

inspiration

March 2018

HOMAG

YOUR SOLUTION

Design meets digital.

N0212 #SIGNAL [ID=50000000, Ch=1, P[0,0], P[1,0], P[2,0], COUNT=1];
N0213 #SIGNAL [ID=50000001, Ch=1, P[0,0], P[1,0], P[2,0], COUNT=1];
N0214 #SIGNAL [ID=50000002, Ch=1, P[0,0], P[1,0], P[2,0], COUNT=1];
N0215 #SIGNAL [ID=50000003, Ch=1, P[0,0], P[1,0], P[2,0], COUNT=1];
N0216 #SIGNAL [ID=50000004, Ch=1, P[0,0], P[1,0], P[2,0], COUNT=1];

N0401 G01 X420.3770 Y174.4666 Z15.5804

N0348 G01 X422.8973 Y174.0967 Z23
N0349 G01 X423.3317 Y173.3213 Z23



N0401 G01 X420.3770 Y174.4666 Z15.5804



**The new HOMAG
machine generation at the
HOLZ-HANDWERK
2018!**



N0401 G01 X420.3770 Y174.4666 Z15.5804

N0401 G01 X420.3770 Y174.4666 Z15.5804

N0374 G01 X421.2567 Y174.7498 Z19
N0375 G01 X422.1361 Y174.6208 Z19

The new HOMAG machine generation



We're giving a face to the digital future.

Experience our new machines at the HOLZ-HANDWERK in Hall 10.0.

We're thrilled to offer you some very special insights this year at the HOLZ-HANDWERK: The premiere of our new machine generation. Under the banner of "Design meets digital" we've redesigned all our machines to be more intuitive, modern and unique. Furthermore, it is now faster and easier to network your machines to the tapio eco system, if and when desired. If and when you want to use this function is up to you. The progressive new function-orientated design transforms the machine operation experience making it feel special while highlighting your innovative credentials. Make a clear statement to your customers – and to your competitors.

Visit us at the HOLZ-HANDWERK from March 21 - 24 to receive a first-hand impression of our machine technology in its new design.



Clearly arranged machine design and optical accentuation support intuitive user guidance.

New product names: Simple and meaningful

As well as redesigning our machines, we've also restructured our product names for greater clarity: The function of each machine will now feature in the name: So you can find your way more easily around our product world. For instance our edge banders on show at the HOLZ-HANDWERK will be designated EDGETEQ, while sawing machines will now bear the name SAWTEQ.



Look here for more detailed information and examples of the new names for our products:
www.homag.com/design-meets-digital



Always a solution ahead

We explore new horizons to help you reach your goals.

We keep a step ahead of the market so that we can better assist you on your journey to the digital future. Not only do we offer you the perfect high-tech machines, but also integrated solutions tailored precisely to your needs. Whether its traditional woodworking, batch size 1 or industrial series production: We'll be right beside you, helping you achieve that all-important competitive edge. Because we understand woodworking operations inside

out, we can target exactly what you need. For instance with tapio-ready machines, customized software or services from our global service network. Together, hand in hand, we can shape tomorrows trends and discover the exact solution you require to meet any and every challenge.

Progress begins with the design. Discover our new machine generation.

Our highlights

What you can expect at the HOLZ-HANDWERK from March 21 - 24.

New machines:

Modern design, cloud networking capability

The "autonomous cell":

First autonomously operating workshop concept

New panel dividing saw:

Higher throughput, more ergonomic design

Maximum edge quality for all performance categories

Spare part production for windows:

Complete solutions from planing to painting

Transparency in the workshop:

Manufacturing execution system ControllerMES

News from the digital future:

The eco system tapio and new digital products

Find out more: www.homag.com/hhw



“Autonomous Cell”

HOMAG showcases the first autonomous workshop concept

1

WORKSHOP

3

CELLS

1.000

POSSIBILITIES

Live in action at the HOLZ-HANDWERK: The first workshop to operate completely autonomously. It comprises of two self-contained fully automated cells linked by small autonomously working helpers: Automatic guided vehicles (AGVs) which take care of organizing part logistics between the cells.

The “autonomous cell” brings its full flexibility to bear in both woodworking shops and industry, in series and batch size 1 production, exposing previously unimaginable options for the production of the future.

CELL 1 HIGH-TECH EDGING WITH INTEGRATED WORKPIECE HANDLING

Edge bander EDGETEQ S-500 (formerly KAL 370 profiLine) offers maximum flexibility combined with the LOOPTEQ O-600 return feed system (formerly TFU 521).

The new EDGETEQ S-500 opens up an exciting new scope. It changes flexibly between 3 profiles and chamfer, offering 3 edge banding methods simultaneously (see page 6). To allow the cell to process each workpiece correctly, every part is equipped in advance with a digital identity (barcode).

Return feed system LOOPTEQ O-600 takes care of fully automated part flow. Here, the return feed system and stacking station are combined – allowing finished workpiece ejection or automatic destacking. The gantry achieves this using a width-dependent rotary function and newly developed vacuum traverse for gentle handling. The return feed system and edge bander are networked by the cell control system WoodFlex.

PROCESSING MACHINE

Availability levels of almost 100 %, high repeat accuracy and pin-point precision part handling: Robots are not only reliable but also increase production economy. At the HOLZ-HANDWERK, a 6-axis robot will be taking charge of automated part handling on the vertical processing center DRILLTEQ V-500 (formerly BHX 200). Integration into the cell control system enables extremely simple robot operation. In addition, new workpieces or functions such as alignment, validation and flipping of parts can be simply integrated into the process.

CELL 3 FLEXIBLE NETWORKING USING AUTOMATED GUIDED VEHICLES

Small, autonomously working logistics helpers link the two fully automated cells: Automated guided vehicles (AGVs) are used which supply the drilling cell with finish processed stacks from the edging cell.

SOFTWARE

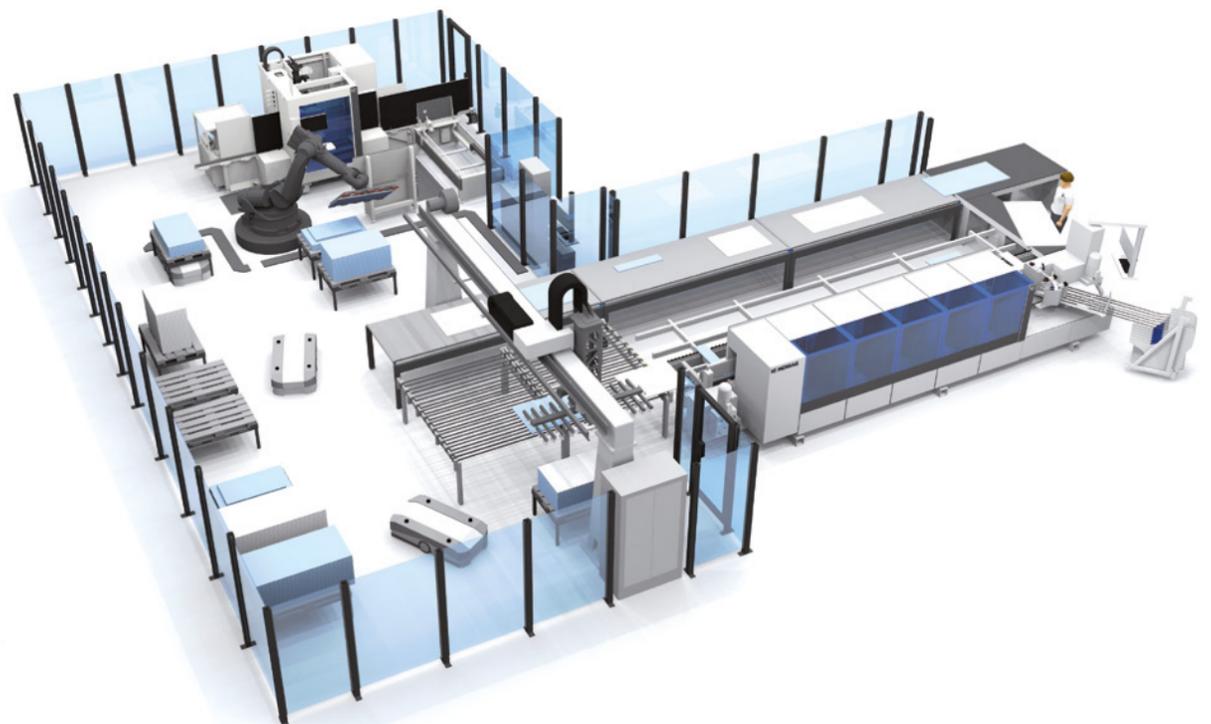
SMART NETWORKING OF THE CELLS USING THE AUTOMATED GUIDED VEHICLES (AGVS)

The key to networked communication within the cell is provided by the HOMAG manufacturing execution system ControllerMES. It enables overarching communication between the individual controllers of the automated edging cell, the CNC robot cell and the AGV controller. Here, what’s known as the AGV cell controller is in use. This is closely connected to the fleet manager, which is in charge of complete AGV route planning.

The benefits of the “autonomous cell”

- Combined process expertise from woodworking and AGV technology
- Material management from a single source
- Prepared for connection to tapio
- Flexible networking of processing cells: Spatial flexibility, no rigid connection by roller conveyors
- Capacity for rapid response: Simple subsequent changes to the product spectrum and processing sequence

CELL 2 ROBOT HANDLING ON VERTICAL CNC



How does material flow work in the cell?
Look here:
www.homag.com/autonomous-cell



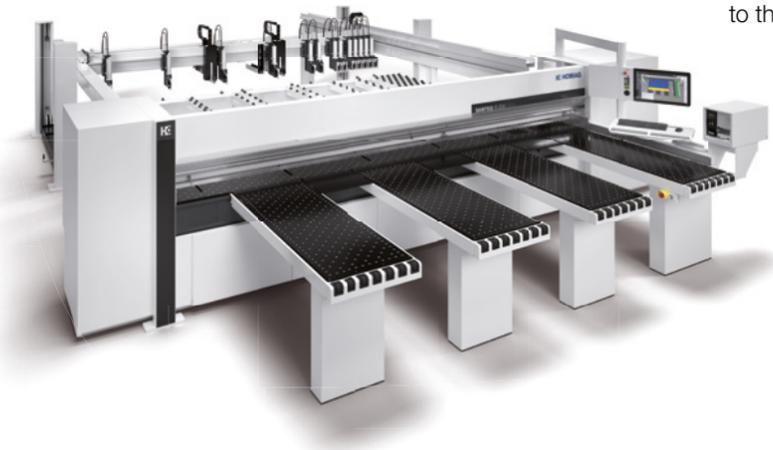
New saw with lift table for woodworking shops

The compact woodworking shop series 2 has been extended by a model with integrated lift table: The new SAWTEQ B-200 (formerly HPL 200). The benefit? Just like the previous basic model HPP 200, the

SAWTEQ B-200 has a saw blade projection of 60 mm – and with even more options. Thanks to the integrated lift table, it is technically significantly more powerful than the individual saw belonging to the series. For instance the lift table can be loaded with whole books of panels at once which are then individually and automatically pushed to the rear machine table for cutting. This saves time, and makes for more ergonomic, speedier production.

NEW HIGHLIGHTS OF THE SAWTEQ B-200 FROM THE HOLZ-HANDWERK:

- Saw blade projection of 95 or 80 mm instead of 60 mm (optional)
- Modern high-end machine control system CADmatic 5 as standard – with graphic wizard displaying the next work step
- IntelliGuide Basic and destacking module LITE optionally available – for simple handling and destacking
- 800 mm wide air cushion tables (for ergonomic handling of large heavy panels)



SIMPLE AND CLEARLY ARRANGED

The new saw control system CADmatic 5

The new version of the CADmatic 5 software is all about saw operating simplicity and clarity. But what are the new features?

Mr Mömesheim, what's behind this new saw control system?

We've completely redesigned the user interface. The focus is on radically optimized sequences which make operation of the whole machine far more ergonomic. Because we integrated customer ideas into development of the new control software, it's highly practice-oriented.

So what's now easier for operators than before?

We've merged different function areas with a view to simplifying operation. For instance it's now possible to navigate through different views by swiping – as we're accustomed to doing on our mobile devices. We've also added convenient features for sorting, finding or tidying data to create greater overall clarity.

Who will benefit from CADmatic 5?

All HOMAG saws of the 3, 4, 5 and 6 series are already equipped with CADmatic 5. From the HOLZ-HANDWERK onwards, this will also apply to series 2 and the SAWTEQ B-130 (formerly HPP 130).

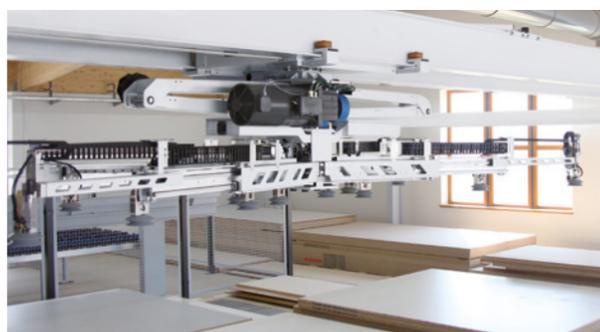


“CADmatic 5 in 3 words? Simple. Ergonomic. Intuitive. Simple because all the important functions are just a click away. Ergonomic because users will find what they want, where they expect it. Intuitive because most features are self-explanatory.”

Arne Mömesheim, Product Manager Software Panel Dividing

NOW ALSO ON SMALLEST STORAGE SYSTEM

Suction traverse in X geometry



The highlight of the STORETEQ S-200 is its combination with suction traverse ST 71.

From now on, even the smallest of the HOMAG horizontal storage systems offers maximum flexibility for transporting different materials. The reason for this is the combination of horizontal storage system STORETEQ S-200 (formerly TLF 211) with suction traverse ST 71 in X geometry – undoubtedly the storage technology highlight at the HOLZ-HANDWERK. This means that STORETEQ S-200 opens up many of the outstanding possibilities previously reserved to the next model up, the STORETEQ S-500 (formerly TLF 411).

Highlights of the ST 71:

Proven ejector technology

- ensures economical power consumption
- regulates air flow individually to the specifics of each panel

Panel parameters are automatically accessed from the system once they have been computed

Spray lacquering: Using robots and automation

High-quality surfaces

In collaboration with our partner MAKOR, we will be unveiling an innovative spray robot in Nuremberg – which is designed to apply different lacquer quantities



Find the solution you're looking for from HOMAG – from manual lacquer application to automated spray technology.

to the workpiece edge and surface. Visitors to the HOLZ-HANDWERK can also look forward to a SPRAYTEQ S-100 series spray lacquering machine (formerly GSF 100). Both plants feature a fully automatic loading and unloading station which allows them to work largely unmanned during spray application.

The SPRAYTEQ S-100 series is particularly suited for SMEs looking to gain an entry into the world of spray lacquering. The machines are among the most compact automatic lacquering systems of their class, require only a minimal footprint and are used to produce all kinds of furniture (also solid wood), interior fittings, windows, staircases or doors.

EDGE PROCESSING

Flexibility³



The new features can be seen live on the EDGETEQ S-500 (formerly: KAL 370 profilLine) at the HOLZ-HANDWERK.

This year, the HOMAG edging experts are focusing on a triple benefit for profile and edge processing. If you're aiming to shift your productivity up a notch, the new [3-profile technology](#) is the perfect lever. It enables fast, automatic changeover between three profiles and 20° chamfer with outstanding repeat accuracy. The "3-profile technology package" contains a fine trimming unit for 3 radii, the 3-profile head for the FK30 profile trimming unit and a profile scraper for more than 3 radii. Anyone aiming to achieve rapid changeover between different banding methods (PU, EVA or the zero joint technology airTec) can now use all [three edge banding methods on a single machine](#) (e.g. automatic changeover from airTec to EVA by pressing a button).

Maximum edge quality for entry-level users

Pneumatic snipping tool and scraper adjustment as standard.

The EDGETEQ S-200 edge bander (formerly Ambition 1130 FC) is the ideal all-rounder for woodworking shops. A joint trimming unit prepares the edge for an optimum joint, a 2-motor snipping unit takes care of the perfect cut. The trimming unit provides impressively simple adjustment between the radius, chamfer and flush trimming tool. The finish area comes with three units – and a profile trimming unit including corner processing is also attached. In this performance category, this combination isn't available as a matter of course. Alongside an extensive unit configuration, the first unit automation functions are now also possible.



The EDGETEQ S-200 is optionally available with pneumatic 2-point adjustment of the pressure zone.

Complete solutions from planing to surface finish.

Cohesive single part production for windows

At the HOLZ-HANDWERK, the market's most efficient single gantry system for window production will be live in action. The CENTATEQ S-900 (formerly BMB 925) comes with two processing tables and independent units on both gantry sides. This flagship machine series premiered 10 years ago and is able to process over 60 units per shift in optimized practical application.

HOMAG is now taking the next step – with integrated solutions for single part production.

How? Through a combination of competences from the worlds of planing, CNC and surface technology. The CENTATEQ S-800/900 series forms the foundation. The optimum planing partner is the MOULDTEQ M-300 (formerly LPP 300) with powerTouch operation and a quick-change system for tools. Using six spindles, the

glazing bar can be separated out and finish planed above and below. For the perfect surface finish, machines for impregnating or lacquering the individual window components are used. Ultimately, window manufacturers benefit from tailored concepts for ready-to-assemble, perfectly all-round coated parts for windows – no matter whether they aim to produce 25, 50 or more units a day.



The window production trio:
Planing machine, CNC all rounder and spraying machine

USERS HELPING USERS

New HOMAG software forum

WHAT USED TO BE CALLED THE “WOODWOP” FORUM NOW HAS A LOT MORE TO OFFER.

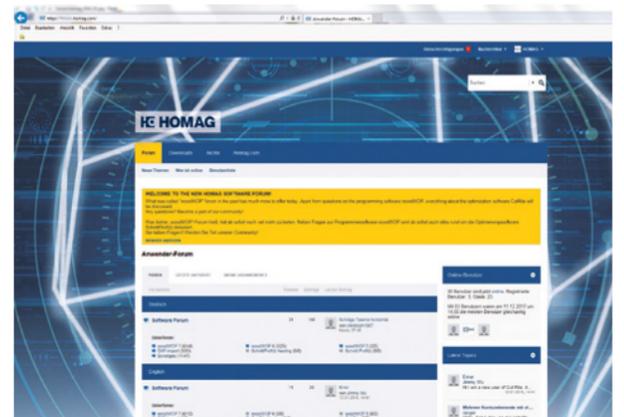
In the new HOMAG Software Forum, meet like-minded users to exchange information and seek advice on a range of woodworking software-related topics. Alongside questions on woodWOP programming software, the optimization software CutRite will now also be featured.

What the new forum has to offer:

- More topics: woodWOP and CutRite
- New, user friendly arranged layout
- Responsive design to allow mobile access (optimized for smartphones and tablets)

- Faster assistance through user profile with woodWOP version and machine designation
- Possibility to subscribe to receive articles – so you won't miss out on what's happening
- New features such as launching a survey
- The “old” forum is archived and can still be used

Any software-related questions? You can rely on a response from our community.
forum.homag.com

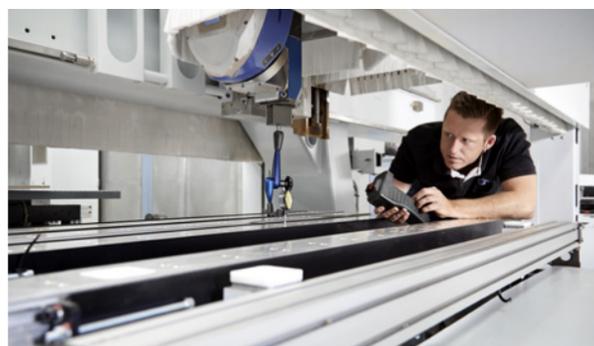


Count on us.

Life Cycle Services

We continuously further develop our services for customers. HOMAG is a partner you can rely on to provide all-round support, whose mission is to ensure your success and help improve your productivity, flexibility and quality.

Our worldwide HOMAG Service Team covers every activity over the life cycle of your machines and plants: From spare part management through inspections and maintenance to remote servicing, modernization and training.



New for the HOLZ-HANDWERK:

- HOMAG Warranty Plus – the all round carefree package goes global
- 5-axis technology maintenance – attractive trade fair deal
- New functions for the ServiceBoard
- IntelliGuide Basic, Advanced and Professional – all packages of our operator assistance system can now be implemented as an upgrade
- New digital services on your journey to the digital future with tapio

tapio

Squeezing more from your production.

tapio creates an open eco system for the entire woodworking industry. tapio is a neutral platform and technological basis for partners. To help you keep an eye on your entire production – irrespective of your machine manufacturers or suppliers. The tapio partners (including HOMAG, Venjakob, Leuco, Rehau or Henkel) work jointly with the tapio team on new functions and apps.

Available from the App Store

tapio products are available from Apple and the Google Play Store. As soon as you have linked your machines over www.tapio.one, you can start downloading the products. Alongside apps, tapio also makes available a portal where you can individually manage your machines, digital products and users.

Available apps:

MachineBoard: Optimum machine monitoring.

Machine operators carry all machine displays with them in real time in their smart phone.

DataSave: Shorter downtimes.

Saving all important machine data in a secured area so it can be accessed immediately when needed.

ServiceBoard: The quick, interactive way to get help.

If error messages appear, the ServiceBoard can be used to get into direct touch with your service partner (e.g. from HOMAG). This allows the HOMAG experts to assist live over a video link.

Additional apps will be available from the HOLZ-HANDWERK.

SOFTWARE AS A SERVICE

intelliDivide

The optimization “Software as a Service” based on tapio

From cutting plan generation through tool management for accessing individual material parameters: Smart, intelligently networked software solutions are playing an ever more vital role for production processes along the entire value chain in woodworking shops.

Which is why all HOMAG 3, 4, 5 and 6 series saws with CADmatic 5 are now tapio-ready. From the HOLZ-HANDWERK onwards, this will also apply to series 2 and the SAWTEQ B-130 (formerly HPP 130). This facility for linking the saws to the eco system tapio lays the foundation for the use of cloud-based high-performance software.

HOMAG will be unveiling its own cloud software at the fair: intelliDivide. This cloud-based optimization software permits significantly higher computing capacity, meaning it can provide the user with several variants of an optimization result in record time.

Using intelliDivide, users can select not only a purely cutting waste-oriented solution, but also other variants – for instance the option with the shortest machine running time or simplest handling. Just pick whichever suits your specific needs.

Alongside intelliDivide, we will of course still be offering the locally used optimization software CutRite.

The benefits

- intelliDivide works independently of the operating system – Internet access is all you need
- Automatic transfer of the machine configuration (when connecting to tapio)
- Users no longer need to worry about maintenance or updates
- Low-cost entry into optimization
- intelliDivide works with limited functionality even without CADmatic 5, and therefore also without connecting the saw to tapio – just ask us!



www.tapio.one

Connect your machine to the tapio eco system.

Your route to the digital workshop.

Machine networking and manufacturing execution system integration are becoming increasingly more important to woodworking shops. Why's that? We asked Hendrik Albers (Product Manager ControllerMES).

Why should woodworking shops be looking at networking?

Trends in the furniture sector continue to be determined by addressing individual customer requirements at affordable prices. For woodworking shops, MES systems can provide the answer: The cohesive flow of data from office to workshop and transparency over all production processes provide valuable support when it comes to workshop organization. For instance, enabling a more flexible response to individual customer requests.

ControllerMES originated in the furniture industry. Isn't it too industrialized to address the special requirements of woodworking shops?

Absolutely not. Because the software structure is modular, ideally it can be adjusted to the market requirements of our woodworking shop customers. Or to put another way: All work steps of relevance for woodworking shops can be simply bracketed out, such as automatic batch formation.



www.homag.com/digital-workshop



Optimum production processes aren't a question of company size.