

# inspiration

May 2019

**HOMAG**

**YOUR SOLUTION**

## LIGNA

**2019**

**Hanover, Halls 13 & 14**

**May 27–31, 2019**

Our focus: Your solution



HOMAG AT LIGNA 2019

# The highlights

What you can expect from HOMAG in Hanover from May 27–31.

2

HALLS

50

MACHINES

5000

SQUARE METERS

## HALL 14

- **Integrated, holistic cell concepts** in different performance classes for various target groups
- **Software and digital solutions** live in action
- **Services throughout the entire life cycle** with new services tailored to the requirements of trade and industry
- **Surface technology with new and optimized solutions** for sanding, painting and laminating
- **Component production** and everything you need to know about the latest automation solutions for constructing prefabricated houses
- **New individual machines** (edge and CNC processing, panel dividing)

- **Innovation Center – future-proof solutions for our customers since 1960:** a journey back in time through the technological milestones of furniture production and a look at smart solutions for the future
- **powerTouch2:** the next generation of machine operation

## HALL 13

- **News from WEINMANN:** the latest technology for automated insertion of loose insulating material into timber frame components

Learn more:  
[www.homag.com/ligna](http://www.homag.com/ligna)



FROM ATLASES TO NAVIGATION SYSTEMS.

## Step by step: an overall concept built from single parts.

When trying to find the right route in the past, we used to pore over an atlas, study a map or ask passers-by for directions. Now all we have to do is pull out our smartphone and we have all the information we need at our fingertips. If something arises that will slow our journey down, we receive real-time suggestions about how to get to our destination quicker using an alternative route. We often like to use such aids in our private lives — so why not use them in our day-to-day work as well?

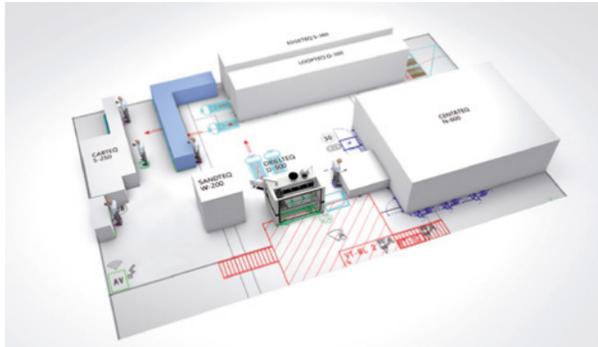
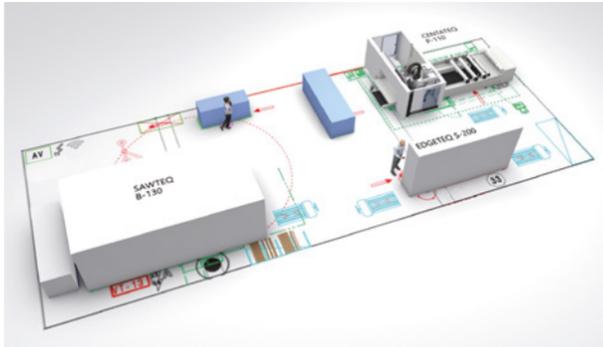
**At our stand in Hall 14, we will address the central issues affecting trade and medium-sized businesses:**

- What specific options does digitalization already offer small and medium-sized businesses today?

- Which easy-to-use assistants and features can support carpenters/joiners in their day-to-day work?
- How can every business find the right building blocks for their own "workshop of the future"?

At LIGNA, we will be addressing these questions by exhibiting clever aids that simplify working life and support work processes using just a few simple steps. *It will soon become clear to any visitor to our stand that there is no need to invest in an entire system; instead, you can opt for individual machines, smart hardware, software and digital assistants that communicate with each other and integrate these into your business in a way that will benefit you most.*

We will be presenting three new integrated concepts in different performance classes so you can see exactly how that can look in a live situation.



From a just a sketch today to a reality after LIGNA: On the stand in Hall 14, HOMAG is presenting how any business can create their own individual overall concept step by step using a modular concept. The exhibit is targeted toward trade businesses.

## CONCEPT 1: "YOUR SOLUTION FOR DIGITAL ENTRY"

### JUST START.

At some point, almost every business faces the question of how best to get started.

Our "Digital entry" workshop concept has the answer.

**It will help you to ensure more transparency in production, recognize where there is potential for optimization and simply improve existing production processes.** Take the example scenario that will be presented at LIGNA: an employee accompanying an order throughout the entire production process, facing various challenges along the way:

- How can they access digital job information for their production easily?
- How can they use optimization software if there is already a cutting saw available?
- How can they retain an overview of all parts?
- How can they use data continuously?

## CONCEPT 3: "YOUR SOLUTION FOR NETWORKED INDIVIDUAL CELLS"

### FULLY NETWORKED.

At LIGNA, we are presenting processing cells that can be extended on a modular basis — perfect for medium-sized wood-processing businesses. Each individual cell is already an ideal solution for efficient panel processing. The cells are networked via the driverless transport robots (TRANSBOT). The ControllerMES production control system takes over higher level control. **All of these elements come together to form a fully autonomous and automated, variably adjustable production concept for batch size 1 production — from cutting through to fully packed furniture.**

## CONCEPT 2: "YOUR SOLUTION FOR A NETWORKED DIGITAL WORKSHOP"

### STEP-BY-STEP ADJUSTMENT.

In the "Networked digital workshop" concept, each machine is operated by one employee.

**This concept is organized so that the work preparation, machinery and bench room areas are separate from one another. Some of the job data is available to machine users in digital form.**

The employees face the following issues:

- How can digital data from different systems be used?
- Is it possible to manage the stocks of edging strips?
- How can components be quickly reordered?
- How can it be ensured that all parts for the bench room are complete?
- How can digital data be used in the bench room?

The businesses are faced with various challenges:

- How can the process for recording orders be simplified?
- How can individual customer requirements be implemented with greater speed and efficiency?
- How can we counteract high personnel costs and a shortage of skilled workers?
- How do we respond to the high level of pressure resulting from competition and costs due to an ever more consolidated market?

"You can see the solutions to these challenges live in action at LIGNA." "

In addition to new machine technology, automation solutions and robot technology, software solutions and digital assistants are also used. These include a new furniture configurator, a digital job folder, various assistants for sorting, edge management or assembly, and new features in the woodCAD|CAM design software.

**All machines on our trade fair stand are networked with the tapio ecosystem.**

They use applications and digital assistants, such as the "intelliDivide" cutting optimization system, a new tool manager, a material manager and the tapio MachineBoard, which provides an overview of all machines.



→ **tapio** partner:

# Tool manager and material manager

Digital assistants for management and organization



**How can tool and material management be made more efficient and with fewer errors?** The new tool manager and the new material manager can help make these aims a reality. Both are based on the tapio ecosystem.

**The tool manager:** With the tool manager, companies will soon be able to manage all of their tools in a clear overview, easily call up information about the tools or even load information directly to the respective machine. For LIGNA, we are starting with the management of saw blades for panel dividing saws as an example. To help illustrate how the tool manager works, various manufacturers have added data specific to their saw blades (for example type and geometry, speeds or even material restrictions.) The user scans the barcode on

the tool using a smartphone or tablet. They receive the information and transfer the information directly to the machine — if the saw is connected to tapio. The result: Users no longer have to spend a long time searching for data and there are significantly fewer errors.

**The material manager:** This tool is used to define material classes and their properties (for example unprocessed chip, Alucobond, lightweight construction.) General information on commercially available densities and average weight can also be added. The user can then assign the panels they are already managing to these classes.

## EDGETEQ S-240 EDGE BANDING MACHINE

### Faster and more efficient: new entry-level model with axis adjustment



Even more flexible: The new entry-level machine celebrates its premiere at LIGNA.

The new EDGETEQ S-240 model 1240 edge banding machine can handle a high level of variety in design and material, as well as with changing profiles at the edges. The machine offers a high level of automation, including on the snipping unit, on the flush trimming units and on the dual-motor profile trimming unit. This simplifies the setup process, reducing the time required. Individual adjustments

can be executed quickly and efficiently using the automated functions from the controller unit. All types of glue can be processed, including PUR. On this model of edge banding machine, the QA65N overhead glue application system features a simple cleaning and emptying function.

## EDGETEQ S-500 SERIES EDGE BANDING MACHINES

### More flexibility: new design with more units

Machines in the new EDGETEQ S-500 series offer more equipment and therefore more flexibility for edge banding processes, as well as feed speeds of 20 m/min and 25 m/min. After LIGNA, these machines can also be equipped with the MS40 multi-level trimming unit, the MF60 Servotrim multi-function profile trimming unit, the BF40 fine-milling unit and the MZ40 multi-level scraper unit.

**Other special features:** The new AG12 gluing unit can be used for either EVA or PUR glue and enables individual strips of up to 12 mm to be processed as standard, with the basic version requiring less space. It is now easier to handle the application unit when changing glue or paint — and the application unit can also now be emptied in the machine. The fluid supply is now located outside the machine, requires less space and is more easily accessible. Thanks to the new drilling grid, it is easier to retrofit units to the machines, which ensures more investment security.



**LAMINATING WITH THE LAMTEQ F-200**

## This laminating unit with handling concept takes care of every task

There are various challenges facing today's coating specialists. The LAMTEQ F-200 laminating unit with handling concept provides solutions to a whole range of these challenges.

**A lack of skilled workers:** All tasks requiring a higher level of qualification are handled by a single machine operator. This frees up someone else to take on more straightforward tasks.

**Personnel costs are too high:** Partially automated material handling reduces the number of personnel required, as the system can be operated by just two people.

**Protection for employees:** The new concept means that personnel no longer have to carry out strenuous lifting and turning tasks involving large workpieces, thereby preventing physical strain.

**Reduced manufacturing costs:**

An optimized part flow leads to increased productivity. A greater number of parts are laminated with an equal amount of effort.

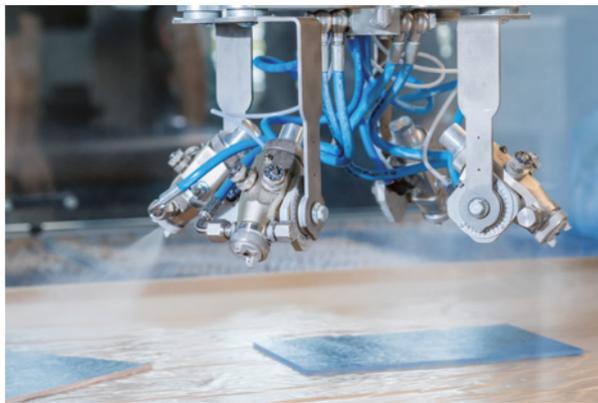


### SURFACE APPS: FOR MORE EFFICIENT WORK PROCESSES

We now also use digital aids in surface processing. After LIGNA, new apps will support machine operators in their daily work, helping them to avoid errors and providing helpful information. **The new tools: intelliCoating, intelliLaminating, intelliMoulding and intelliSanding.**

## More advantages for entry-level painting

Next generation: SPRAYTEQ S-100



Just two years after the market launch, HOMAG is presenting an optimized SPRAYTEQ S-100 spray painting machine. This new generation offers small and medium-sized businesses performance that until now would have only been expected from an industrial machine.

**Here are all of the new developments at a glance:**

**Reduced manufacturing costs:** Modifications to the design produce a better transfer rate, meaning that an even higher proportion of the coating material being used lands on the workpiece surface, as well as allowing the filters to be used for longer.

**Reduced cleaning effort:** With less overspray, the operator spends less time cleaning, allowing them to carry out tasks that add greater value.

**Improved working conditions:** The fans make less noise thanks to the optimized exhaust air system.

### SURFACES: YOU NEED IT – WE HAVE IT!

The SPRAYTEQ S-100 is specifically designed for getting started with automated spray painting. However, HOMAG has been working in cooperation with the painting system specialist MAKOR to offer even more, including solutions for painting surfaces, profiles and windows in various performance classes. It goes without saying that these solutions can also be combined with application technology, drying systems and ergonomic material handling systems.

**EDGETEQ S-800 PROFILINE SERIES EDGE BANDING MACHINES**

## Freedom in terms of performance and flexibility for edge banding in batch size 1

The new, one-sided EDGETEQ S-800 profiLine series is ideal for special-order-based production. The machines can process any width, so they can be used with a high level of flexibility. With a feed speed of 35 m/min, the new workpiece supply system enables a higher capacity of output. The machines are also equipped with a dimensioning that performs any precise, angle-specific cutting.

The "gap setup" function also ensures high productivity levels; The control system calculates the gap required for the changeover and blocks the machine infeed for the required length of time, meaning the machine does not have to be run empty. High-performance servo units are used in post-processing.

The new SF25 Servo features two grooving units for grooving and rabbeting from above/underneath/the side in batch size 1, including the option of processing lamello grooves. The groove position optimization system ensures larger groove clearances from the glue joint. All processing units can be changed over rapidly to increase the number of workpieces per shift.



## The new CNC all-rounder: An optimum balance between space requirements and performance



On the new CENTATEQ P-210, the user can select between three-, four- and five-axis heads, and now a gluing function is also possible.

The new CENTATEQ P-210 CNC series will demonstrate just what it is capable of in its live debut at LIGNA. The most striking feature of machines in this series is equipment that is not typical for this performance class including a gantry design with a drive unit on both sides, a drilling gear and trimming spindle arranged separately with two independent Z axes, a dynamic field division for shuttle operation and a dual-circuit vacuum system with double-lip technology for infinitely variable adjustment of the clamping equipment. The CENTATEQ P-210 can be equipped with up to 24 tool change slots and a maximum of 21 vertical and 10 horizontal drilling spindles featuring a patented spindle clamp. Gluing is now also possible. Despite all this, the installation area of the CENTATEQ is barely larger than that of its smaller counterpart, the P-110, and is freely accessible from three sides.

### CENTATEQ T-300 SERIES OF CNC PROCESSING CENTERS

## Double the number of tables — double the level of flexibility



The new CENTATEQ T-300 CNC router is the optimal partner for interior fitters, furniture manufacturers, caravan manufacturers and manufacturers of booths for trade fairs. The level of performance is astounding: **With four work areas, three operating modes (synchronous,**

**independent, coupled) on two nesting tables and just one control system,** the machine can be operated by just one employee. The concept requires a surface area of just 64 m<sup>2</sup>, offering two trimming spindles, two fully equipped drilling gears, and two tool change systems, combined with the latest safety and control technology. In total, it provides the user with a working area of 1550 x 6400 mm. Both tables can also be used individually in shuttle operation. A five-axis spindle can also be connected to the CENTATEQ T-300.

## The new standard in gluing technology

### The powerEdge Pro Duo gluing unit

New from profile parts gluing: At LIGNA, the new "powerEdge Pro Duo" gluing unit will be presented to the public for the first time.

This "all-rounder" can cope with both the challenges of today and those that furniture manufacturers will face in the future. **The technology: defined and controllable parameters at each point along the contour.** The result: perfect edge quality.

## Drilled, trimmed and pressed: complete edge processing



We have sent the DRILLTEQ D-500 to a tuning workshop. The machine was originally conceived as a supplement to vertical CNC processes (often referred to as "nesting") and was used for horizontal drilling and/or dowel pressing. **After LIGNA, the DRILLTEQ D-510 will also be able to carry out trimming,** meaning it will be able to execute processes for all current connector fittings, for example the Lamello Clamex, and hinges, for example the Grass Tiomos. The machine can also insert a number of connector fittings directly if this is required.

## HOMAG and tesa develop a new process

### Gluing technology for integrated composite windows

In window production, appearance and break-in protection requirements are increasingly coming to the fore when it comes to manufacturing the adhesive bond between the pane and the frame. HOMAG and tesa wanted to develop a simple production solution with a reliable process to address these requirements. [The process is also required for manufacturing integrated windows.](#)

The core of the new process is the application of an integrated adhesive tape, tesa® ACXplus, which is inserted into the window frame after planing. After CNC processing, the window—including the adhesive tape—can be painted, ensuring that the color of the joint is identical.

The protective film on the adhesive tape can then be easily removed before inserting the window, and the pane no longer has to be sealed with silicone.



Lean profiles with 20% more glass: Thanks to their new process, HOMAG and tesa are helping bring more daylight into rooms.

#### PROPERTIES OF INTEGRATED WINDOWS:

- **More light in the room:** Narrow wing profiles mean up to 20% more glass.
- **Modern design:** Flush to the outside when installed in the soffit, the frame is practically invisible.
- **Low maintenance requirements:** The pane of glass and the frame are fixed in place and securely connected to one another. The wing does not have to be "set."
- **Increased break-in protection:** The pane of glass cannot be separated from the wing frame and reinforces the frame. This makes the frame more robust in the event of an attempted break-in.
- **High thermal insulation:** The narrow frame ensures the windows achieve the best U-Values.

## Automated and ergonomic window scantling production

At LIGNA, we are debuting the MOULDTEQ M-300 planing machine in combination with a return line — for economical single-person operation in window production. The planing machine is fitted with six spindles, all of which are equipped with a separate drive unit so that the speed of each spindle can be adjusted on an individual basis. All of the spindles are fitted with the proLock clamping system, making setup much faster

and simpler. Once processing has finished, the return line takes the workpieces, separates them and transports them back to the operator.

**It won't be long until you see the multitude of benefits:** an improved material flow, a sleeker production process, better organization of personnel and a considerably more ergonomic operation.



## A quantum leap in insulation installation technology

### WALLTEQ M-380 insuFill multifunction bridge

Until now, inserting insulation has been the "bottleneck" in automated element production processes. This is now a thing of the past thanks to the WEINMANN WALLTEQ M-380 insuFill multifunction bridge with integrated blow-in plate.

[It inserts loose insulation materials efficiently into the wooden frame components using an automated process that is followed by a visual inspection.](#) During the insulating process, the multifunction bridge positions the blow-in plate automatically and transfers the data from the work preparation stage, for example the geometry and size of the component, the type of insulating material and the quantity of insulating material. The blow-in plate fills every cavity with insulating material as an autonomous unit. A controlled blow-in process ensures that the insulating material is applied with quick and even compression in compliance with the manufacturer's specifications.

#### Practical advantages:

- Insulation of a consistently high and demonstrable quality
- A high level of flexibility when choosing insulation materials
- Ergonomic workflows and significantly lower dust exposure
- Reduced cost and effort in terms of storage and manipulation of the insulating material
- Significant material savings due thanks to a reduction in waste



Live at LIGNA: the multifunction bridge with blow-in plate. Hall 13, Stand C26



## Automation in house construction

In today's prefabricated house construction industry, fully automated production lines combine all process steps — from frame work production and panel processing through to finishing. Integrated robots are now used to automate the entire material handling system — from feeding in the unprocessed parts to loading the finished elements.

#### What tasks does the robot perform?

- Gripping and depositing heavy components
- Performing the entire beam installation process for making frame works
- Removing the beams from the collection position and placing them in the frame work

## The new teleservice solution of the future

Faster help thanks to IntelliServiceNet



With TeleServiceNet, our HOMAG specialists are available by telephone to answer any questions you may have about machine technology. We are now taking this service to a higher level of technology with IntelliServiceNet, creating a modern teleservice connection. You contact teleservice employees as usual, either via the ServiceBoard app, by telephone or by email.

**The benefit:** Even more specific and faster help for users.

**What's new?** In future, machine operators will be able to view previous contact with teleservice via a web portal. IntelliServiceNet also offers advanced diagnostic tools as well as the use of various Service apps, such as those aimed at predictive maintenance. There are benefits for HOMAG employees too: By being able to access machine information (e.g. temperatures and currents), the employee can start the process of finding a solution before contacting the user. This means that errors can be rectified with even greater speed.

### THE PERFECT COMBINATION: IPACKAGE AND THE SERVICEBOARD APP

## No surprises. Keep an eye on everything.

### THE BENEFITS AT A GLANCE:

- Comprehensive service including inspection and teleservice at an attractive price/performance ratio.
- Early wear detection means unplanned downtimes can be avoided.
- Preventive maintenance through regular inspections.
- Our teleservice has a success rate of over 90%. If necessary, a service technician will be sent within 24 hours.
- Free ServiceBoard app for rapid identification of errors, direct connection to your contact person and a simple overview of all cases.

If the machine fails, production has to stop. We have the means to counteract such unexpected surprises: iPackage, the service contract at a fixed price. In addition to the flat-rate TeleService, iPackage offers users an annual inspection—including travel costs and access to the ServiceBoard app—giving you everything you need to not only identify signs of wear and the need for maintenance promptly, but also plan inspections and servicing in good time. This preventative approach can often prevent unexpected machine failure.

#### iPackage — Service with guaranteed success.

Thanks to our teleservice, our specialists are available by telephone to answer any questions you may have about machine technology. This can be used in conjunction with the ServiceBoard app, which allows the user to share the current situation with HOMAG wirelessly via live

video diagnostics. This allows our specialist to identify possible errors quickly and often fix them immediately. The specialist can also provide instructions, videos, images or 3D drawings on the move.



### POWERTOUCHE2: NEXT GENERATION

## Even faster and more convenient machine operation



Following LIGNA, HOMAG machines will have the next generation of machine operation at their disposal — powerTouch2

With the powerTouch operating concept, HOMAG revolutionized the art of machine operation in 2013. We have now adapted the touchscreen operating concept to the latest requirements. Operating the touchscreen is child's play — many of the features are similar to those on a smartphone or a tablet.

#### The machine operation is now...

**...even more intuitive:** The powerTouch2 screen has a clearer, more transparent layout. The menu design allows the user to take in all essential elements at a glance.

**...even faster:** By entering information on the machine, the operator can achieve a time saving of up to 30%. But how? Thanks to new features, including automatic word completion, a pop-up keyboard that can be kept open and Windows-like functions such as the being able to select common actions directly via the start button.

**...even more convenient:** We have improved the traffic light dialog, meaning you can now directly influence the machine's production readiness by selecting actions via the traffic light icon.