HC | WEINMANN

Master of beam processing

Our carpentry machines
BEAMTEQ B-520
BEAMTEQ B-560/660



homag.com/weinmann

YOUR SOLUTION

Building living spaces.

From furniture to homes: The future is built with wood.

Together, HOMAG, WEINMANN, SYSTEM TM and KALLESOE provide comprehensive production solutions for manufacturers of optimized timber, engineered wood, timber construction, interior fittings, furniture and more. With over 500 years of combined experience in machinery engineering, automation systems, and software technology, our focus is on building strong partnerships that enhance your productivity, precision, and profitability.

This is how we are Building living spaces. Together, with you.

HOMAG – YOUR SOLUTION

Modular technology for carpenters, module manufacturers and the prefabricated house industry from WEINMANN.

WEINMANN offers everything for timber construction – from machines and production lines to suitable software solutions and consulting as well as life cycle services. We support you right from the start and accompany you through the entire process to find the right solution for your business. Many companies have already found it.

That is our idea of efficiency. This is how we are Building living spaces. Together, with you.

Building living spaces.

Building efficiency.

Timber construction – from A to Z.



BEAMTEQ carpentry machines — Precise, fast and compact

Whether it's carpentry applications, wood frame construction, half-timbered constructions, block house construction or prefabricated house construction — the demands for quality, flexibility and cost-effectiveness are constantly increasing. The carpentry machines in the BEAMTEQ series offer you a wide range of options. The machines do your work at high speed and with a high level of precision, thus significantly increasing your efficiency in production and on the construction site.

YOUR SOLUTION

MORE INFORMATION AVAILABLE AT HOMAG.COM/WEINMANN

CONTENTS

06 Standard feature(s)

10 Machine layout and technical data

14 BEAMTEQ B-520

16 BEAMTEQ B-560

18 BEAMTEQ B-660

20 Options

22 Handling and storage systems

24 Software

26 Life Cycle Services

The right solution for every requirement

From fast cutting to complex beam processing, the BEAMTEQ series offers the right support. Our machines are used in both carpentry work and commercial beam production, and you receive exactly your solution.



Speed in new dimensions

- Maximum performance even in industrial beam processing
- Feed speed up to 150 m/min
- Highly dynamic drives
- Process-optimized workflow
- Multi-channel control
- Highly dynamic tool change technology
- 12-slot tool changer to minimize setup times

Precision to the highest standards

- Consistent high and reproducible quality
- High-resolution positioning system for all axes
- Exact positioning of the component thanks to the NC-controlled gripper system, combined with vertical and horizontal clamps
- High-precision and robust linear guides with a long service life
- Monitoring of all processes
- Quality monitoring according to ISO 9001

Flexibility to meet your needs

- A wide range of processing steps
- Tool changer with up to 12 slots
- Automatic adjustment to different component dimensions
- Manual entry or direct data transfer from CAD
- No set-up times, even for complex processing steps
- All options available for retrofitting thanks to modular system
- Even the shortest parts can be processed

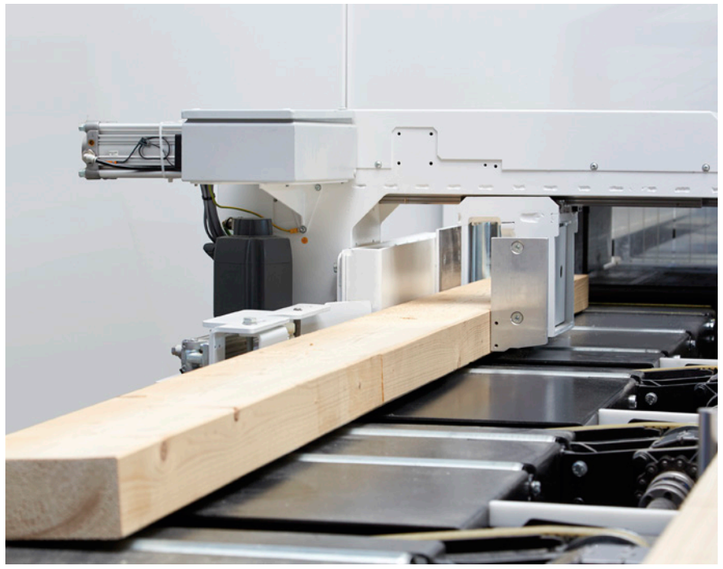
"We were extremely satisfied with the quality of our BEAMTEQ, but we reached the limit in terms of beam processing capacity. That's why we decided to replace it with the BEAMTEQ B-660, which significantly reduces processing times."
Marco Büsing, Büsing Zimmerei GmbH, Barßel



	BEAMTEQ B-520	BEAMTEQ B-560	BEAMTEQ B-660
	Fast and precise cutting	High-performance beam processing	All six sides of a component in a single throughfeed
Cutting capacity	Up to 4,500 running meters per shift in a single piece For multi-layer processing, correspondingly higher capacity		
Beam processing capacity	Up to 800 running meters per shift	Up to 2200 running meters per shift	
Five-axis processing	Yes	Optional	Optional
Processing depth for trimming/drilling	Up to 120 mm	Up to 200 mm	Up to 200 mm

Sophisticated equipment makes everyday work easier

All carpentry machines are already equipped with many useful details as standard, which make your everyday life easier and ensure a consistently high level of quality. See for yourself.



Beam carrier in the feed gripper
The highly dynamic and safe transport of components ensures a high level of accuracy in all processing steps.

- NC-controlled gripper system
- No slipping, since the component is guided in two positions
- Beam pre-storage with safety barrier ensures a high level of occupational safety
- Manual transport of the beams to the infeed roller conveyor
- High dynamics due to low intrinsic weight
- Horizontal clamping of all cross-sections
- Automatic measurement of the length, width and thickness of the unprocessed part
- True exposed wood quality thanks to damage-free beam transport



Sawing unit with five-axis technology
Highly dynamic, flexible and very precise working at different angles.

- Rotating and swiveling sawing unit
- Rotation angle of 0–360° for angular cuts and notches
- Swivel angle of 0–90° for rafter assembly and rip cuts



Processing of beam stacks
The entire gripper system enables beam stacks to be processed.

- Increased beam processing performance
- Integrated optimization for stack formation



Support table
The beam rests on this during the entire process.

- High precision
- Automatic positioning of the table
- Outfeed of short parts



Compact machine design
Simple and space-saving positioning in the hall.

- Maximum operator protection thanks to the enclosed machine housing
- Reduced dust emissions due to connection option for fine dust extraction



Intuitive powerTouch operating system
The new dimension of machine control units.

- Quick overview of the machine status
- Easy, user-oriented navigation
- New ergonomic design of the operating panel
- Gesture control, such as zoom, swipe and scroll



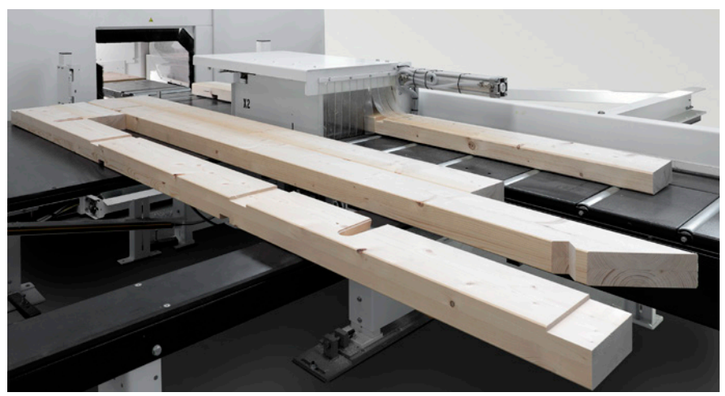
Integrated sound insulation
The machine operators are provided with a low-noise workstation

- No hearing protection required
- According to noise measurement protocol: 75 dB



Sorting unit
Automatic separating of short parts and waste pieces.

- Including automatic chip removal

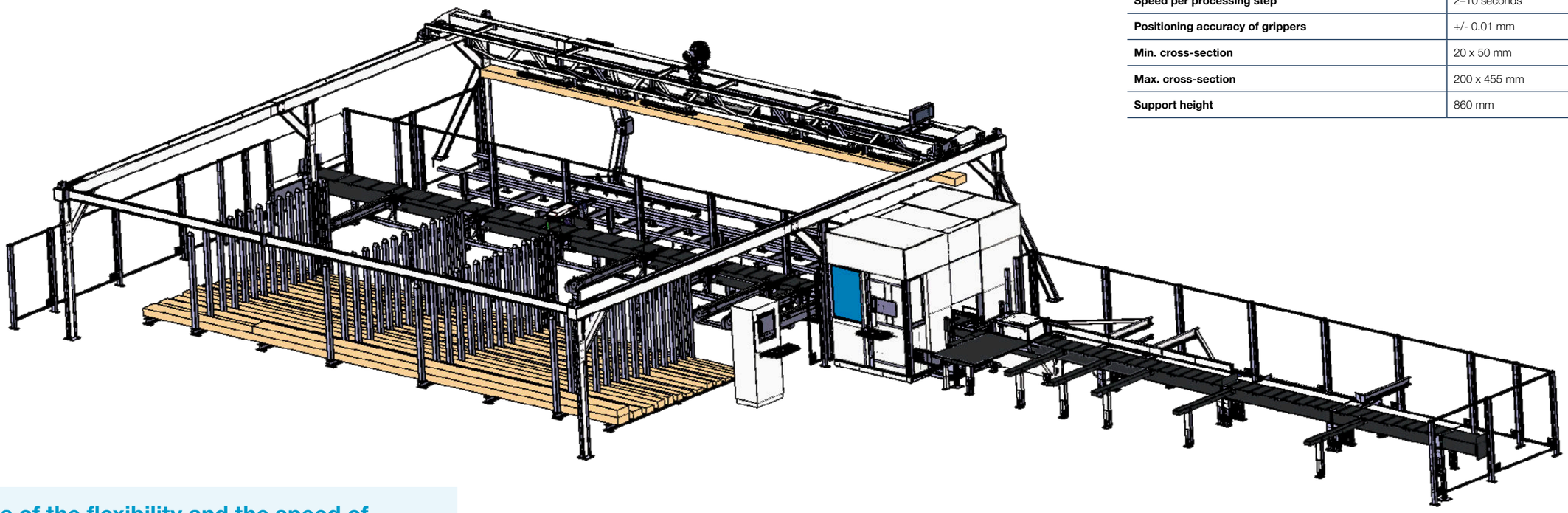


Beam outfeed with deposit table
Automatic outfeed and cross conveying of the beams.

- Ideal positioning of the components using support trestles that can be moved manually
- High level of operational safety due to few moving parts
- Low-wear surface coating with good gliding properties
- Minimum outfeed length 160 mm

Ergonomic working and maximum performance

The carpentry machines allow you to create an ergonomic workplace. Thanks to the completely closed machine housing, dust and dirt do not escape to the outside and the machines operate very quietly. The employees who work directly on the carpentry machine do not require any hearing protection and the other employees in the hall are not disturbed either. The powerTouch operating system also allows the machines to be operated intuitively and they can be controlled directly via the touch-sensitive monitor. With the carpentry machines of the BEAMTEQ series, you can achieve maximum performance for cutting and beam processing.



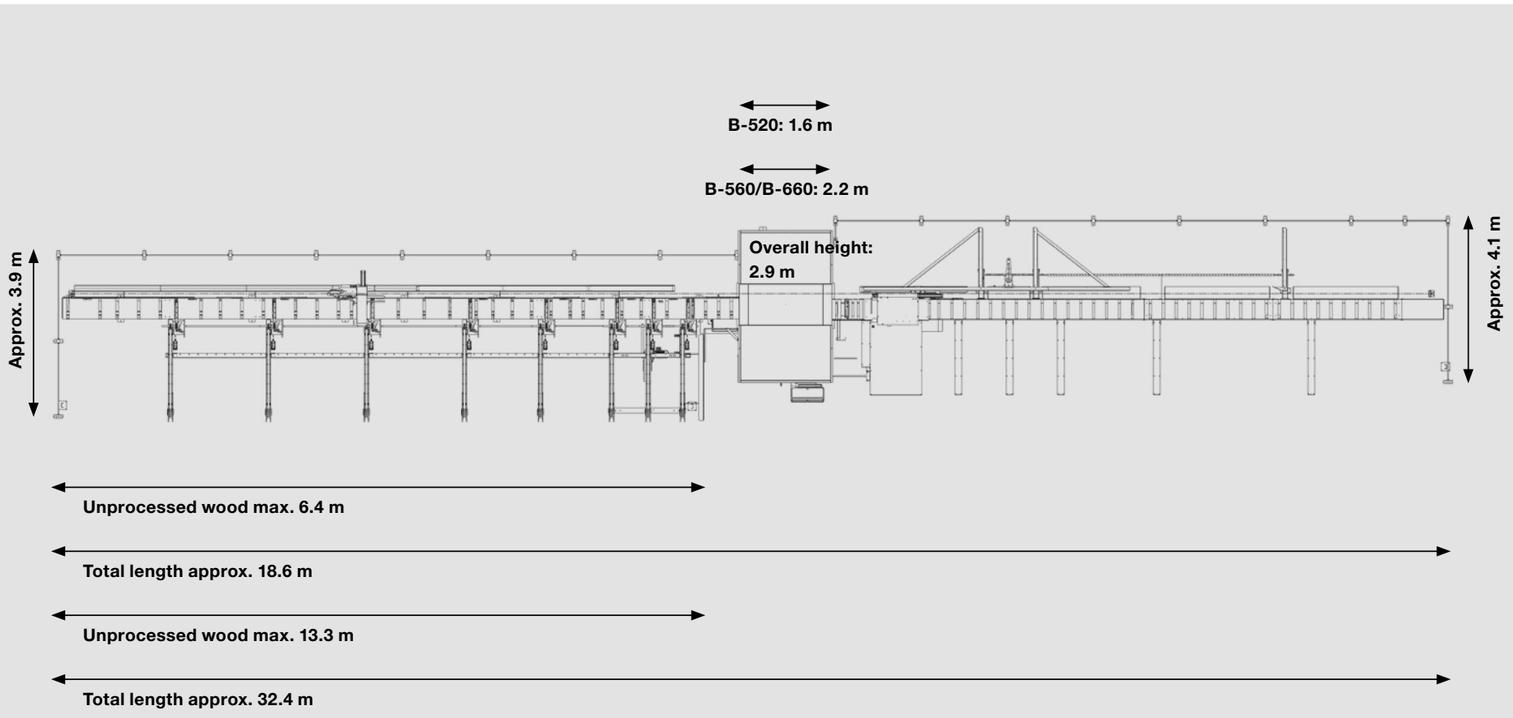
"In terms of the flexibility and the speed of the system, our requirements have been far exceeded. To put it more precisely, our production output has now been increased by a staggering 36%."

Manfred Simonavicius, Luxhaus, Georgensgmünd

Technical data	
Saw blade diameter	555 mm
Rotation angle	0–360°
Swivel angle	0–90°
Suction volume (depending on machine type)	1,800–5,000 m^3/h
Saw power	20 kW
Trimming spindle power (for BEAMTEQ B-560/B-660)	19 kW
Speed per processing step	2–10 seconds
Positioning accuracy of grippers	+/- 0.01 mm
Min. cross-section	20 x 50 mm
Max. cross-section	200 x 455 mm
Support height	860 mm

Compact and space-saving

To enable easy positioning of the carpentry machines—even in confined spaces—the machines are designed so that they require only a small amount of space. For example, the BEAMTEQ B-520 requires less than 80 m^2 of installation space for beam processing 6 m of unprocessed wood. The machines can be quickly and easily installed directly on the hall floor, no complex foundation work is required.



Depending on the space available and the desired beam length, the length of the infeed and outfeed can be selected differently. The table below shows the total machine length for different infeed and outfeed lengths.
If the combination you require does not fit into your hall, the machine can also be adapted to the available space using a special excess length function. This depends on the respective hall conditions.

Infeed of unprocessed beam	Outfeed of finished components	Overall machine
15.6 m	15.6 m	37.01 m
15.6 m	13.3 m	34.71 m
13.3 m	13.3 m	32.41 m
13.3 m	8.7 m	27.81 m
8.7 m	8.7 m	23.21 m
8.7 m	6.4 m	20.91 m
6.4 m	6.4 m	18.61 m

"In contrast to machines on which all work steps take place in succession and the system has a correspondingly long length, we are impressed by the compact design of the WEINMANN concept. It is ideal for carpentry businesses."

Hans Nehr, Nehr Holzbau GbR, Oberhaid

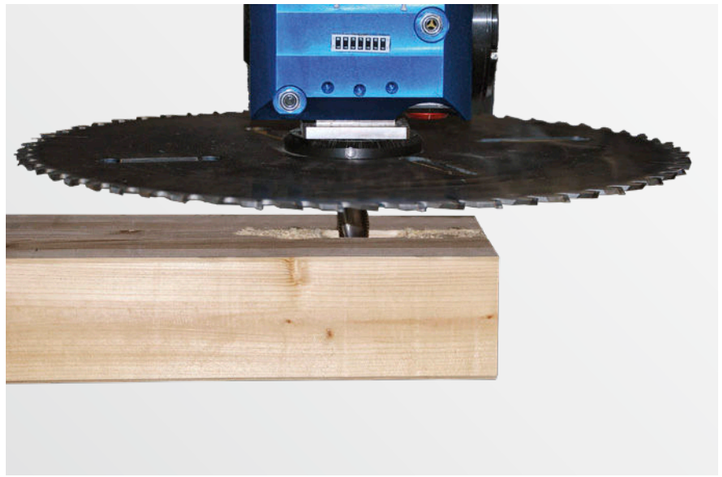


"You just set the BEAMTEQ up and off you go. It doesn't need any highly trained specialists to operate it. In terms of user-friendliness and performance, it is an ideal solution for small to medium-sized enterprises."

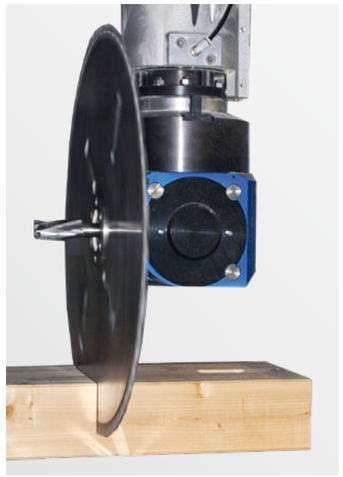
Stefan Brügger, KA Holzbau AG, Grindelwald

BEAMTEQ B-520 — Fast and precise cutting

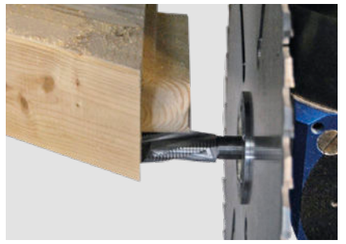
The cutting saw, featuring an integrated trimming system, is ideal for cutting wall components, simple beam processing tasks and for processing nail plate trusses. The sawing unit with five-axis technology allows for a high level of performance. You can also produce notches, leaves and tongue and groove joints as well as installation openings on TJI joists fully automatically.



Saw blade with integrated trimming chuck



Rip cut



Tongue and groove joint



Processing TJI joists

Highlights

- **High cutting performance**
- **Sawing unit with five-axis technology**
- **Integrated trimming chuck**

Trimming and sawing in one

The trimming chuck integrated in the sawing unit enables you to perform both trimming and sawing processes with no setup times. Both drills and dovetail trimmers can be used.



New features:

- **Markings now also possible diagonally**
- **Robust and cost-effective printing with the inkjet printer**
- **Improved separation**
- **Optimized cladding of the units for protection against dust and chips**
- **Increased clearance height for good and waste parts**
- **Modern control system (PC87)**

BEAMTEQ B-560 — High-performance beam processing

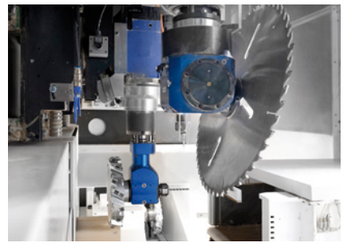
With this carpentry machine, you have a machine that leaves almost nothing to be desired. The 12-slot tool changer optimizes your existing applications and makes the machine highly flexible for cutting in timber frame and prefabricated house construction as well as roof beam processing. The BEAMTEQ B-560 performs all processing steps at maximum speed. Depending on the product range, it achieves performance that is up to 30% above the industry average.



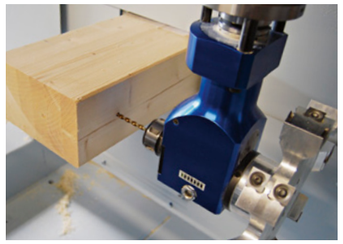
Five-axis trimming



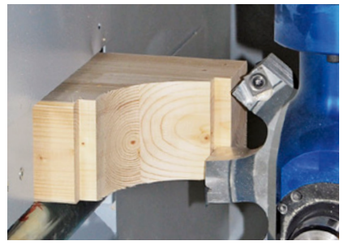
12-slot tool changer



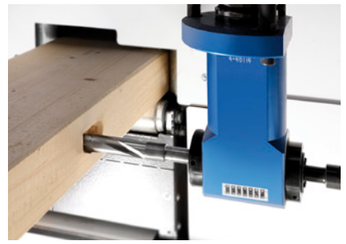
Second integrated main spindle



Horizontal drilling



Rafter head processing



Manufacturing of mortises and pockets

High speed thanks to a second integrated main spindle

- 20-kW spindle for fast and tear-free saw cuts
- Sawing unit with five-axis technology
- Shorter throughfeed times, since the saw blade does not need to be changed
- Rotating and swiveling sawing unit for highly dynamic, flexible and very precise work

Large range of applications thanks to the 12-slot tool changer

- 19-kW spindle for high processing quality even with large tools
- Space for up to 12 tools
- Short setup times thanks to fast loading
- A variety of individual tools can be used, such as drills with different diameters or standard and profile trimmers
- Can be extended at any time with five-axis units
- Optimal speed range for the maximum processing quality during trimming

Highlights

- **High processing speed**
- **Five-axis technology for sawing**
- **12-slot tool changer**
- **Second integrated main spindle**

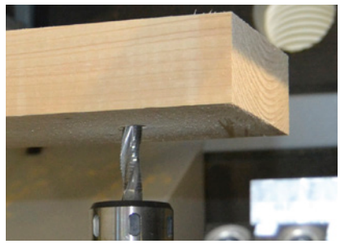


New features:

- **Fast tool change in the underfloor unit (HSK)**
- **Markings now also possible diagonally**
- **Robust and cost-effective printing with the inkjet printer**
- **Improved separation**
- **Optimized cladding of the units for protection against dust and chips**
- **Increased clearance height for good and waste parts**
- **Modern control system (PC87)**

BEAMTEQ B-660
All six sides of a component in one throughfeed

With the BEAMTEQ B-660, you get maximum beam processing performance, a wide range of processing steps and consistently high quality. Equipped with the underfloor unit, you can process all six sides fully automatically at any angle and inclination. Quickly and easily manufacture traditional block house joints, blocking grooves on rafters and dovetail connections on both sides of ridge beams.



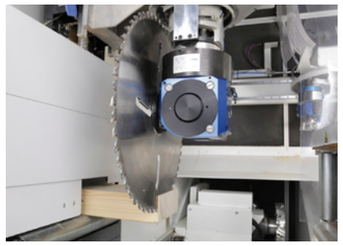
Mortise trimming with underfloor unit



Lap joint with side milling cutter



Optional: markings on the underside of the component



Saw cut



Dovetail connection



Swarf conveyor belt already included in the standard features

Underfloor unit enables fully automatic beam processing on all six sides

- 6.6-kW side milling cutter
- 7.5-kW drive unit for finger trimmer, dovetail trimmer or drill
- High level of accuracy since the beam is processed in one position from all sides
- Easy handling without tilting
- Fast throughfeed time: the appropriate tool is inserted on the main spindle in parallel with the processing of the underside of the component
- Swarf conveyor belt with sorting function already included in the basic machine
- Optional: markings on the underside of the component

Highlights

- **Fully automatic beam processing on all six sides**
- **High beam processing performance**
- **Extended processing range**
- **Five-axis technology for sawing**

Equipment for every requirement

Fast, compact and precise.

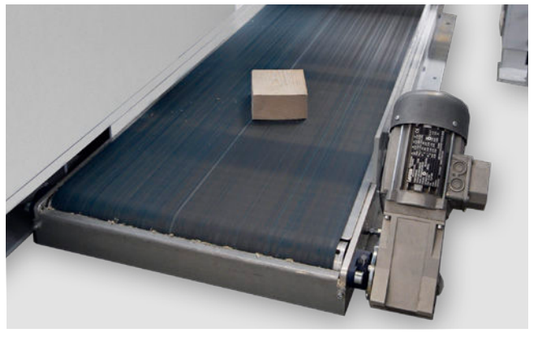
The modular WEINMANN concept—which is the basis of all machines—enables various modules to be retrofitted in your machine. This means that you are always prepared for future, changing requirements.



Waste conveyor belt

Automatic disposal of chips and offcuts. The waste parts are transported directly into a designated container.

- Machine installation on a level hall floor
- Low-maintenance operation thanks to automatic actuation
- High level of operational safety
- Increased clearance height of waste parts



Required parts conveyor belt

Automatic transport of short parts smaller than 160 mm and provision in a user-friendly position.

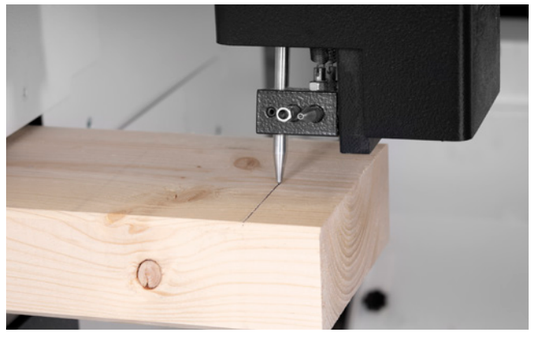
- Low-maintenance operation thanks to automatic actuation
- Increased clearance height of good parts



Automatic beam feeder with with improved separation

Automatic infeed and separation of beams using stainless steel chains. Different cross-sections are pre-sorted in a customer-specific order.

- Transport speed of up to 12 m/min
- Shorter throughfeed times thanks to optimal workflow
- Ergonomic machine operation with a high level of operational safety
- Pre-sorting of the beams enables continuous production, e.g. even during break times



Ballpoint pen/marker

Markings are possible both on the top and on the two narrow sides of the beam.

- Markings can be made at an angle of 0° to 90° to the beam edge
- Identification of cable bushings, studs and mounting positions
- Marker also available for underfloor unit



Swarf conveyor belt with sorting function

Sorting and outfeed of required and waste parts directly in the machine.

- Increased performance due to shorter waiting times



Second operating monitor

The additional monitor permanently displays the production history to the operator, such as the component number, dimension and quantity.

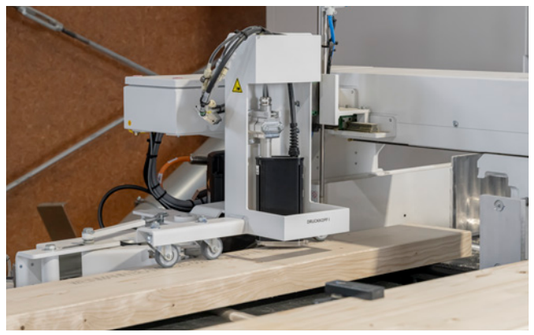
- The operator can see which component is currently being processed at a glance and can label or sort it accordingly after processing.



Label printer

The information required to identify the components is printed and applied manually by the operator at the desired location. The information, such as customer name or component number, can be freely selected.

- Especially for exposed wood processing
- Automatic dispensing and winding device
- Resolution of up to 300 dpi



Inkjet printer

The components are labeled automatically with the ink printer.

- Alphanumeric labeling with variable heights
- Resolution of up to 300 x 600 dpi
- Printing during non-productive times for optimal throughfeed time
- Protection against dust and dirt as the printer is installed outside the processing area
- Quick, easy and clean replacement of bottles for cleaning fluid and ink

Integrated production flow with gantry and storage systems

Just-in-time production of individual components, high level of automation and minimization of stock levels are just some of the advantages that a WEINMANN production cell offers you. Our gantry and storage systems ensure that the correct material is always in the right place at the right time. Waiting times are eliminated and the utilization rate of the machine is increased, allowing you to achieve maximum productivity in your production.



Beam lifters

You can easily transport your beams with just one operator. Transport is via easy-glide rails. The beam lifter can also handle different beam dimensions.

- Ergonomic operation thanks to the chain hoist
- Both horizontal and vertical transport



STORETEQ H-300 and STORETEQ H-700 feed gantry

The CNC-controlled feed gantry is used for fully automatic feeding of unprocessed parts to the carpentry machine. The unprocessed parts are picked up from a stack of unprocessed parts using a screw or vacuum gripper and placed on the separator of the carpentry machine.

- Unprocessed parts are picked up from different stacking positions
- Different beam dimensions and components can be picked up
- Automatic stock control
- Ergonomic working thanks to fast and easy handling of the beams
- High level of performance due to the continuous material supply and automatic stack formation







STORETEQ H-700 feed gantry with upright store

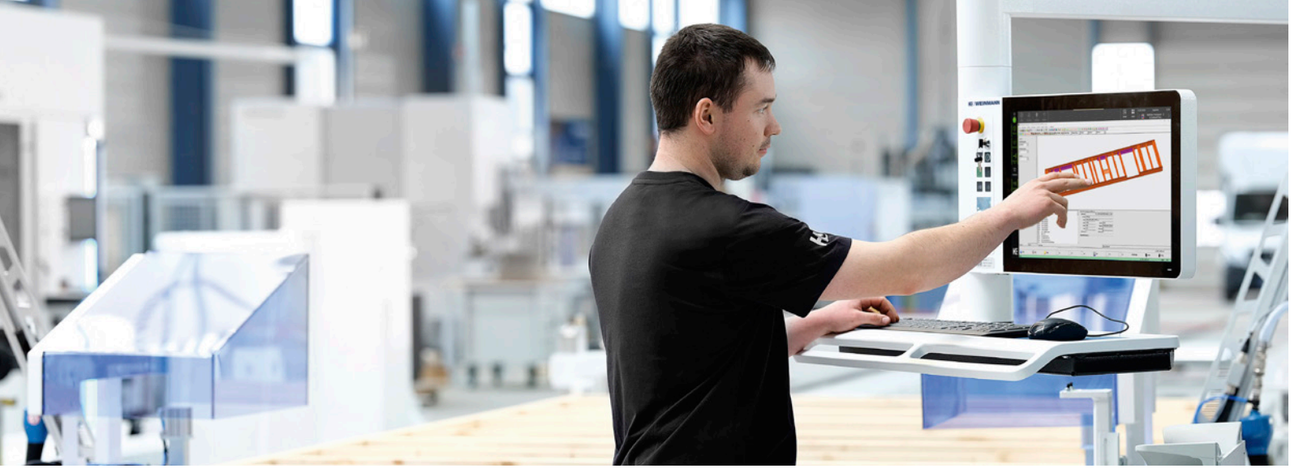
If you work with many different beam cross-sections, the combination of a gantry and upright store offers you a flexible solution. The raw material is automatically removed from the unprocessed part stack and stored in the individual uprights. From there, the respective beams are picked up and placed on the separator.



- Storage size can be selected as required based on the number of uprights
- Simple storage of different beam cross-sections
- Significantly less space required due to reduced storage area
- High level of performance due to the continuous material supply and automatic stack formation
- Multiple carpentry machines can be fed with one gantry



- Operation via wupWorks
- Display of stock and automatic stock control
- Definition of minimum stocks
- Optimized work processes: unprocessed parts are stored and the carpentry machine is fed in parallel





Software for the machine

wupWorks for the machine

wupWorks is the user interface for your machine's control system. The software automatically reads in, optimizes and processes the data records generated by the CAD. Thanks to the data interface, the machine is controlled independently of the CAD. In addition, the software enables you to graphically display workpieces and to control processing. You can assign machine functions, and travel paths and the use of tools are optimized.

wupViewer for the machine

With wupViewer, you can import data from the CAD program and visualize it graphically. With the clear 3D display, you can easily check the workpieces and machine processing..

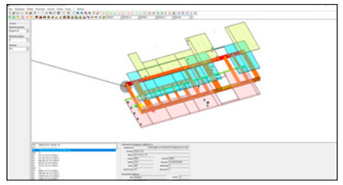
wupEditor for the machine

wupEditor is used to transfer and graphically display data from the CAD program. In addition to wupViewer, not only can you import and graphically visualize the workpieces, but also edit them. This allows you to remain flexible and create and extend components directly on the machine. You can also display, adjust or delete processes.

MMR Basic and MMR Professional

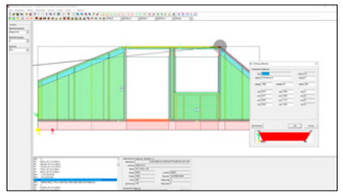
With MMR you have absolute transparency: How many parts are produced on which machine? How busy are the machines and what is the proportion of waiting or malfunction times? This information can be very useful for effective operation of your production. MMR Basic is available on every machine and shows you selected key figures. The MMR Professional extension is available as an option and allows you to graphically evaluate the machine statuses and counters in the form of diagrams directly on the machine. In addition, the operator can add any possible causes of malfunction to the machine.

Software for the office



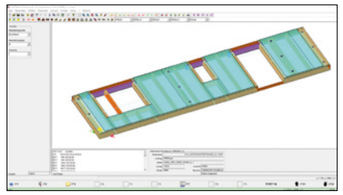
wupViewer Office

With wupViewer, you can import data from the CAD program and visualize it graphically. The software is used for checking workpieces and machine processing during work preparation. The software is available as a free download on our website.



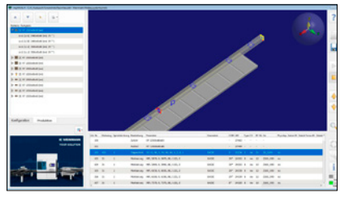
wupEditor Office

wupEditor is used to transfer and graphically display data from the CAD program. As an extension to wupViewer, not only can you import and graphically visualize the workpieces, but also edit them. wupEditor for the office can be purchased as a floating license or as a single user license.



wupWorks 3 Office

With this software, you can read in and visualize WUP data records. This allows you to check whether components can be manufactured on the multifunction bridge during work preparation. wupWorks 3 can be purchased as a floating or single user license and is available for download as a trial version on our website.



wupWorks 4 Office

With wupWorks 4, you can read in and visualize WUP or BTL data records. During work preparation, you can thereby check whether components can be manufactured on your carpentry machine and optimize unprocessed parts for orders or further production. The software can be purchased as a floating license or as a single user license and is available for download as a trial version on our website.



MMR Office

MMR Office copies the data from several machines to a separate database in the office. This has the advantage that the data can be viewed centrally there. The software enables you to make the machine data available for further evaluations and to connect machines from other manufacturers.

INFO

WEINMANN

Downloads and trial versions

VALYOU

Our Mission, Your Performance.

Fast support:
94% resolution rate
via our hotline

Close to you:
1,350 service experts worldwide

We get things moving:
Over 1,000 worldwide spare parts shipments each day

No one else has that:
Electronic documentation on over 150,000 machines, available in 28 languages

LIFE CYCLE SERVICES

Improved performance, more efficient processes, faster help, assurance of availability and smarter working

TEAM & COVERAGE
Largest global service network in the industry with over 1,350 personnel.

INSTALLATION & COMMISSIONING
For a smooth start, we only let proven experts manage your setup.

OPERATION & CONTROL
After teaching your personnel the intuitive control system, our clever apps help to make the operator‘s life much easier.

MAINTENANCE & SERVICING
To keep things running, we’re happy to take a preventative approach. You decide how often and how intensively you want the support to be. As we all know, prevention is better than the cure.

eSHOP & ONLINE ADVANTAGE
A few clicks and it’s fixed. Receive exclusive advantages by ordering spare parts online, depending on market availability, shop.hoffmann.com

HOTLINE & READINESS
When there’s an emergency, we’re here. Direct by phone, digitally via app or video, or with on-site support. We are close to you with over 90 regional service organizations worldwide. With more than 1,000 spare parts immediately available, we can deliver 85% of your orders fast.

TRAINING & EDUCATION
With classroom, live online or eLearning training, we offer flexible options to help you get knowledge. We conduct over 4,000 customer training courses every year, and we even have our own training centers in 19 countries

MODERNIZATION & IMPROVEMENT
Our modernization program is tailored to your machines and processes. We can evaluate your data and advise you on the next step.

ANALYSIS & SUSTAINABILITY
On request, we analyze all your processes with proven lean and procedures (LeanSixSigma). We have a large, certified team of experts for this purpose.

FINANCING & CONSULTING
We offer you tailor-made financing concepts worldwide. With more than 60 years of experience and a close partner network of prominent banks and insurance companies to help us to find the right solution for you, we’re always transparent and reliable in processing.

As at 11/25 | Subject to technical change, print errors and mistakes. Images may show special features.

WEINMANN Holzbausystemtechnik GmbH
info@weinmann-partner.de
www.homag.com/weinmann

YOUR SOLUTION