch size 1 plant: Completely networked.

A batch size 1 plant will be **live in action** at the LIGNA demonstrating impressive data continuity and technical solutions for individual component production. The components of the high-tech plant for furniture production are completely networked.

### Wide range of highlights in the stand-alone machines.

- **Horizontal storage system TLF 411.** The storage system and suction traverse ST 71 demonstrate new scope for transporting wide-ranging materials.
- **Cutting cell HPS 320 flexTec.** This robot cell has been extended to include various stacking facilities.
- **Edge processing with Profi KAL 610.** The tandem plant comes with an unprecedented circulation system.
- **Order picking center TLB 321.** The TLB buffers, sorts and picks the material flow over the entire process chain.
- **Drilling & hardware fitting technology with the ABF 600.** The CNC-controlled machine processes sensitive fronts gently and efficiently.
- **Electrical throughfeed case clamp MDE 120.** This technology clamps sensitive, ultra high-quality or mitered carcasses.
- **Cardboard cutting machine VKS 250.** Here, precisely the right packaging is produced just-in-time – at minimal piece costs.

NEW!

NEW!

NEW!

- **Machine operation: powerTouch.** All machines feature standardized operating elements and software modules, ensuring a familiar look and feel which is: Simple, standardized, ergonomic.



**Fig. 1:** A wide range of aids and wizard functions makes for significantly simpler machine operation

- **Cell control: woodFlex.** The control system takes charge of networking all the machines of the batch size 1 plant. It is open for future requirements, creates security, optimizes sequences and enhances efficiency. With woodFlex, the user is making another decisive step towards “Industry 4.0”.



**Fig. 2:** woodFlex: Control and visualization of flexible production cells and their part flow

## Workshop concepts for woodworking shops.

In Hall 14, woodworking shop visitors will find smart concepts for entry level businesses through to industrial-scale networked workshops. Together, the machines form smart solutions, while the stand-alone machines also feature innovative technical highlights.

### Small entry-level workshop over 80 sq.m.

Here, visitors will find the solution for entry into the world of zero joint technology – both with the airTec unit and with PU gluing technology for rapid glue and color changeover. Miter cuts can be carried out directly at the saw on the small panel dividing saw. The workshop is supplemented by a case clamp and a CNC machine for vertical drilling.

NEW!

### Workshop for the industrial entry level.

Here, a sawing-storage-nesting cell is fully networked with a drilling and dowel driving machine with end-to-end data flow. Both the panel dividing saw and the nesting machine feature technical highlights – such as a new operator wizard system on the saw or the nesting process with “Register mark detection”.

NEW!



**Fig. 3:** HOMAG is placing a particular focus on woodworking shops once again in 2017. Here: A completely networked sawing-storage-nesting cell

## New individual solutions for woodworking shops.

NEW!

The diversity of panel and edging types is constantly on the increase – as is **demand for individual and unusual furniture**. To meet this demand, today's joiners and cabinetmakers need maximum machine flexibility. For this, HOMAG **adapts solutions from industry for woodworking shops** and has further developed existing woodworking shop technologies.

An excerpt from the highlights:

- To address **growing demands made on edging quality**, Ambition 1120 FC is the ideal entry-level solution. A jointing-trimming unit and a profile trimming tool for corner rounding permit complete workpiece processing.
- The airTec method for **the manufacture of optical zero joints** can already be used from the Ambition 1200 series upwards.
- The **profile trimming tool becomes a multiple-stage unit**: A new tool permits simple **changeover between two profiles** or radii.
- **PU processing from the entry-level machines upwards**: To allow the manufacture of furniture with maximum resistance to water and heat, many companies rely on the processing of PU adhesive. A standardized, top-mounted glue application system for entry-level edge banders will be available from the LIGNA onwards.



**Fig. 4:** The Ambition 1120 FC enables complete workpiece processing

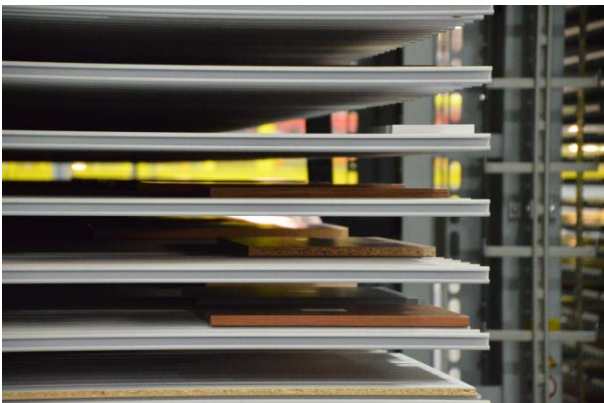
## YOUR SOLUTION along the entire process chain.

### Storage and automation technology.

#### Order picking center TLB 321.

Even the traversing carriage of the TLB with its **array of variants** for workpiece arrangement sets a whole new standard among order picking devices. It offers extreme application versatility. The TLB 321 buffers, sorts and picks the material flow over the customer's entire process chain.

NEW!



**Fig. 5:** The TLB enhances high-bay management efficiency

#### Robot insertion station VRE 200.

Fully automatic insertion of workpieces in cardboard boxes – not a problem with this pitless robot insertion station, because practically everything can be automated. The robot delivers availability levels of almost 100% and almost identical repeat accuracy.

NEW!

#### Storage control system wood Store 7.

woodStore is the **brain of every HOMAG storage system**. The latest version 7 of the control system offers improvements particularly in terms of user convenience, safety and process optimization.

NEW!

## Panel dividing technology.

### Man-machine interaction redefined.

NEW!

To date, it has always been the saw that dictated the production sequence. HOMAG has now reversed this relationship – from now on panel dividing solutions will obey the operator.

- **CADmatic 5 – the machine control generation**

The control software takes the machine operator through all the input and processing steps using a graphic wizard.

- **NEW: Wizard system IntelliGuide**

In its basic version, the modular solution already existed under the name “Operator wizard system LED” (Now IntelliGuide basic). Two additional upgrade stages have now made the system even smarter – these include a camera system whose pictures are evaluated in real time, and a laser projection system which projects handling instructions directly onto the part being processed.



**Fig. 6:** Man-machine interaction: The saw responds to actions by the operator

### New: HPS 320 flexTec now with fully automatic part stacking.

NEW!

The cutting cell is now available both as a stand-alone solution and as a high-end networked system. The robot cell can be optionally supplied with an automatic outfeed, with lifting table constellations for automatic stacking or with a combination of roller conveyor and lift tables.



## New for the timber construction industry: HPP 300 multiTec with COBUS NCAD interface.

NEW!

For the saw capable of sawing, drilling and trimming in the same pass, the next stage is now unveiled: The smart software link over an interface to COBUS NCAD (on show in Hall 13).

## Surface technology.

### Flexible lamination concepts from small to big.

Demand for PUR laminating adhesive is growing in the marketplace – reason enough for HOMAG to extend its product range of laminating machines from the FKF 200 & 250 series (high-gloss and laminate coating). The focus is on individual solutions for coating furniture parts – inclusive of a dedicated control system and custom-tailored automation offering.

### Sanding machines operated by a simple finger touch control.

Since last year, HOMAG customers have been able to operate sanding machines of the SWT 300 series with the utmost convenience. Now, the user interface has been integrated into the machine standard. In the same way as using an app on a smartphone or tablet, **users can operate the machine simply using swiping and drag & drop functionality.**

## Edge technology.

### Zero joint and PU in all performance categories.

- **Tandem plant for edge banding with PU in batch size 1**

The new concept for flexible production of kitchen elements comprises two K 610 edge banders. All edges are glued using PU. An **offsetting station with**

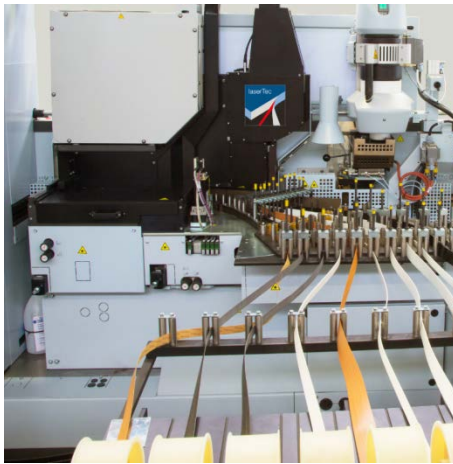
NEW!

**unprecedented workpiece circulation** substantially reduces the space required.

- **Highly flexible edge cell with new “laserTec<sup>1</sup> – Next Generation”**

HOMAG has now used the experience gathered from several hundred supplied laserTec systems and taken the technique a step further. The result: the “laserTec – Next Generation”, which will be series produced from the LIGNA onwards.

NEW!



**Fig. 8:** The update of the laserTec unit is available in two performance categories

- **For entry-level machines: Gluing techniques**

Anyone wishing to produce an optical zero joint will find the optimum solution with the airTec method. But glue application using a glue application roller is also possible as standard. To achieve resistance to water and heat, from the LIGNA onwards a standardized top-mounted glue application system will be available for processing PU adhesive. The application unit enables the processing of all types of adhesive (including PU).

**Corner processing de luxe.**

The profile trimming tool becomes a multiple-stage unit: The new feature is extended functionality for corner processing workpieces. From the LIGNA onwards, the profile trimming unit will become a multiple-stage unit. It is now possible to simply change between 2 profiles.

NEW!

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<sup>1</sup> For patent-related reasons this may only be used in Germany with Rehau edges.

## Innovative machine operation feature.

At the LIGNA, a **new wireless hand-held operator terminal** will be in use. Trailing cables will no longer present a trip hazard.

NEW!

## CNC technology.

### New series BMG 310.

Freely accessible from 3 sides and space for 32 tools. The new range offers a broad spectrum of applications. In the **new control system PC87** the machine bed, consoles, clamping elements and workpieces including all processing operations are depicted as freely rotatable 3D models.

NEW!



**Fig. 9:** The machines of the series offer outstanding potential to become the hinge pin of your production

## New nesting process.

How to cut customized front designs so that the panels match perfectly later on? HOMAG will be showing the solution at the LIGNA with the new nesting method. This entails precision cutting of **individually designed fronts** so that the panels later create a perfect overall appearance.

NEW!

## Solid wood processing: New solutions.

In the HOMAG structural element area, alongside the proven powerProfiler the

NEW!

company will be showing a new top-quality solution to complete the window processing process chain.

## Software and servicing.

### New HOMAG software platform.

End-to-end solutions from the point of sale to production: HOMAG has completely revised its software portfolio. On show for the first time at the LIGNA, HOMAG will be demonstrating how to configure individual solutions for woodworking shops and industrial producers from a modular suite – “One Platform for Integrated Solutions”.

NEW!



**Fig. 10:** The focus of the new software platform is on end-to-end solutions from sales through to furniture completion

### Smart solutions.

Digitalized production has long since made its entry into the industry. HOMAG is continuously developing new digitalization solutions – always with the aim of making production even more efficient for furniture manufacturers. To do this, HOMAG offers a range of smart solutions for the factory, for product configuration and for servicing.

NEW!

- **Smart Factories:** “Smart products” allow end customers to configure their kitchens individually, for instance. Just a few days later, their kitchen can be delivered ready to install. This is achieved using software at whose core is **an MES for production control** (see text on digitalization).
- **Smart Products:** Smart machines **support the operator** performing daily tasks. With additional **production optimization**, operating times can be organized more flexibly and efficiently.
- **Smart Services:** Smart services enhance plant availability. Machines are serviced using **Predictive Maintenance**. If an error occurs, remotely located servicing experts can offer support.

## TECHNOLOGY OF TOMORROW.

NEW!

At the heart of its trade fair booth, HOMAG will be setting aside a more significant area than ever before to innovations of the future. Inside the InnovationCenter, visitors can discover **new patent-registered technologies** and **smart Industry 4.0 applications** to provide inspiration for the future of furniture component production. Here, visitors can take a look at technologies which are set to influence trends in the furniture industry in the years to come. Marking the end of the tour is a visual surprise – a **180° degree cinema** to provide an unusual glimpse at the furniture production of tomorrow.



Fig. 11: Central element in Hall 14: The HOMAG InnovationCenter

### **Pictures**

Pictures courtesy of: HOMAG Group AG

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