

Maßarbeit

A magazine for the makers.

By carpenters. For carpenters.

Portrait of Lindinger Holztechnik GmbH.

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Interaction. Made easy.

**ALL MACHINES
IN YOUR POCKET.**
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**THE HOMAG
REPAIR SERVICE.**

**LINDINGER
HOLZTECHNIK**

Thinking out loud.

Special times for all of us.

Even 2021 is still marked by the pandemic—we feel it every day. But even if life is standing still in many ways, we won't let that affect us. We have a HOMAG year full of innovations ahead of us. It starts with our Live.HOMAG event in Horb and Holzbronn. There we will be presenting exciting ideas for your business—in relation to batch size 1, for example, or our new solutions in the area of solid wood. You can find out more in the special supplement on this event that is enclosed in this issue.

The main story in this issue is about the high-tech machine pool of Lindinger Holztechnik GmbH. The carpenters from Germering in Bavaria see themselves as strong suppliers for their colleagues. In this issue you can also read about bespoke cardboard boxes for the workshop, our sorting assistant and the fixed price for the HOMAG repair service.

We hope you enjoy reading the magazine

Karl-Heinz Brauneisen
Sales manager for southern Germany

Thomas Nesemeier
Sales manager for northern Germany

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WOOD IN THE BLOOD

Vera Katharina Zimmermann.

All employees at HOMAG have WOOD IN THE BLOOD. In this section, we present the people who do extraordinary things for you every day. In issue 5, it's the turn of Vera Katharina Zimmermann, product manager for CNC Processing. The literal translation of her last name is "carpenter" so she was almost predestined to have a future with wood.

Name: Vera Katharina Zimmermann

Date of birth: 09/05/1986

Has been working for HOMAG since: 2006

Career overview:

2006–2009	Work-study degree in industrial engineering, HOMAG GmbH, Schopfloch
2009–2011	Marketing and sales, HOMAG GmbH, Singapore
2011–2016	Marketing manager, HOMAG GmbH, Singapore
2016–present	CNC product manager, HOMAG GmbH, Herzebrock-Clarholz
2019–present	Development project manager, HOMAG GmbH, Herzebrock-Clarholz

Why HOMAG?

As you can see from my career overview, HOMAG offers its employees the right bases for growing and developing. And that's also exactly what we offer our customers: from single machines to complete factories or from a cutting assistant to an optimized workshop process—all that makes HOMAG authentic. The human factor also plays an important role—regardless of whether I'm reporting on my time in Schopfloch, Singapore or Herzebrock, the colleagues and the ability to work as a team in the group are unbeatable.

Why wood?

As a naturally sustainable raw material, due to its low thermal conductivity and extreme durability, by its very nature wood is a practical material that is not a drain on resources. Wood is also a living material, with unparalleled aesthetics. When the right process methods are applied, be that machining or shaping, truly marvelous things are created.

Favorite piece made from wood:

My kitchen counter made from solid wood—it attracts a lot of attention!



She's got CNC under control: Vera Katharina Zimmermann

NEWS

SOLID WOOD

Solutions for the entire process chain.

Together with the Danish system specialist in solid wood **System TM** and the expert for production systems for timber house construction **WEINMANN, HOMAG** offers integrated solutions in the field of solid wood. From optimizing the wood to the finished wall, we deliver everything from one source for businesses that already specialize or want to specialize in timber construction elements.



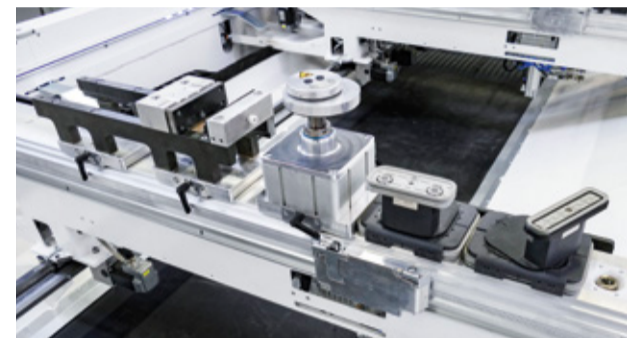
CUTTING-EDGE INNOVATION

Manual or automatic console table? Both.

The A-Flex table combines flexibility and comfort.

Decisions are particularly hard to make when one method excludes the other. Until recently, this was the case for CNC console machines: the customer had to choose between a console table that had to be set up manually and an table that could be moved automatically. One was extremely flexible, the other was extremely comfortable.

The A-Flex table from HOMAG now combines all of the benefits in one solution—the user simply places the clamping equipment at any point on the console. The PC87 control system then positions the suction units fully automatically: the machine operator activates the program and setup takes place automatically without the operator having to intervene any further. Once the setup process has been completed, the workpiece can be clamped and processing can start. For small businesses in particular, which produce individual items or small series, the new CNC console machine can become an all-purpose weapon that optimizes setup times.



Register now.



CUTTING-EDGE MACHINING

LIVE.HOMAG

Personal exchange. Made easy.

From **May 10** to **June 10**, you can find out everything about our solutions first hand— at Live.HOMAG in Horb am Neckar and Holzbronn. There we have set up networked machines and plant for you that our experts would be happy to present to you in more detail in a personal conversation. The most important thing first: you can take part comfortably, easily and safely from your office, workshop or home. All further information you need can be found in the special supplement in this issue and at Live.HOMAG.com.



Bespoke cardboard boxes for the workshop.

PAQTEQ C-250:
A lot of protection.
Little space required.

Every workpiece involves dedication and craftsmanship. That's why all products deserve the optimum protection— ideally, mass produced. This is where the PAQTEQ C-250 comes into play: at a narrow width of 1500 mm or 2500 mm, the cardboard box cutting machine fits in any workshop. Carpenters and joiners use it to produce exactly the packaging they need—in optimized form and at minimal unit costs. This radically simplifies the packaging process. The reason for this is that the cardboard cutting machine processes fanfold corrugated cardboard into precisely dimensioned cardboard boxes fully automatically. In the PAQTEQ Shop,



the user can choose between various packaging designs and individual service solutions. This allows even small business to save costs and material. And at the same time, they can reflect their own quality demands to the outside world with highly professional packaging.

Find out more at magazine.homag.com

CUTTING-EDGE MACHINING

Absolutely precise edges.

The MN11 multi-scraper for the EDGETEQ S-500.



With two separate profile cutters, the **MN11 multi-scraper** ensures maximum flexibility in the profile selection. The cutter is changed automatically— just like the edge thickness adjustment and the height adjustment via the tracer rollers. Chamfers and radii are drawn off the trimmed plastic edges with consistent precision— corrections within a range of 0.01 mm are also possible. And the process is also very comfortable: thanks to a pneumatic chip remover and suction box for the plastic chips that are removed.



Lindinger Holztechnik GmbH, Germering

By carpenters. For carpenters.

Portrait of Lindinger Holztechnik GmbH.

Germering is just outside Munich, the freeway is just a stone's throw away. In all other aspects the town is rather tranquil. However, since 2017, the town has a new attraction: an impressive wooden hall, situated directly at the entrance to the town. The hall houses a carpentry business, a startup, a high-tech company, an internationally active supplier and a service business. But the commercial register contains not five companies located at Augsburgstrasse 3 but just one: Lindinger Holztechnik GmbH.

From a classic carpentry to a partner for classic carpentries.

The business has been located in Germering since time immemorial. The story started in Salzstrasse, in the middle of the residential area. At some point, however, the space became too small for the machines, the orders and above all, the goals. Even raising the roof can't change that. Therefore, the construction of the new hall starts in 2016—an enormous project, some locals describe it as a suicide mission. The hall is too big, and probably too expensive, and some think Ludwig Lindinger is simply mad. And what can we say: maybe Ludwig Lindinger is a little bit mad, but just in a decidedly positive way. With a committed team, a clear vision and a hefty portion of courage, he has made Lindinger Holztechnik what it is today: a highly automated high-tech carpentry that supplies its partners with the highest quality at the highest speed—but still remains down to earth. Regardless of whether customers want trimming services, serial products from batch size 1 or complex furnishing, furniture, trade fair or store construction projects—Lindinger supports small and large carpentry businesses as a 100% supplier from CAD planning to cabinet production. To do this, the company needs the right machines, processes and software. And here, even though it sounds almost too kitschy for him, "only the best is good enough" for Ludwig Lindinger. This is because when

other carpenters come to him, they want first-class goods that they can set up at their customers without any problems. Ultimately, the master carpenter is responsible for their good reputation.



Inspiration: LIGNA.

Perfection: Lindinger.

To meet these demands, Ludwig Lindinger uses HOMAG. Even in Salzstrasse the company uses machines from the global market leader. According to Karl-Heinz Brauneisen, HOMAG sales manager for the southern region, the proprietor shows his courage again for the new hall—in three different ways all at once: courage for innovation, automation and for the performance class. The machines used at

„Durability, dimensional accuracy, productivity, flexibility and resilience were the reasons for the maximum performance class. When we do something, we do it wisely.“

Ludwig Lindinger, master carpenter and proprietor

the company in Germering are not exactly typical of those for a business employing fifteen people. The same is true of the level of automation. Inspired by a HOMAG concept at LIGNA, together with the experts from Denkendorf, Ludwig Lindinger worked out a concept that is unique in this form: the customer makes a call, programming specialist and master carpenter Florian Seeholzer designs the jobs in the work preparation process and then everything happens very quickly. All data goes to production fully automatically. The next day, the workpiece is finished and ready for



Always at full speed: the edge.

Top left: Mature wood kitchen from Lindinger Holztechnik GmbH.
Top right: The journeymen at work.
Bottom left: Ludwig Lindinger in his element.
Bottom right: Trainee Niklas Gulder on the CNC.

collection. There are therefore almost no warehouse stocks. According to Ludwig Lindinger, the trick is to have "an empty hall but full order books." However, this requires the right software. For the proprietor, the software is the "fuel for the machine." Therefore, in addition to Cut Rite, woodWOP and woodFlex, he also uses ControllerMES. The production progress, utilization and machine status can therefore all be viewed in real time. However, the production didn't always run as smoothly as it does today.

All she needs is a rough outline—nothing more.

On Instagram, for example, you can get a good impression of the business and its services. One thing quickly becomes clear: even though the

“As we see it, the technology that we have is what the other carpenters have as well. We are the extended workbench—uncomplicated with no bureaucracy.”

Ludwig Lindinger, master carpenter and proprietor

2017: Every beginning is hard.

A plant of this size rarely works perfectly the first day. So it was to be expected that the unique concept meant everything would take longer. And it is actually a real challenge for everyone involved. The period is marked by lots of telephone calls and weekend work. "But the team from Lindinger always kept going," says Karl-Heinz Brauneisen. The innovative project is also very dear to the HOMAG management: which is why Dr. Markus Vöge, EVP Sales & Marketing HOMAG Group, and Ludwig Lindinger meet in the new hall. After some good conversations, the partners take their leave of one another feeling reassured that the plant will work smoothly. And it does. With tenacity and a high level of commitment, the partners complete the project together. Since 2018 the machines have been working at full speed. But, as Ludwig Lindinger knows, "a machine is only as good as the person operating it." If you don't have good people, having the best machines means nothing. And Ludwig Lindinger does have good people around him. He knows that, and he's visibly proud of it. A lot of people have been with him for years and practice the family-oriented corporate culture just like the boss himself. He has to almost force the edge expert to take vacation; on the way to the machine the trainee disposes of some chips; and in the lunch break, everyone cooks some German currywurst together. A lot of small details that make the business what it is overall. At this point, we must also mention Michaela Scheel. The commercial manager is not just the good soul of the company, she's also very handy with social media.

machine pool is high-tech, it is real carpenters that work here, carpenters who have wood in their blood. Superb kitchens made from matured wood, unique items of furniture or complete furnishings—at Lindinger, carpenters get top quality at dizzying speeds. Lindinger Holztechnik GmbH therefore provides vital support for many colleagues, regardless of whether they want to extend their capacities or use the highly efficient high-tech production. An edge example: in addition to the PUR process, with the laserTec edge processing, Lindinger provides highly accurate zero joints that ensure a significantly more homogeneous look and greater durability. And because Ludwig Lindinger has been passionate about CNC for more than 20 years, the latest technology is also used there. This is the case for every one of the networked work processes: contractual trimming, CAD design, cutting, surface handling. Always the latest technology for its partners—right up to shipping. However, the best thing for potential partners is that a rough outline is all that is needed in most cases. Everything else is clarified and set underway in a joint discussion and in the design. Speaking of getting things underway: together with Karl-Heinz Brauneisen, Ludwig Lindinger is already planning to extend the machine pool with an automatic throughfeed drilling machine with an integrated high-bay warehouse—to make things even more efficient. Standstill is obviously a foreign word for Ludwig Lindinger.

LINDINGER HOLZTECHNIK

- Products:** Supplier for carpenters, furnishers, trade fair and store construction
- Location:** Germering, Germany
- Founded:** 2012
- Employees:** 15
- First HOMAG machine:** 2006 (old business)



Lindinger
Holztechnik GmbH

Little helpers. Big effect.

Automated support for woodworking shops: TRANSBOT and FEEDBOT.



The benefits of the TRANSBOT at a glance:

- **Less time spent searching and collecting:** Benefit from demand-based material provision, significantly reduced errors and lower quality costs
- **No modification necessary:** You can change the order of processing or buy new machines—your TRANSBOT solution adapts itself in a way that saves space
- **No bruises:** TRANSBOT scans the surrounding area continuously to protect people and to approach buffer, feed and stacking positions
- **Intelligent fleet management:** Regardless of whether it's status messages or error messages, the order of transport jobs or energy management—everything takes place clearly and automatically

Some carpenters and joiners think that robots are only for industry. To some degree that's true, but there are also solutions that are attractive for woodworking shops. It's never a matter of replacing qualified workers. Instead, it's a case of relieving these workers of non-productive work so that they can concentrate better on the activities that create value—and that ultimately, are more fun. Therefore, at HOMAG, we have developed robot systems that make life easier for carpenters and joiners and increase the efficiency of employees.

TRANSBOT S-100:

The driverless transport system

Who doesn't know the tedium of going back and forth at work, moving workpieces from A to B. With its easy integration in the existing production process, the space-saving TRANSBOT is an impressive practical alternative to conventional conveying technology and physical labor. The robot moves freely around without rails and thus connects machines and workstations with one another.

FEEDBOT D-300:

The handling system for CNC processing centers

Manual feeding and destacking are often not only time-consuming, they are also poisonous for the movement apparatus. The ergonomic solution goes by the name of FEEDBOT. The robot system turns every CNC into a high-performance center with almost 100% availability, high repetition precision and highly accurate workpiece handling—thanks to automatic feeding and destacking.

The benefits of the FEEDBOT at a glance:

- **Complete workpiece handling:** A wide variety of tier patterns and positions, fast alignment and turning, large assortment of workpieces and materials—and all with fast changeover times and quiet handling
- **Less backache:** Relieve the physical burden on your employees with ergonomic parts handling
- **Efficient use of personnel:** Your employees can perform efficient, demanding and value-creating activities
- **Greater value creation:** Your FEEDBOT minimizes downtimes—to the equal delight of the accountant and the master carpenter
- **Simple control:** You control the robot system easily via the CNC controller

All machines in your pocket.

Production performance constantly in view: productionAnalyzer.



For many production managers, it's not easy to get really substantive production data. An overview of different key figures for the machines in the business could increase the efficiency significantly. This is exactly what the productionAnalyzer from HOMAG can do: clear graphics present key figures as well as the part performance and the status of the machines. Selecting different evaluation periods allows you to recognize trends, uncover improvement potential and derive measures—all in real time. This will allow you to get more out of your production in the future.

The benefits at a glance:

- **Always up to date:** Regardless of whether you're in the office, at home or visiting a customer—you always have an overview of your machine performance
- **Discover and use potential:** Opportunities for improvement are revealed by relevant key figures and evaluations
- **Easy connection:** Simply display all compatible HOMAG machines in the app
- **Clear and transparent:** Various diagrams and periods provide clarity in production



WOOD WITH A FUTURE

A tidy house, a tidy mind.

The sorting assistant in the workshop: Sorting Production Set.

Knowing at all times which furniture parts have been fully processed and are ready for assembly, packaging or further processing: that is the ideal state and often just a pipe dream. The Sorting Production Set turns this dream into an everyday reality—this is the case, for example, for master carpenter Mario Esch in Murrhardt.

On his right hand he wears a glove that he uses literally to quickly scan workpieces and sort them into the sorting rack. He built the rack according to the construction diagram provided, released the apps and set up his CAD/CAM system in such a way that it transfers the parts lists directly to the digital job folder (a web application called productionManager) via the XML interface. He didn't have to worry about installations, the data structure and computing capacities—HOMAG organizes that in real time.



The benefits at a glance:

- **Complete overview:** Sort your parts by job and thereby always have an overview of the respective status
- **Intelligent aid:** The app notes the position of the job item in the rack and suggests this to the operator for the next relevant part
- **Searching is a thing of the past:** The simple organization in the rack means that there is no more cumbersome and time-consuming searching for parts
- **Save time:** All parts for assembly are on site and at the same time, the digital job folder provides all the information
- **One set for everything:** Two apps (the digital job folder "productionManager" and "productionAssist Sorting"), one construction diagram for the sorting rack, two LED strips and the HOMAG CUBE as an intelligent control box

Report based on the article "Master of the workpieces" by Georg Molinski, which appeared in the trade magazine DDS, issue 11/2020



Sorting
Production Set

"A lot of the work runs just like I imagined it would. We now finally have an overview and we are digitalized consistently and completely from dimension through to assembly. Searching, counting, searching again and hoping that the batch is complete now all belong in the past." Mario Esch, proprietor of Schreinerei Esch

REAL-LIFE EXAMPLE

Fewer stacks. More time. More cutting.

The innovative destacking optimization: intelliOptimizer Stacking.

"Using intelliOptimizer Stacking means that the intervals between the stack changes have increased by around 30%. The pallets are now packed much higher and are more stable."

Christian Kalbe, Theodor Schönefeldt GmbH



intelliOptimizer Stacking



An increasing number of businesses are using automated processes in their workshop—for example, with the SAWTEQ B-300/B-400 flexTec robot saw. As part of this change, the carpenters and joiners always ask themselves the same questions: how can I make better use of the unique machine concept and the stacking positions? How can I use my workforce to create more value and simultaneously increase productivity? The answer: with optimized destacking. And this is what intelliOptimizer Stacking does. In the work preparation process, the tool ensures that the cutting patterns are resorted in such a way that up to 20% fewer stacks are created. The user then simply transfers the results directly to the saw.

By the way: there is also a maximum performance option to allow production peaks or series jobs to be processed more quickly.

The benefits at a glance:

- **Up to 20% fewer stacks:** Benefit from fewer stack changes, smaller space requirements and lower procurement costs
- **Longer intervals:** The operator can use the time gained to perform activities that create value
- **Increased cutting:** Less idle time means more parts calculated across the whole day
- **Flexible control:** Use the tool directly after Cut Rite or integrated in intelliDivide Cutting Premium

ROOT KNOWLEDGE

Fast and reliable support

The HOMAG repair service is here for you.



The benefits at a glance:

- **You can be confident:** There is a 12-month warranty on our repairs—at manufacturer quality
- **Is it urgent? No problem:** Simply opt for the express repair
- **We repair almost anything:** Our repair offer also includes many older assemblies and components

NEW additional services:

- **Glue application unit:** Complete cleaning service of your existing application unit
- **CNC spindles:** Short downtimes due to immediately available replacement units for your CNC spindles

HOMAG machines are built with the aim of providing high performance. To ensure their availability and the high quality of your products in this process, our repair service is working at full swing: from the cleaning and maintenance of your glue application unit, through the repair of selected electronic components up to servicing your CNC units—always with a warranty from the manufacturer.

Use our professional repair service to secure the availability of your machine. Our experts combine several decades of experience with the use of high-quality tools and state-of-the-art measuring methods. Feel free to contact us—we are happy to help.

OUR SERVICES:

GLUE APPLICATION UNIT: We offer you immediate delivery of a replacement unit, or provide extensive maintenance on your current unit. The maintenance includes: disassembly and cleaning of the entire glue application unit and the preventive replacement of all wearing parts.

ELECTRONIC COMPONENTS: In our eShop you will find an extensive repair offer for more than 300 electronic components—also available for many older assemblies and components.

CNC UNITS: With our repair service, we will repair your BENZ CNC unit at a cost-effective fixed price within 48 hours.

ROOT KNOWLEDGE

Machine technology and financing from a single source.



HOMAG Finance: The partner for stress-free financing.

In a history stretching over more than 100 years, the family-owned company STARKE Objekteinrichtungen GmbH has become one of the leading furnishers in Europe—with high quality, first-class service and a feel for individual customer wishes. The company from Saxony is not easily surpassed when it comes to the planning, manufacture and assembly of micro-apartments, kitchens and health care facilities. What is clear is that the latest machine technology is required to do this.

„We found exactly the right model. And with the financing via HOMAG Finance, we are getting everything from one source. The approval and execution process was very simple and the communication was really target-oriented. This saved us time-consuming discussions with banks.”

Katja Gerstenberg, managing director of STARKE Objekteinrichtungen GmbH

This is why last year, the company decided to invest in an individually planned robot system from HOMAG—including a matching financing model. Thanks to the many years of collaboration with leading finance institutes such as Deutsche Leasing, HOMAG Finance can offer its customers attractive financing packages that are above all impressive in terms of speed, flexibility and machine knowledge. Our experts monitor the entire process from the order of the machine to delivery and acceptance. In the case of STARKE, the result was a structured financing consisting of hire purchase and KfW subsidies. This combination is rather unusual at this level of financing, as many banks offer these modules only for much higher sums. Here, HOMAG Finance benefits from partnerships that have grown with established companies such as Deutsche Leasing and modular standard components. This means that even medium-sized businesses get the financing concept that is right for them.

The benefits at a glance:

- **Direct line:** Simply ask your HOMAG contact person, they will initiate a discussion with our financing experts
- **Everything from one source:** Benefit from the dual expertise in machine technology and financing
- **Personal contact:** You will be advised and supported through the entire process
- **Stress-free, uncomplicated and quick:** In just a few days you will have your individual offer, HOMAG Finance does everything else
- **Worldwide experience:** In collaboration with leading finance institutes, HOMAG Finance also takes care of international export financing

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**HOMAG Finance explained easily—
in less than three minutes**

