inspiration

HE HOMAG

YOUR SOLUTION

September 2018



HOMAG TREFF

The Highlights

You can look forward to all of the below at the HOMAG Treff from September 25-28

TREFF

LOCATIONS

YEARS



THE BENEFITS

• Highly efficient batch size 1 production with

With robot mode:

up to 800 parts per shift

No operating personnel needed

For cutting panels in books or

dividing thin panels, for example

Maximum flexibility and manual control

Low piece costs per part

With operator mode:



Don't miss it! Our specials for the Treff

- · Workshops: Practical knowledge. Exchange ideas with experts
- Surface CompetenceCenter: Surface expertise live in action
- 25 years of HOMAG Treff: HOMAG is marking the occasion with 25 special edition models
- High-performance window processing: Don't miss our window day on September 27

Digital products: Your path to digitalization

- intelliDivide: The optimization "Software as a
- intelliGuide: The operator assistance system is now also available on edge banding, drilling and dowel inserting machines
- visualAssistant: Mobile help at the machine
- qualityGuard basic: Preventative quality monitoring
- performanceControl basic: Preventative monitoring of your system's performance
- Configurator3D: Integrated software solution for furniture configuration
- tapio eco system: 26 partners in the community

New machine technology

NEW: Two robot saws for maximum versatility

- Flexible concepts: New ideas for your production
- The "autonomous cell": The autonomously operating workshop concept
- Drawers made easy: New "narrow part" processing package
- Laminating: New handling concept
- Solid wood: CNC window processing (incl. profile splitting) and planing technology

Our locations

- Holzbronn & Schopfloch: HOMAG Treff
- Herrenberg: Surface CompetenceCenter
- Horb am Neckar: Tailored plant expertise

How to find us:

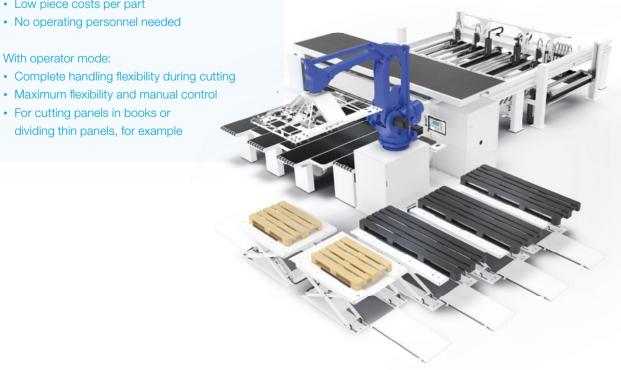
www.homag.com/visit-us



SAWTEQ B-300 FLEXTEC AND SAWTEQ B-400 FLEXTEC

NEW: Two Robot Saws for Maximum Versatility

Automatically efficient. Manually versatile. Ingeniously flexible. These three statements sum up the strengths of the HOMAG SAWTEQ B-300 flexTec and SAWTEQ B-400 flexTec saws. This new combination of robot and saw will be celebrating its world premiere at the HOMAG Treff in Holzbronn.



UNMANNED BATCH SIZE 1 PRODUCTION:

The two cutting solutions are automatically efficient because both saws work with industrial robots which complete the batch size 1 cutting process fully unmanned along the line. The key to this is the highly-intelligent stack formation during destacking on the lift tables. This is carried out with the aid of a software program whose algorithms have already proven successful with the SAWTEQ B-320 flexTec batch size 1 dividing cell.

PROVEN SAW TECHNOLOGY:

The SAWTEQ B-300 flexTec and SAWTEQ B-400 flexTec saws can also be operated manually if required - for operations such as cutting panels in books, dividing thin panels, or special functions such as panel grooving. Thus, the new saws offer versatile use.

NEED-BASED SOLUTIONS:

The ingenious flexibility of both new saws comes from the combination of maximum robot performance and the freedom to manually operate the machine for cutting processes. This opens up endless design possibilities the range covers a variety of feeding and destacking options along with numerous optional extras.

NEW IDEAS FOR YOUR PRODUCTION

Flexible Concepts

At the HOMAG Treff, we will be presenting five manufacturing concepts: small to large, simple networking to fully digitalized, manual machine operation to maximum automation. How can you expand your production operations? How does networking work? We have combined our machines to create various concepts for you. At HOMAG Treff you will discover new modern ideas that can deliver greater flexibility and options to your company.

CONCEPT 1: WORKSHOP FOR SMALL BUSINESSES

The easiest way to get started with efficient production: Enabling you to cover almost all production steps for interior fittings.

The machines:

- SAWTEQ B-130: Small entry-level saws for efficient cutting, only slightly more expensive than a sliding table saw (take a look at our promotion: Currently with a module45 bevel cut unit for a promotional price)
- EDGETEQ S-240: Entry-level machine for edge banding with initial unit automation
- CENTATEQ P-110: CNC processing center for trimming and drilling with unrestricted access from all sides (incl. 5-axis technology)

CONCEPT 2: FLEXIBLE WORKSHOP WITH AUTOMATIC WORKPIECE HANDLING

This concept helps you enter into the world of partially unmanned production. The integrated saw is equipped with a robot which takes care of the automatic destacking. In short: High performance with low personnel requirement.

The machines:

- NEW! SAWTEQ B-300 flexTec: Single saw with lift table and unmanned production over longer distances by means of robot. The completely new saw concept with the use of robots will be celebrating its world premiere at the HOMAG Treff in Holzbronn
- EDGETEQ S-380 profiLine: Edge banding machine with return feed system and full automation
- DRILLTEQ V-500: Vertical processing center with trimming unit for Clamex connections and return feed system (compact 25 m² handling system increases output by 15%)

CONCEPT 3: WORKSHOP WITH FULLY-AUTOMATED STAND-ALONE MACHINES

Here you can dive deeper into the world of automation. The SAWTEQ B-320 flexTec saw can be directly interlinked with the edge banding machine. Parts that are not being edged can be destacked automatically. Unmanned production can be carried out for longer periods of time, as direct interlinking means that stacking stations do not need to be emptied. In short: A low-personnel industrial solution for batch size 1 production for all kinds of requirements (incl. shaped parts).

The machines:

- SAWTEQ B-320 flexTec: Panel dividing saw with outfeed roller conveyor, two destacking stations and automated parts labeling
- SAWTEQ B-300: Fully-equipped saw for maximum output
- CENTATEQ N-500: Nesting machine with roller conveyor
- STORETEQ S-200: The aforementioned machines are networked with this intelligent horizontal storage system (with flexible ST71 universal suction traverse). Thus, the storage system delivers the ultimate in flexibility
- DRILLTEQ D-500: CNC drilling and dowel inserting machine with intelliGuide operator assistance system

CONCEPT 4: THE "AUTONOMOUS CELL" (FLEXIBLY NETWORKED STAND-ALONE MACHINES WITH TRANSBOT)

If you have not yet seen them live, then now is your chance! The "autonomous cell" is live in action in Schopfloch. It comprises two self-contained already

All the concepts have one thing in common:
The integrated labeling of the parts. This part
identification enables clear assignment of
each part while the process is underway. On top of that,
this enables easy re-production of rejected parts.



fully automated cells. These are connected by an automatic guided vehicle (TRANSBOT), which takes 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.

CONCEPT 5: FULLY-AUTOMATED FURNITURE PRODUCTION FOR CHINA

This year, visitors can experience our plant expertise for the furniture industry in the new production halls in Horb am Neckar (near the HOMAG Treff in Schopfloch). A highly-flexible plant will be on display which will be used at a Chinese furniture manufacturer after the Treff.

LIVE CONCEPTS

See these concepts live at the HOMAG Treff in the following locations:

- Concept 1-3: Holzbronn
- Concept 4: Schopfloch
- Concept 5: Horb am Neckar



You can find information on how to find us and about all the HOMAG Treff stations here: www.homag.com/visit-us → tapio partner:

visualAssistant: Mobile Help Directly at the Machine

"You don't have to spend time searching, as the documentation for the machine is already on hand and can be easily accessed by the operator. All information is available at your fingertips. It means virtually error-free work, and it's easy to use."

Michael Zetzsche, Head of Control Development BU Edge HOMAG

Rapid access to machine information directly during production is no longer considered wishful thinking. With the "visualAssistant" assistance system, the machine operator can access all the information about the required machine area with just a tap of the tablet. Thanks to the use of augmented reality, the system is able to identify which unit the operator is at and provide the appropriate documentation. The content is displayed in 3D. The operator can select the relevant content, which is displayed in 3D on the touch screen, and is thereby able to access information and support which can help them resolve issues by themselves.

The benefits:

- · Documentation can be displayed
- Machine identification
- · All data is centrally available via tapio

 Shortens the duration of malfunctions/set-up times, improves workpiece quality and reduces training expenses

Live at the Treff in Schopfloch:

Demo on planing and edge banding machines



→ tapio partner:

qualityGuard basic: Preventative Quality Monitoring on Edge Banding Machines

Workpiece quality is not always consistent. Monitoring this often poses a challenge when it involves large quantities. However, that is about to change, thanks to "qualityGuard basic". This detection system reports workpiece cupping directly to the HOMAG service experts. A message is sent to them as soon as the workpiece quality begins to deteriorate if the cupping tends to get worse from workpiece to workpiece.



If a workpiece is of poor quality, the HOMAG service employee receives an error message before the part reaches the edge banding machine. The system also sends an error message to the machine operator, so the part can



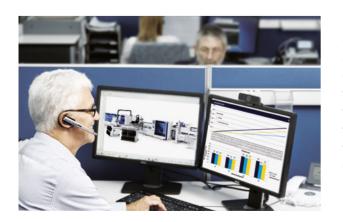
be removed from the production point at this location. This prevents unusable workpieces from being processed, which in turn prevents rejects.

The prerequisites:

- Can be used on edge banding machines in the EDGETEQ series (from performance category S-500 profiLine) with existing HOMAG transport system
- Use of the HOMAG Remote Service (Service Hotline)
- · Connection to the tapio eco system

→ tapio partner:

performanceControl basic: Preventative Monitoring of Your System's Performance



THE BENEFITS

Workpiece quality deviations are promptly

and processing of rejects.

detected. This prevents production interruptions

Do you work with interlinked systems in your production operations and want to ensure that these are operating at full capacity? Then why not let the HOMAG service experts monitor your systems for you? With the basic version of "performanceControl", HOMAG will look after your system and continuously evaluate your data in real time. What does this mean exactly? During production, the system will take measurements to check whether each individual workpiece is in the right place at the right time. If the system detects a deviation, a warning message is sent to our HOMAG service employee. The

benefits: Weaknesses are quickly identified and errors are localized. This means that a drop in performance is promptly detected and countermeasures can be initiated. Defective parts are also reduced to a minimum.

The prerequisites:

- An interlinked system with at least two edge banding machines with powerTouch
- Use of the HOMAG Remote Service (Service Hotline)
- Connection to the tapio eco system

→ tapio partner:

INTELLIDIVIDE

The optimization "Software as a Service"

Many customers know that when it comes to cutting plans, a lot of time is spent manipulating and correcting optimization results in the Work Preparation department. intelliDivide does away with this. Instead, you can use this time for other tasks. How is this possible? intelliDivide is a cloud-based optimization software in the tapio eco system which can be used directly via the Internet. All that is required is online access. There is no need to install any special hardware or software locally.

INTELLIDIVIDE IS FLEXIBLE AND POWERFUL:

Simply upload the cutting data and intelliDivide will automatically get to work on the optimization, whether that be purely in terms of waste, the shortest machine running time or the simplest handling:

The customer decides which optimization result best suits their requirements and starts the cutting process. This works because intelliDivide even automatically transfers the machine configuration, provided that the saw is connected to tapio.

Your benefits:

- You do not need any local hardware or software. intelliDivide works independently of the operating system and on all mobile and stationary devices with interped access.
- You do not need to worry about maintenance or updates
- intelliDivide automatically and simultaneously calculates several alternatives
- The optimization results can be quickly and easily compared
- The costs for intelliDivide are usage-based and precisely calculable





Take a look at the video to see how intelliDivide works: **youtube.de/homaggroup**

WOOD IS DIGITAL

Get more out of production.

Since July, the **tapio** partner community has contained **26 members**, all working with the aim of creating added value for mutual customers through the development of digital solutions.

Our partners: AKE, Barberan, Becker, Benz, Döllken, DÜRR, Festo, Heesemann, Henkel, Hesse Lignal, Hettich, Höcker, HOMAG, Jowat, Lamello, Leuco, Makor, Rehau, Riepe, Schiele, Schmalz, Schneider Electric, SCHULER Consulting, Venjakob, Hans Weber, Werkbliq.

Register at www.tapio.one

If you would like to benefit from solutions with **tapio**, simply begin by registering for the entire company. At www.tapio.one, you can easily create and manage machines, buy, use, and release products for your colleagues. You can find a short guide on our website.

The tapio Shop is growing: More partners and tapio apps

MachineBoard provides an overview of the machine data and status in real time. Through error messages and warnings via push notifications or indicators for remaining process times, this app gives users a full overview of their machinery, wherever they are.

ServiceBoard establishes contact with the manufacturer in a matter of seconds and enables problems to be solved via remote diagnostics using photos and videos. It provides an overview of all service issues to date and helps users to plan upcoming maintenance activities. Online access to the spare parts shop is included.

DataSave saves all important machine data in a secure area so that this can be called up right away if required and the machines can be put quickly back into operation.

tapio partner product: HOMAG intelliDivide. Product time, material yield, parts handling, and logistics: An efficient cut can only be achieved with optimized cutting plans. For HOMAG saws, intelliDivide provides you with the right optimization solution on demand.



"With **tapio**, I can see everything! Whether I'm in the office or using my tablet on the go, I can monitor production times, downtime, and maintenance, right down to open safety doors. The convenience makes my life so much easier. **tapio** saves time as it allows me to optimally plan maintenance activities. If there is a fault, I can detect it right away and quickly let a service employee know. And more effective planning has also resulted in better working relationships." **Thorsten Weiss, Head of Production at Erfi in Freudenstadt, Germany**



us pioneers. Pioneers try to do the impossible. For these new ways of development, you need partners. **tapio** is the long-awaited networking solution –

SMEs." Anton Eberhart, Master Joiner and Production
Foreman in the CNC department at Josef Wochner in
Rosenfeld, Germany





Connect your machine to tapio.

Keeping Orders under Control: Configurator3D

Integrated software solution for furniture configuration

Does your company rely on individual sales? Do you want to make your order management processes more efficient? And do you want to see greater productivity during manufacturing? If so, then Project Manager Rainer Amelong recommends the "Configurator3D" – a highly flexible, graphical furniture configurator.

Mr. Amelong, as Product Manager, you presented the "Configurator3D", a graphical product configurator, for the first time at the start of 2018. Who, in particular, could benefit from taking a closer look at the software?



Amelong: All industrial manufacturers of furniture who have a large variety of versions will certainly benefit from it. Configurator3D is particularly suited to the requirements of kitchen, office, lounge and bathroom furniture. Individual change requests are no longer a problem. There is no limit to the variety of versions and furniture retailers can respond easily and flexibly to special requests, right there and then in the sales talk.

Why should furniture producers opt for the Configurator3D?

Amelong: Flexible furniture and entire installations can be graphically created using the powerful product configurator, on the basis of catalog data from the furniture retailer. No matter whether it's in the studio or online business: you're always on the safe side. The configurator speeds up and simplifies graphical order entry and ensures optimum data quality. Configurator3D also takes care of commercial furniture configuration. So, firstly, all items are recorded, checked and subjected to a plausibility check. Secondly, the configurator also generates technically perfect data for the entire order and production process, including automatic BOM explosion. This ensures optimum data quality thanks to a continuous flow of data from the point of sale to production.

Find out more: www.homag.com/3D-configurator

THE HIGHLIGHTS

- Fast and intuitive: Catalog-based product configuration
- Graphical highlight: Order entry in 3D
- Individual and flexible: Automatic creation of order documents
- Data for the production process with automatic BOM explosion
- Optimum data quality thanks to a continuous flow of data from the point of sale to production

Configurator3D: The end-to-end solution for sales and order entry

PRODUCTION OPTIMIZATION WITH SCHULER CONSULTING

Breathing New Life Into Production

"Do we want to leave existing processes as they are because that is how we have always done things? Or do we want to breath fresh air into production?" This is the question that Schweitzer Project AG asked itself last year. The global shopfitting company, with headquarters in Naturns, Italy, who, by its own account, is considered an innovation leader in its field, then signed up for consulting services from SCHULER. The aim? "Together with the team, to proactively review certain processes in our own production operations in the field of wood and metal, which were perhaps no longer in keeping with the times." explains Manuel Stecher, Head of the Schweitzer factory.

In order to optimize the production processes and partly re-design the production layout, SCHULER Consulting used a range of optimization methods. These included "KAIZEN", "5S", and "7 ways of waste". Thus, KAIZEN cards were introduced, for example, as the measures were rolled out. These show a before/after comparison of the optimizations which were initiated and implemented by the employees themselves. The changes, however, go way beyond the optimization of workstations or transport routes, explains Stecher: "SCHULER did much more than hang up a few pictures. They helped us to anchor the KAIZEN principle in our employees' minds.

All of this only makes sense if it is also sustainable. And it is only sustainable if it reaches our staff members."

The results are clear to see and can be measured, above all, in terms of positive production key figures such as less waste, an increased efficiency rate or optimized quality. "But you can see it too," says Stecher. "You walk through production now and it is tidier, cleaner, and more structured. Everyone has their own (flexible) workstation – you can't help but work more efficiently."

Read the entire article here: www.homag.com/schweitzer-optimization



Notable customers include Edeka (image shows the store in Düsseldorf), Carrefour, Nespresso and Armani

Together with consultants from SCHULER Consulting, Schweitzer has brought its production department up to date



The company from South Tyrol, with 1,000 employees, has a decisive competitive advantage: **The "Consult, Design and Build" concept.** From customer consultations, the store design through to production and assembly, Schweitzer provides everything from a single source – across the entire added value chain.

Surface Expertise Live in Action

Surface CompetenceCenter: Intensive collaboration between HOMAG and IVM Chemicals

In most cases, extensive test runs are required to determine the correct surface technology for high-quality wood surface processing. To do so, HOMAG is now working closely with IVM Chemicals GmbH. In the coating specialist's technical center in Herrenberg, Germany, machines are available the entire year round for test purposes – live in action. Be one of the first visitors to the site and benefit from regular live presentations, which are taking place daily between 9 a.m. and 5 p.m. during the HOMAG Treff.

EVERYTHING UNDER ONE ROOF: SANDING, PRIMING, INTERMEDIATE SANDING, TOP COATING

The IVM Chemicals' technical center offers excellent expert advice on site. Experts from the HOMAG and DÜRR surfaces team, application engineers from Croma Lacke and technical specialists from the IVM Group's research and development laboratories provide comprehensive, professional and personalized advice.

In Herrenberg, application solutions will be presented live with numerous opportunities for users to test combinations of materials, machine technology and processes. One of the machines that will be in use is a machine from the HOMAG SPRAYTEQ S-100 series – one of the most modern spray-coating systems on the market, based on HOMAG's partnership with the renowned brand Makor.

In addition, the advice center is equipped with a HOMAG SANDTEQ W-200 wide-belt sanding machine. Other equipment includes nozzle dryers, UV dryers, roller coating machines and a scraper rolling machine – all from Makor.



More info can be found at: www.homag.com/surface

"In the Surface

CompetenceCenter, you can always find the latest automated developments. With application-oriented live demonstrations of HOMAG coating systems close to our company's site, we are providing the ideal place to get to know the latest technologies."

Josef Zerle, HOMAG Executive Director Surface Processing

CONGRATULATIONS: MAKOR TURNS 50!

With Makor, we have a strong partner at our side in the field of coating flat and tubular workpieces. Working closely together, we develop new solutions for our customers' varied requirements. Congratulations to our partner on 50 successful years!

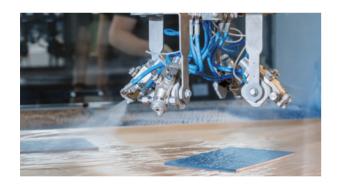
- Founded: 1968
- Machines sold worldwide: 25,000
- Plants installed worldwide: 8,000

An invitation from Makor!

Celebrate with us: Between September 28–29, 2018 in Sinalunga, Siena in Tuscany.

Register online at:

www.makor.it/en/#50years





On the left: Live application process tests show how machines from HOMAG and the specific material components from Croma Lacke can be used to produce high-quality finishes

On the right: Internal training at the IVM Chemicals technical center in Herrenberg, recently equipped with state-of-the-art surface processing technology

LAMTEQ F-200 WITH HANDLING CONCEPT

More Laminating With Less Personnel

More economical and convenient than ever before: The innovative handling concept makes working with a laminating plant a unique experience. The concept means less personnel are required for operation and also removes the need for physically demanding lifting, carrying and flipping of unwieldy panels. This partly-automated handling solution consists of a vacuum-suction traverse at the infeed, an automatic panel turner behind the system and a stack return feed system. All this makes it possible for one person to manage all the workpiece transport. If another colleague applies the coating materials, the laminating plant can be safety and easily operated by just two people. What is more, the optimized parts flow increases the plant's productivity,

since travel paths and manual parts handling is kept to a minimum. This allows operators to concentrate on value-adding activities. In short: More parts laminated with less personnel.

AT A GLANCE

- Quick return on investment
- Economical 2-person operation
- Ergonomic handling protects employees
- Greater productivity thanks to optimized parts flow



HOMAG Is Marking the Occasion with 25 Special Edition Models

Which machines are part of the Edition25 program?
What is all inclusive?

Find everything you need to know here: www.homag.com/edition25

PROMOTIONAL PERIOD JULY 16 – DECEMBER 31, 2018



We have every reason to celebrate: For 25 years, thousands of visitors have flocked to the Black Forest every autumn, and we are proud of what we have achieved here. Having a face-to-face, in-depth conversation with you is the essence of the Treff and is synonymous with success – and for this, we want to say thank you:

By offering over 25 machines with impressive equipment and services at an attractive price.

MORE FUTURE: All Edition25 models are fully digitalized and tapio-ready*. Useful apps such as MachineBoard (5 years) are already included. Use the nearly unlimited performance of our cloud-based software solution to increase machine availability.

MORE TECHNOLOGY: All Edition25 models offer better performance at an attractive price and include comprehensive options. So your investment can raise your production performance to a higher level.

FULL SERVICE: All Edition25 models come with a warranty extension from 12 to 24 months and the additional advantages of the Warranty Plus 24 service package.

*Currently available in the EU and Switzerland

Workshops. Practical Knowledge. Exchange Ideas with Experts.

We have devised practical workshops on the latest topics especially for visitors to the HOMAG Treff. Make use of this opportunity to exchange ideas with your colleagues and HOMAG experts.



- · Digital products for panel dividing technology
- Digitalization: What changes can woodworking shops and SMEs in our industry expect?
- Smart logistics as the key to success

WORKSHOPS IN SCHOPFLOCH:

- Key production figures as the basis for efficient production: What benefit does MMR offer?
- Experience preventative service solutions live in action: 5-axis maintenance, spindle cooling, and intelliAdvice
- Vertical CNC processing: Tips & tricks for everyday CNC use and a glimpse into the digital future
- PUR: A hot topic! Tips & tricks
- woodWOP user meeting: The latest news about woodWOP 7.1 and Industry 4.0 in practice
- Window day: Everything you need to know about window production and the latest trends



The number of places is limited – so register now!

Registration closes on September 15, 2018

www.homag.com/workshops

The self-help tool – preventative solution suggestions with the intelliAdvice app

Using Preventative Service Solutions as an Opportunity

Preventative service is gaining in importance. Our top priority is ensuring both high availability for your machines and low process costs. At the HOMAG Treff, we will also show you the services that you need:

- At an attractive trade fair price: 5-axis-head maintenance and spindle cooling modernization
- XES 200 modernization: The compact, moveable preheating and cleaning station for the order unit
- Preview: intelliServiceNet the cloud-based remote diagnostics solution

- The intelliAdvice service app: "The self-help tool"
- HOMAG Warranty Plus: The all-round worry-free package worldwide and for all series

We cover 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! A central contact number for your service inquiries: +49 7443 13-6000