



Growing with the HOMAG Group



Milano, 24.-28. May
Hall 3

Growing with the HOMAG Group

There when you need us!

What starts with a compact workshop can evolve into a solution for the industrial entry level sector. Discover surprising ways to achieve modular expansion of your production and respond flexibly to new requirements. Make your ideas reality – with individual solutions from the HOMAG Group.



ERBA

“Consistent investment in the future”

Those responsible at ERBA have demonstrated courage and foresight. This is not the first time in its history that the furniture producer based to the north of Milan has responded to market change at the right time with investment and restructuring. The last major investment was a batch size 1 plant for everything from cutting through to packaging. This allowed ERBA to significantly increase turnover and reduce inventories while maintaining the same workforce.

When the company was founded in 1956 as a joinery and manufactured inlay work to order, nobody could have guessed that by 1975 it would be supplying its own furniture range. Ten years later, ERBA had become established as a leading manufacturer of furniture aimed at young people. Nothing has changed to this day – partially because ERBA has always kept abreast of the latest machine technology.

... More on page 4.



“What mattered to us was to develop a fully automatic production plant allowing economical manufacture of furniture parts down to batch size 1.”
Director Alessandro Erba

XYLEXPO highlights at a glance



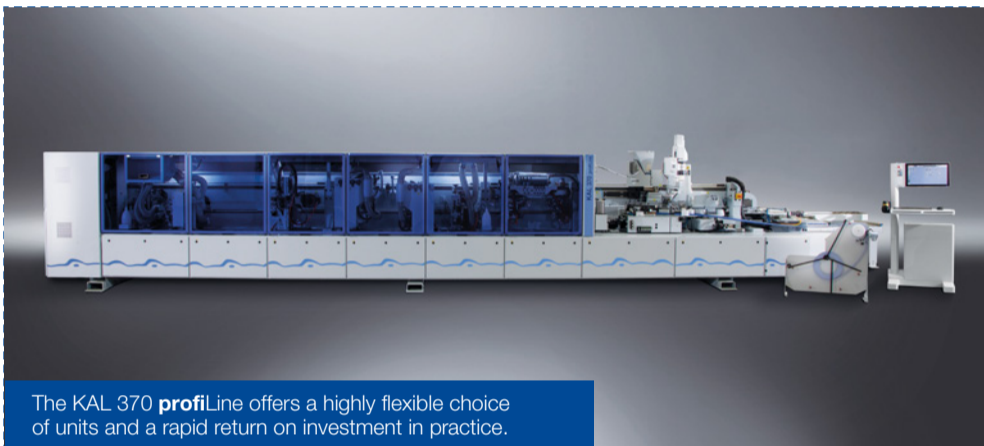
- **Freestyle 5-axis technology** for entry into the world of CNC processing
- **Individual and economical edge banding** – from small to large
- **Automation solution** with the saw-storage combination
- **Individual packaging** with cardboard-box cutting machine and 3D volume scanner
- **Digitalization and Industry 4.0 in Italy:** The Battistella Company project
- **NEW: woodFLEX cell control system**
- **ERBA:** Consistent investment in the future with new batch size 1 plant
- **The „Networked Production“ and „Industry 4.0“:** Getting started in three steps
- **Simple and rapid help with the ServiceBoard:** Live at the fair



All the highlights are described at homag-group.com/xylexpo

WEEKE CNC technology Freestyle-5-Axis-Technology

Compact technology and machine-oriented 360° handling – the basis for this innovative CNC machine concept. The new safety technology makes this processing center freely accessible from all sides. The Venture 115 5-axis machine exhibited at the XYLEXPO is only one of nine possible configurations for this series. 3, 4 and 5-axis solutions are available for entry into CNC processing. The machine can be commissioned within a single day, requires an up to 15% smaller footprint and offers the right performance categories to address every requirement. In combination with woodWOP 7, the new Venture 115 permits simple entry into the world of 3D programming.



The KAL 370 profiLine offers a highly flexible choice of units and a rapid return on investment in practice.

Edge processing

KAL 370 profiLine: Individual and impressively economical

The performance and equipment of KAL 370 profiLine edge banders can be freely configured. The machines address the growing demands of the market, which are forcing furniture manufacturers to deal with a growing variety of materials. The profiLine edge banders are suitable for processing all kinds of edges such as solid wood, coil and strip materials, melamine, PVC, ABS, aluminum, acrylic and veneer. The diversity of the series is clearly demonstrated at the XYLEXPO: The exhibited machine is equipped with the latest high-end processing unit technology. The result: Top processing and edge quality with impressive results in terms of economy. The modular series offers feed rates of 20, 25 and 30 m/min, and also benefits from a rugged design – as well as a rapid return on investment in practice.

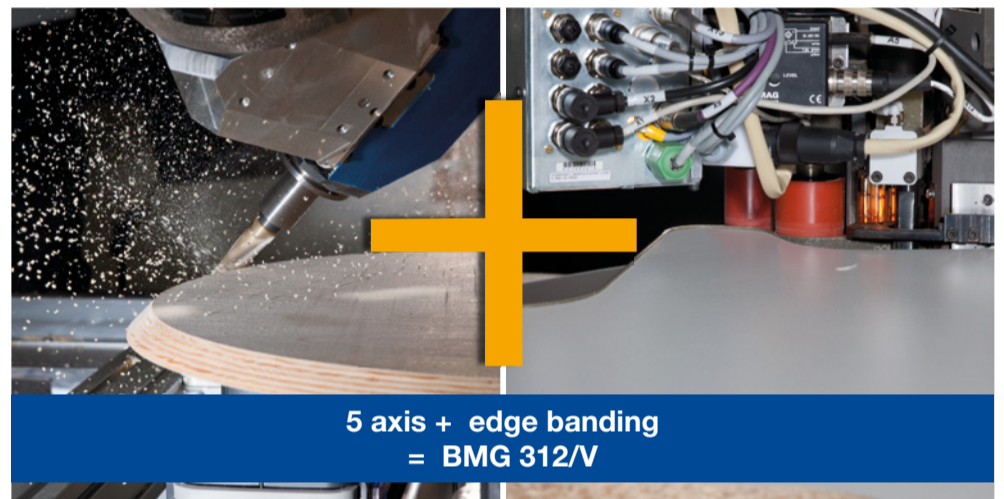


The Highflex 1440 is ideally suited for processing workpieces with sensitive surfaces.

Highflex 1440: Perfect handling with V-belt top pressure

Like all the machines in this series, the Highflex 1440 is highly automated even in the standard version, guaranteeing rapid resetting scope and high reproduction accuracy. For continuous production and optimum glue quality, a quickmelt gluing section is available.

A new feature for the machine: V-belt top pressure for optimum workpiece transport through the machine. The belt ensures full surface contact pressure and is ideally suited for processing workpieces with sensitive surfaces. The belt is a totally new feature in this performance category.



5 axis + edge banding
= BMG 312/V

HOMAG CNC technology

5-axis processing or edge banding? Both!

There is also a new member of the Venture BMG 300 processing center family. For woodworking shops and suppliers, the question of whether to opt for 5-axis technology or an edge banding machine for shaped components no longer arises. The new BMG 312/V links both technologies in a single machine.



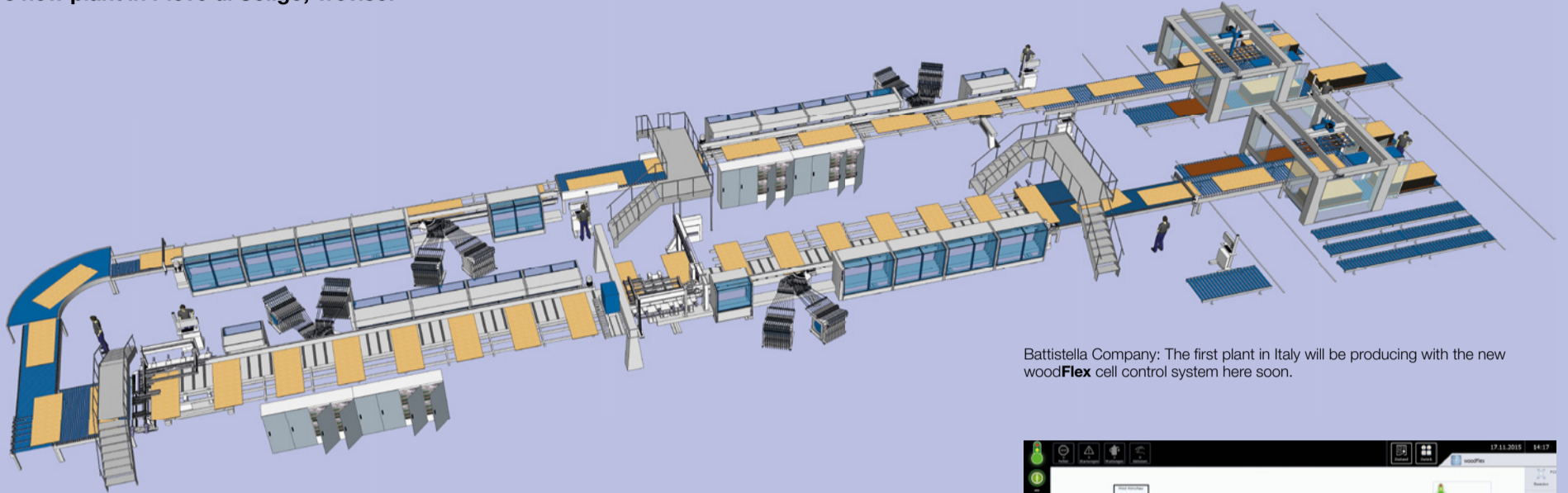
HOMAG Automation

Every packaging as a custom-made suit

High-grade fronts, single components or ready assembled furniture – everything should arrive at the customer as it left the factory. This is easily possible with the cardboard-box cutting machine VKS 250 – in batch size 1, to precisely the right shape, with a high degree of volume utilization and minimal piece costs. The 3D-volume scanner supplies the dimensions for each individual packaging unit. No matter what the scanned object – the length, width and height are measured just-in-time. The data is then transferred to the VKS 250, which instantaneously begins the automatic cutting process.

Hot topic in Italy: Digitalization and networking

The HOMAG Group is already fulfilling many of the criteria for the “Industry 4.0” vision. The HOMAG Group’s furniture producing customers have already implemented wide-ranging concepts for “networked production” over recent years. Furniture producers are already manufacturing millions of furniture variants on completely networked, highly flexible batch size 1 plants – with minimized delivery times. Looking into the future, the degree of networking is set to increase until the “Industry 4.0” vision becomes a reality. All HOMAG Group companies are working closely with partners, suppliers and customers toward this goal. At the XYLEXPO, the experts from HOMAG Systems will be demonstrating concrete examples of implemented plant concepts from Italy – for instance the Battistella Company’s new plant in Pieve di Soligo, Treviso.



Battistella Company: The first plant in Italy will be producing with the new woodFlex cell control system here soon.

Battistella Company: High-grade furniture in batch size 1

The new cell for four-sided edge banding is used to produce small series and batch size 1 furniture parts at the Group’s own supplier company Baco SRL. The production line measuring over 100 meters in length will be seamlessly integrated by the HOMAG Systems experts into the existing production with several cutting plants from HOLZMA and HOMAG Automation and a drilling line from WEEKE.

The edging cell comes with a high-tech equipment outfit in terms of machine technology – including data transfer, edge preview and an overview for the return of produced stacks. woodFlex takes control of the complete cell – in Italy, this is the first plant to be equipped with the new cell control system.

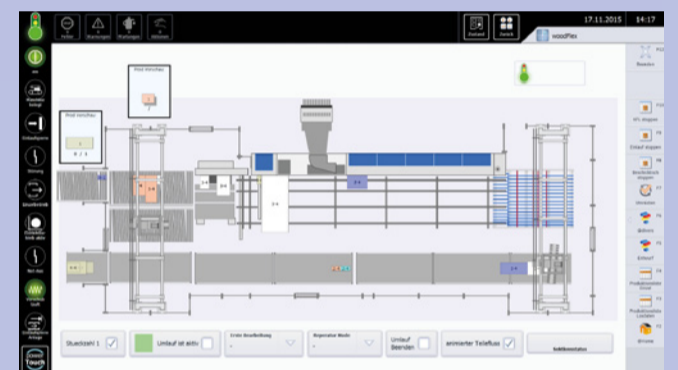
XYLEXPO visitors will be able to view this project as a multimedia experience – combined with additional concrete projects which have been implemented not only

in Italy but internationally.

For more details, go to homag-group.com/xylexpo and visit the HOMAG Group booth.

- How does a plant come into being in cooperation with the user and the experts from HOMAG Systems?
- How is the plant concept created?
- How is it possible to ensure consistency, efficiency and the required standard of quality of products in advance?

All these questions will be answered by the plant specialists at the XYLEXPO. The experts from HOMAG Systems look forward to welcoming you!



Control of the edge processing line is taken care of by woodFlex. The software provides a complete overall view about the production.

NEW: woodFLEX cell control system

Control and visualization of flexible production cells and their part flow

woodFlex ensures:

- Control of smart, networked machines
- Absolute transparency across the whole plant, in every cell and section such as the transport unit, edge cell and so on
- Simple analysis and optimization of the production sequence
- Clear productivity increase due to optimum calculation of the minimum part spacing or faster elimination of disruptions
- Continuous monitoring of the plant status – significantly speeding up the process of remedying errors (e.g. in case of a power failure)
- Visualization of the part flow in real time for complete transparency (allowing faults to be far more simply and quickly remedied)
- Continuous feedback of workpiece production – with immediate indication of order completion progress and whether additional workpieces need to be produced

The control system is modular in structure and standardized for all the HOMAG Group plants – making it open for future requirements or extensions, particularly for the production of complex and completely networked plants.

woodFlex engenders security for the user, creates process transparency and reduces the defect quota. It is not to be confused with planning software: it optimizes sequences, ensures a certain standard – even when working with different cells – and significantly enhances efficiency. With woodFlex, the user is making another decisive step towards the future with “Industry 4.0”.



HOLZMA and HOMAG Automation Saw and storage system solutions are the way forward

Faster sequences, less waste, improved ergonomics: HOLZMA and HOMAG Automation will be demonstrating these benefits at XYLEXPO with a combo of panel dividing saw HPP 300 profilLine and horizontal storage system TLF 211. The precisely coordinated software guarantees smooth, ultra-efficient production even with batch size 1 production.

The special feature of the TLF 211: For the very first time in Milan, panels with structured surface are run through a horizontal storage system. Normally, the structured surface makes it impossible to build up a continuous vacuum for panel transport. But the engineering team of the handling specialist has found a way.



Experience the ServiceBoard live at the XYLEXPO

LifeCycleService

Simple, rapid help with the ServiceBoard

The ServiceBoard has proven a great success: Today, users can transmit an active service issue **live to the ServiceCenter** with an iPad using the video diagnostic function. This allows the ServiceCenter team to provide immediate information remotely to any location – such as instructions, videos, pictures or drawings. In many cases, users can remedy the fault straight away. The ServiceBoard offers direct access to the **spare parts shop eParts** or enables online servicing request to be made and followed up by the customer.

The benefits:

- Faster communication through live transmission
- Fast defect identification and remedy
- Simple compilation and optimum management of service requests
- Direct display of the right service information
- Can be used for all HOMAG Group machines

“Networked production” and “Industry 4.0”: Getting started in three steps

Niklas Kögel
HOMAG Systems
Head of Software Sales



Digitalization and networking of production beyond company and national boundaries – this is the core of the “Industry 4.0 vision”. The aim is for widely diverse units within the company to communicate with each other and even organize themselves. At the same time, machines operating today within a completely networked production set-up already “know” which component is currently needed, how it has to be processed and where storage bottlenecks exist. But what does all this mean for woodworking shops? We asked our expert Niklas Kögel.

What does a woodworking shop need to do if it wants to network its operations and what are the benefits?

Kögel: Entry into “networked production” can be subdivided into three stages for woodworking shops.

Stage 1:

Networking the office and production

First a suitable infrastructure has to be created in the company. This entails **integrating all the machines into the network**, shifting tasks from the workshop to the office (such as CNC programming) or **organizing the data storage centrally**. Another important factor is the use of **labels with barcodes** for the unambiguous identification of workpieces so they can be assigned to production data and processes.

The benefits:

If CNC programming is transposed to the office, **capacity** at the machine is **increased**. Networking the office and production simplifies other work processes too. CNC programs can be stored centrally on the server – meaning that new programs or updates are automatically available to all the machines. By using a label with barcode, the programs can be automatically loaded into the machine and other **work steps** such as assembly or order picking **are simplified**.

Stage 2:

Automated data generation – vertical networking

Here, the focus is on the optimization of IT processes during preparation for production. The question here is: “How do I translate a customer requirement into production data?” This is achieved by for instance using a **CAD/CAM system** – such as woodCAD|CAM from HOMAG eSOLUTION.

The benefits:

With the woodWOP Tools “Project Manager” and “DXF-Import professional”, the **programming work** required can be significantly **reduced**. Use of a CAD/CAM system makes for more efficient **production engineering and reduces** the need for **manual work steps**. In addition, the **throughput times** in production **are reduced**, as complete production information – such as cutting list, label, CNC programs, drawings – are available for all elements being produced. This helps avoid errors and unnecessary raising of queries.

Stage 3:

Optimization of production processes – horizontal networking

Over the coming years, production will be organized increasingly on a software-supported basis: From production and capacity planning through part and order tracking to the organization of finish processing, order picking and shipping. Here, we offer the **manufacturing execution system** woodFACTORY, which is used particularly by medium-sized businesses.

The benefits:

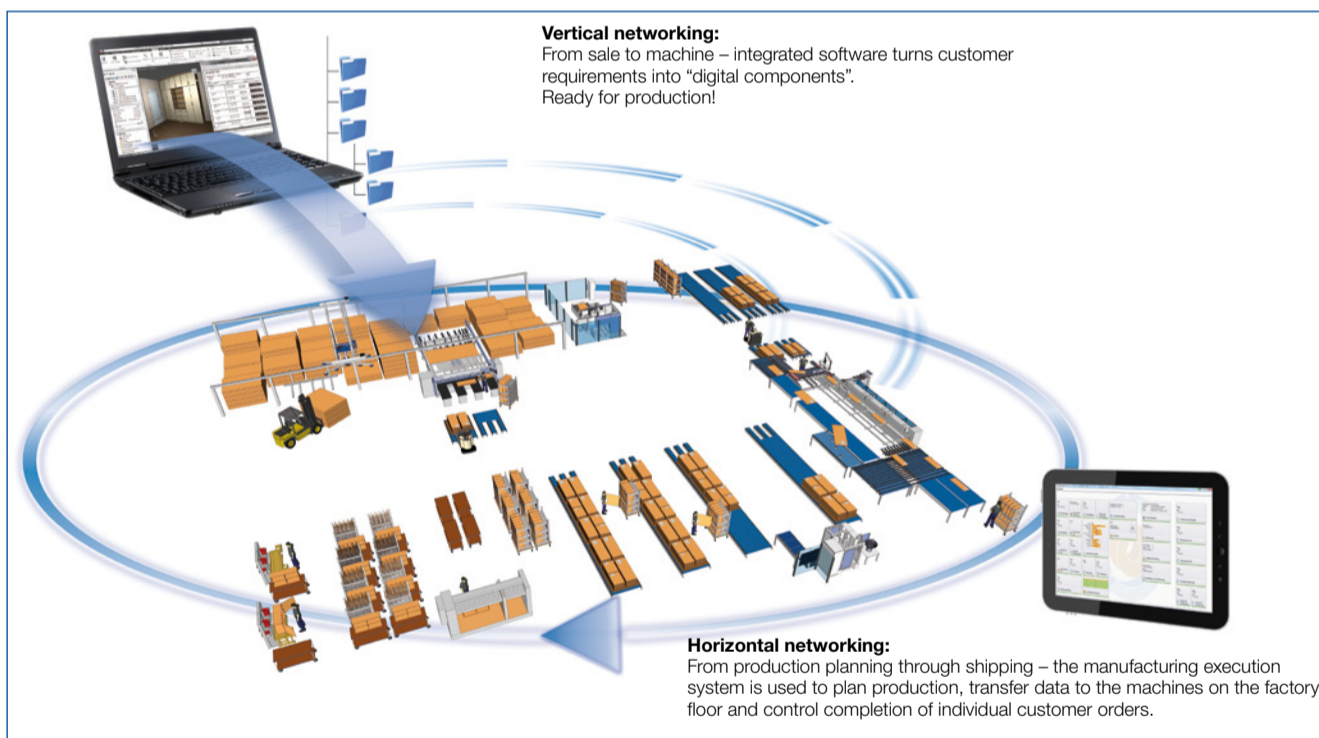
Production becomes more **transparent for the joiner**. Questions such as “do I already have all components ready for order XY?” or “do I have enough capacity to process the order” can always be answered in real time. The component becomes a **“knowledgeable workpiece”** and all the relevant information can be accessed at any time. Every component is ready at the right workplace for processing when it is needed. This supports the joiner in organizing operations such as finish processing or order picking.

Does a networked workshop mean that a joinery needs fewer staff?

Kögel: What is clear is that networking and process automation will change the type of work done by employees. This is both an **opportunity and a challenge** for any operation and for any employee. The human factor is vital.

How does the HOMAG Group support its customers en route to the networked workshop?

Kögel: With intelligent and resource-efficient machines, smart service concepts, software for “networked production” and comprehensive advisory support, we help our customers to create more **intelligent and efficient processes** and to develop their production step by step into what can be termed **“Smart Production”**. Every company is different. Working together with the experts from SCHULER Consulting, we advise and support each one individually – through to implementation and beyond. This makes us successful on a global scale, as the individualization of products and highly flexible production are already reality, particularly in woodworking shops.



... Continued: ERBA

... Because the market no longer required wood and veneer, the company was forced to react, and invested in a machine designed for processing coated panel materials. This turned the situation around for the company. But the interest of its customers was soon diverted once again: to shorter delivery periods. This posed another new challenge for ERBA: Space in the production halls was in short supply, and inventories were growing – not to mention capital tie-up.

“We got in touch with different machine manufacturers and explained our situation”, recalls Alessandro Erba. It soon became clear that a batch size 1 plant was the way forward – but which manufacturer was offering the best concept? “To find this out, my brother Giulio and I visited the machine manufacturers and gained an impression from the practical experience of reference customers”, explains ERBA’s Director.

Finally it was the concept and cost-to-performance ratio of the HOMAG Group that won out. Today, the sizing and edge banding machine KFR 610 **powerLine** forms the nerve center of the entire production. Upstream from this is the cutting

line, after which an identifying label is attached to every part. Subsequently, the cut pieces are fully automatically processed and edged on four sides in the batch size 1 plant. Finally, the finished parts are given their “own” individually tailored cardboard box for their onward journey to the customer. “With the VKS 250 packaging machine from HOMAG Automation, ERBA produces each individual box when it’s required, eliminating the need for a large store for boxes”, explains Roberto Pardini from HOMAG Italia.

For ERBA, setting up an automated batch size 1 production is more than just a smart investment in the future: It can now ramp up the plant’s output without worrying, and with scope for three-shift operation it is ideally fixed to cope with future needs. With these successes behind him, Alessandro Erba aims to place his company in an even better market position and is planning further investment in the future.

Read the complete article in HK 03/16.
The HOMAG Group would like to thank the HK editorial team.



“Our decision proved right. We were able to increase our turnover and cut our inventory by 90 %.”