

Carpentry machines WBS and WBZ





WEINMANN Carpentry machines WBS/WBZ – fully automated, accurate and flexible beam processing

Whether it is beam processing for carpentry companies, timber frame construction, half-timbered construction, log house construction or prefabricated house construction - the demands on quality, flexibility and cost-effectiveness are increasing all the time. The carpentry machines of the WB series offer you a wide range of possibilities. The machines perform your work at high speed and precision, significantly increasing your efficiency in production and on site.

Find out more here: www.homag.com/weinmann

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The right solution for every need

From fast cutting to complex joinery, the WB series offers the right support. Our machines are used by carpenters as well as for contract joinery - you will find **YOUR SOLUTION**.



Speed in new dimensions

- Highest performance also for industrial joinery
- Supply speed of up to 150 m/min
- Highly dynamic drives
- Process-optimized workflow
- Multi-channel control
- Highly dynamic tool change technology
- Minimal set-up times by 8 to 12 position tool changer

Precision to the highest standards

- Consistently high and reproducible quality
- High-definition positioning systems for all axes
- Exact component positioning by NC-controlled griper system with vertical and horizontal clamping devices
- Use of high-precision and strong linear guidance systems with long lifetime
- Monitoring of all processes
- Quality control according to ISO 9001

Flexibility for your requirements

- Wide variety of processing possibilities
- Tool changer with up to 12 places
- Automatic adaptation to different component dimensions
- Manual input or direct data transfer out of CAD
- Complex processings without set-up times
- All options are extendable due to modular design
- Even smallest parts can be processed

“We were very satisfied with the quality of our WBS 140, but we had reached the limit in terms of beam processing capacity. That’s why we decided to replace the machine with the WBZ 160 powerSIX, which significantly shortens the processing times.”

Marco Büsing, Büsing Zimmerei GmbH, Barßel



	WBS 120	WBS 140	WBZ 160	WBZ 160 POWERSIX
	fast and precise cutting	economical joinery with high flexibility	high performance joinery	processing of all 6 sides of a component in a single run
Cutting capacity	up to 4,500 running meters/shift in single beam mode for multi-layered processing correspondingly higher capacity			
Beam processing performance	up to 800 running meters/shift	up to 1,400 running meters/shift	up to 2,200 running meters/shift	
5-axis processing	yes	yes	optionally	optionally
Processing depth for routing / drilling	up to 120 mm	up to 150 mm	up to 200 mm	up to 200 mm

Advanced equipment makes everyday work easier

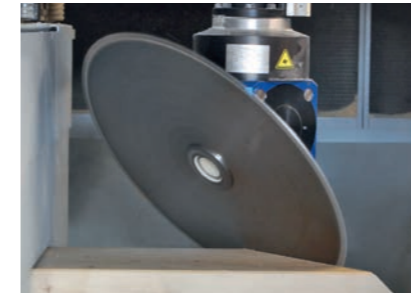
All joinery machines are already equipped as standard with many helpful details that make your everyday life easier and ensure quality at a consistently high level. See for yourself.



Beam carrier at the infeed gripper

The highly dynamic and safe component transport guarantees high precision in all processing.

- NC-controlled gripper system
- No slipping as the component is guided at two positions
- Beam storage with safety barrier guarantees a high level of occupational safety
- Manual transport of the beams to the infeed roller conveyor
- Highly dynamic performance by using light weight desing
- Horizontal clamping for all cross sections
- Automatic measurement of the raw part length
- Beam transport without risking damages for visible timber



Sawing unit with 5-axis technology

Highly dynamic, flexible and very precise working at different angles.

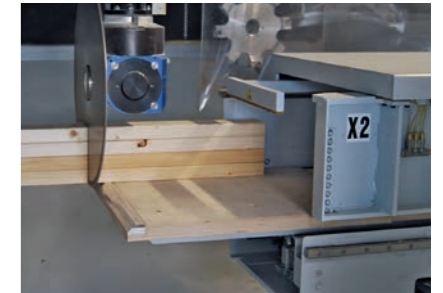
- Rotating and swivelling sawing unit
- The 0 - 360° rotating angle enables angle and birds mouth cuttings
- Thanks to the 0 - 90° swivel angle compound angle and rip cuts are possible



Beam removal with support table

Automatic outfeed and crosswise feed of the beams.

- Ideal positioning with manually shiftable support units
- High operation safety by few moveable parts
- Low-wear surface coating with good sliding characteristics
- Minimal outfeed length 160 mm



Support table

The beam lies flat on the surface during the entire processing.

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



Compact machine design

Simple and space-saving positioning in the hall.

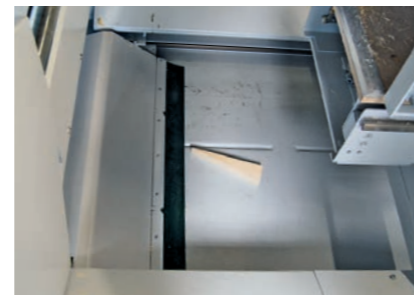
- Enclosed cabin for maximum protection of the operator
- Noise protection by integrated sound insulation
- Connection possibility for fine dust extraction



Intuitive operating system powerTouch

The new dimension of machine control.

- Quick overview of the machine status
- Simple, user-oriented navigation
- New, ergonomic design of the control panel
- Gesture control, such as zooming, wiping and scrolling



Sorting unit

Automatic separation of short parts and waste parts.

- Automatic chip removal



Processing of beam stacks

The entire gripper system enables the processing of beam stacks and logs

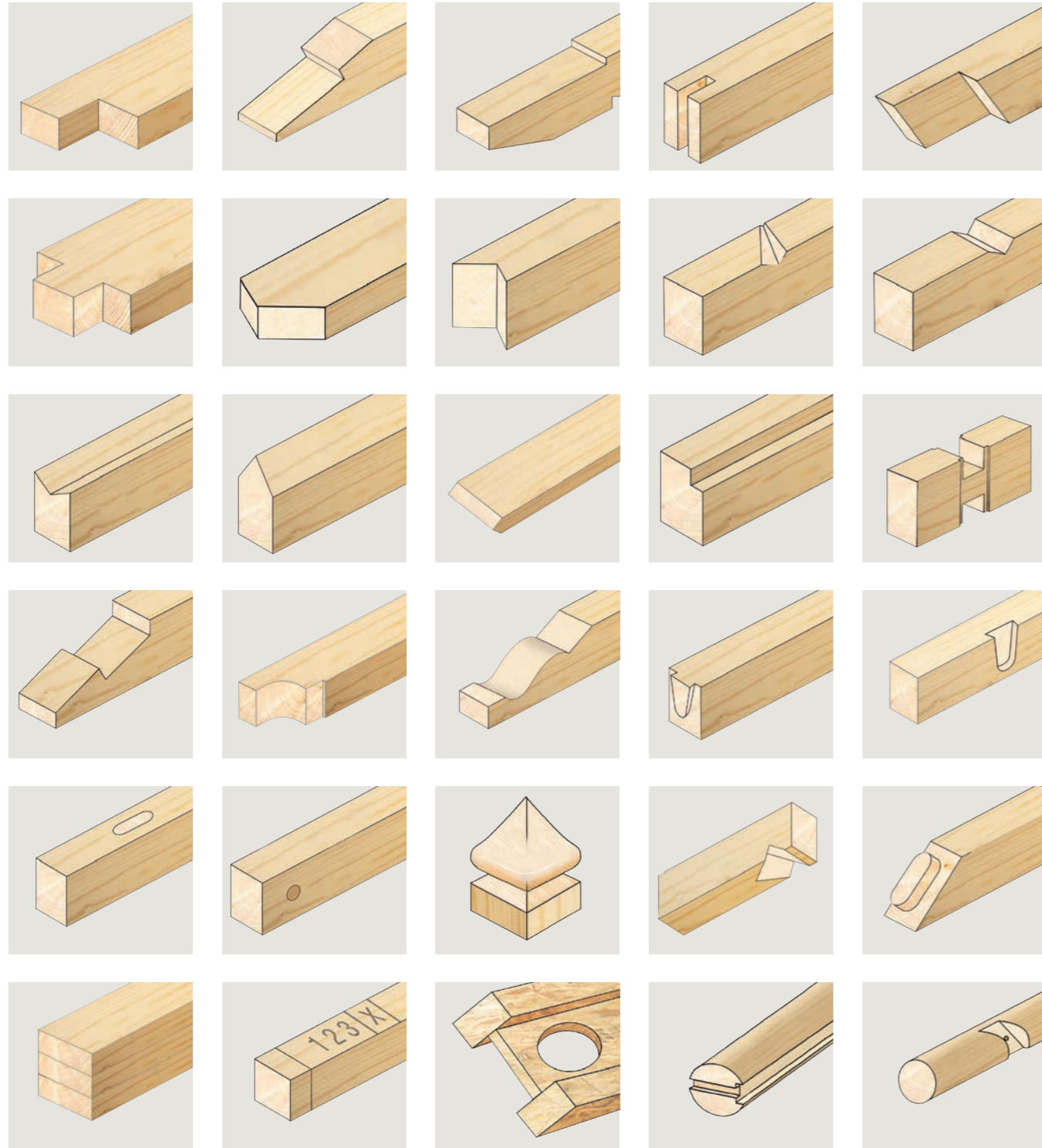
- Increased beam processing performance
- Integrated optimization for stacking

“In terms of flexibility and speed of the line, our requirements were far exceeded. To be precise: our production output has been increased by an incredible 36 % thanks to the good work of the WEINMANN software department.”

Manfred Simonavicius, Luxhaus, Georgensgmünd

Wide variety of machining options

The equipment of the machines, such as 5-axis and tool change technology, enables a variety of different machining operations. No set-up times are required, as the required tools are already held in the tool changer and are automatically changed into the spindle. This gives you a high degree of flexibility.

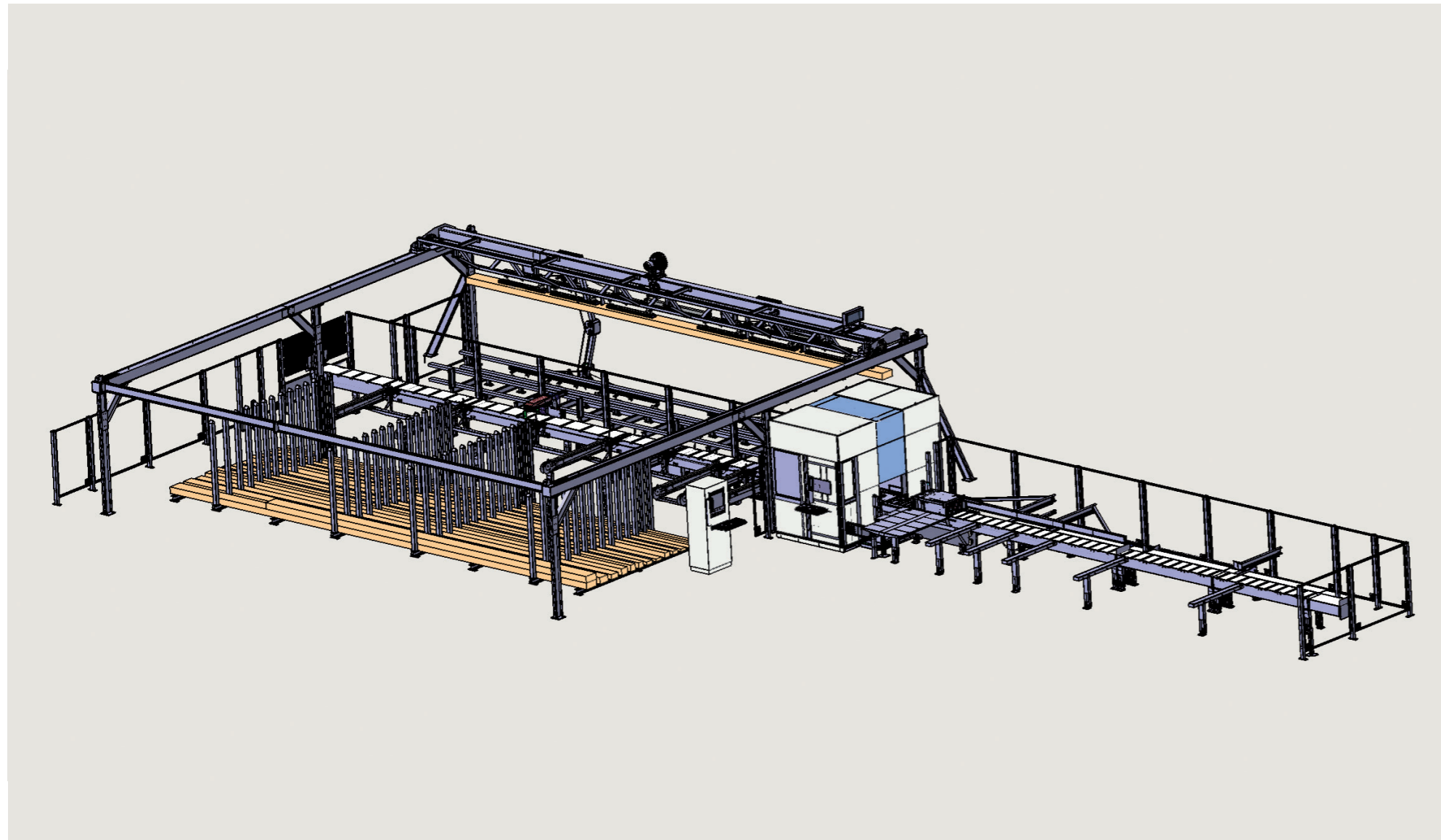


Compact and space-saving

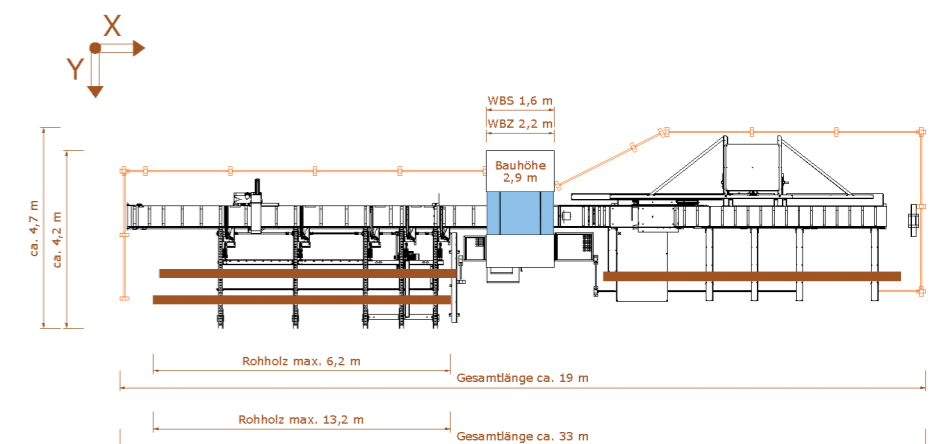
In order to enable easy positioning of the carpentry machines, even in confined spaces, the machines are designed in such a way that they require little space. For example, with the WBS 140, not even 80 m² of floor space is required for the joinery of 6 m raw material. You simply and quickly place the machines directly on the floor of the hall, no complex foundation work is necessary..

“In contrast to machines, where all work steps are carried out one after the other and the plant extends over a large length, we are impressed by the compact design of the WEINMANN concept. It’s ideal for carpentries.”

Hans Nehr, Nehr Holzbau GbR, Oberhaid

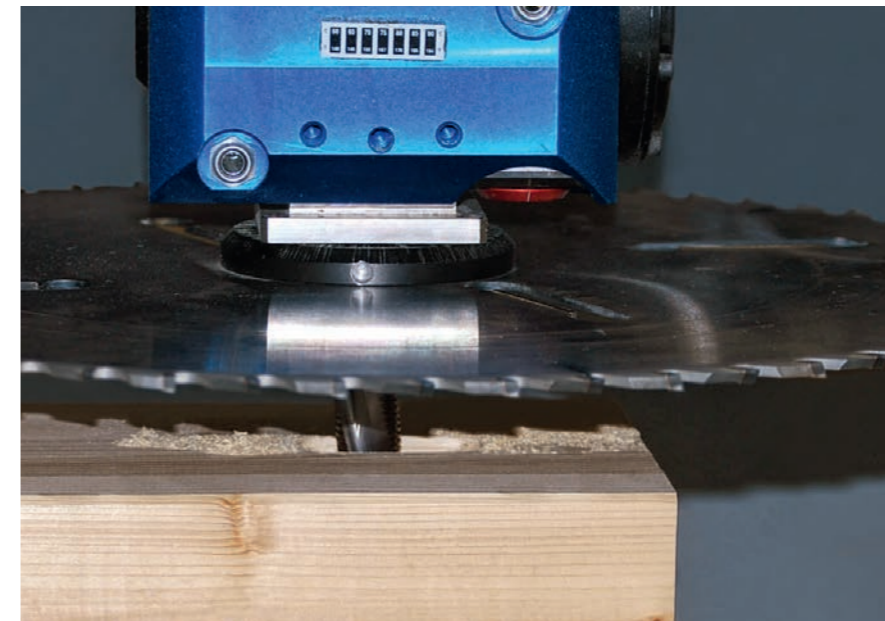


TECHNICAL DATA	
Saw blade diameter	555 mm
Rotating angle	0 - 360 °
Swivel angle	0 - 90 °
Suction volume	1,800 m ³ /h
Power requirement sawing unit	7.5 kW
Power requirement processing (optimized energy consumption)	10 - 20 kW
Speed per processing	2 - 10 sec
Position accuracy	+ / - 0.01 mm
Cross section min.	20 x 50 mm
Cross section max.	200 x 455 mm
Raw timber length min.	1,000 mm
Support height	860 mm

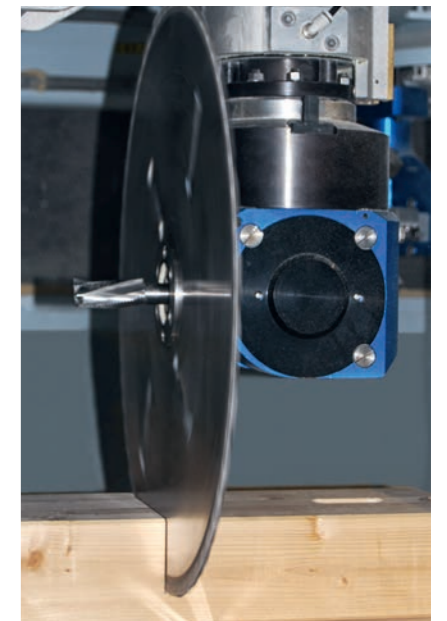


WBS 120 – Fast and precise cutting

The cutting saw with integrated routing system is ideally suited for wall cutting, simple joinery and the processing of nail plate trusses. The sawing unit with 5-axis technology enables high performance. Moreover, you can produce birds mouth, mortise and tenon connections as well as installation openings on TJI beams fully automatically.



Saw blade with integrated routing unit



Longitudinal cutting



Mortise joint



Processing of TJI-beams



Log wood processing

Routing and sawing in one

With the in the saw blade integrated routing unit, you can perform both routing and sawing operations. There are no setup times. Both drills and dovetail routers can be used.

HIGHLIGHTS

- High cutting performance
- Sawing unit with 5-axis technology
- Integrated router

"You place the WBS in your hall and you can start, any especially trained specialists in the company are not necessary. Regarding the user-friendliness and service spectrum it is an ideal solution for small and medium-sized companies."

Stefan Brügger, KA Holzbau AG, Grindelwald



"The compact design of the WBS 140 and the simple installation options without special foundations or cellar basement required made us very flexible in our hall planning. This was an important advantage for us because we grew very quickly and didn't know what our hall layout would look like ultimately."

Christian Kienle, Kienle Holz- & Ausbau GmbH, Neresheim

WBS 140 – Economical joinery with high flexibility

The compact design and the wide range of applications make this carpentry machine the ideal solution for small and medium-sized carpentry companies. With a low investment volume, the WBS 140 allows you to perform a wide variety of machining operations with the highest precision. You will produce economically and in high quality.



Producing a tenon joint



8-slot tool changer with pickup-station



Dovetail at the jack rafter



Dovetail groove



Birds mouth hip rafter

Individually equipped 8-slot tool changer with pickup station

The approved tool change technology is also used in the WBS 140 and offers space for 8 tools. The tools are individually selected, such as drills with different diameters or standard and form cutters. The pickup station also offers space for the saw blade, which is also replaced fully automatically. With the 5-axis technology, you can easily and quickly produce inclined machining operations such as dovetail tenons at the jack rafter or drillings. The set-up times are reduced to a minimum.

HIGHLIGHTS

- 8-slot tool changer
- Pickup-station for saw blade change
- 5-axis technology for routing, sawing, drilling
- Best price-performance ratio



“With the WEINMANN WBZ 160 we are able to produce 5 single-family houses of average size per week. WEINMANN is certainly the market leader in the matter of efficiency and accuracy.”

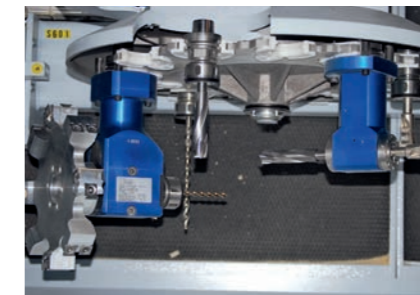
Johann Viechtbauer, Wolf Systembau GmbH, Scharnstein

WBZ 160 – High performance joinery

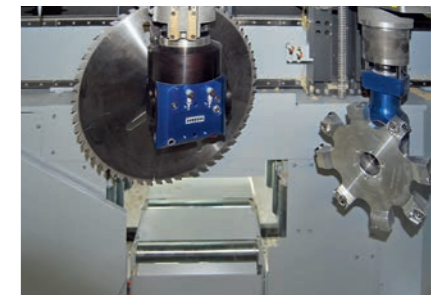
With this carpentry machine, you have a machine at your disposal that leaves almost nothing to be desired. The 12-slot tool changer optimizes your existing applications and makes the machine highly flexible for cutting processing in timber frame and prefabricated house construction as well as roof trimming. The WBZ 160 handles all machining operations at the highest speed. Depending on the product range, it achieves performances that are up to 30 % above the industry average.



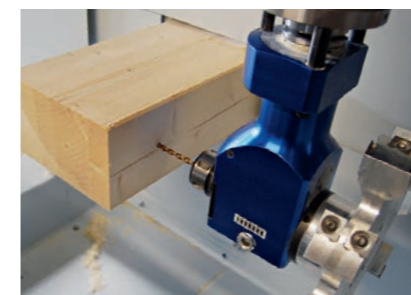
Drilling and routing in different angles



12-slot tool changer



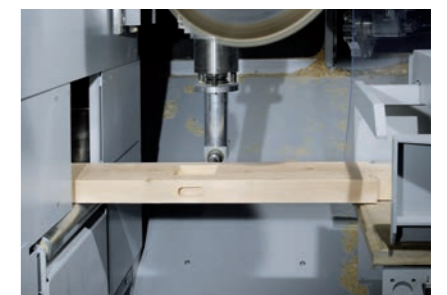
Second integrated main spindle



Horizontal drilling



Machining the rafter head



Production of mortises and pockets

High speed due to a second integrated main spindle

- 20 kW spindle for fast and tear-free saw cuts
- Sawing unit with 5-axis technology
- Shortened processing times, since no replacement of the saw blade is necessary
- Best routing quality due to optimum rotational speed range
- Rotating and swivelling saw unit for highly dynamic, flexible and very precise processing

Large area of application due to 12-slot tool changer

- Space for up to 12 tools
- Short set-up times due to fast equipping
- Many individual tools are possible, such as drills with different diameters or standard cutters and form cutters
- 18.5 kW spindle for high machining quality even with large tools
- Can be extended at any time with 5-axis units
- Best routing quality due to optimum rotational speed range

HIGHLIGHTS

- High processing speed
- sawing unit with 5-axis technology
- 12-slot tool changer
- Second integrated main spindle

WBZ 160 powerSIX – processing of all 6 sides of a component in a single run

With the WBZ 160 powerSIX you achieve the highest joining performance, a large number of processing possibilities and consistently high quality. Equipped with the underfloor unit, you can process all 6 work piece sides fully automatically at any angle and inclination. You quickly and easily create classic log house connections, blocking grooves on rafters and double-sided dovetail connections on main ridges.



“The versatility of our carpentry machine surprises us again and again because it can carry out operations that were previously not possible.”

Christof Reichert, Helmut Volz GmbH, Leidersbach



Milling a tenon hole with the underfloor unit



Production of a birds mouth hip rafter



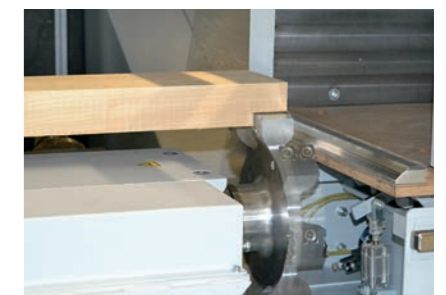
5-axis sawing



Notch



Dovetail connection



Production of a notch with the underfloor unit

Underfloor unit enables the fully automatic beam processing of all 6 sides

- 6.6 kW disc router
- 7.5 kW drive for finger router, dovetail router or driller
- High accuracy, as the beam is processed in one position from all sides
- Easy handling without the need of turning the work piece

HIGHLIGHTS

- Fully automatic processing of all 6 sides
- High performance
- Wide variety of processing possibilities
- Sawing unit with 5-axis technology

Equipment for every requirement

The modular WEINMANN concept, which is the basis for all machines, enables retrofitting of each module of your machine. This means that you are always prepared for the future and for changing requirements.



Waste conveyor belt

Automatic disposal of chips and leftover pieces. The waste parts are conveyed directly into a special container.

- Enables the installation on the plane hall floor
- Automatic control for a low-maintenance operation
- High operation safety



Conveyor belt for processed parts

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

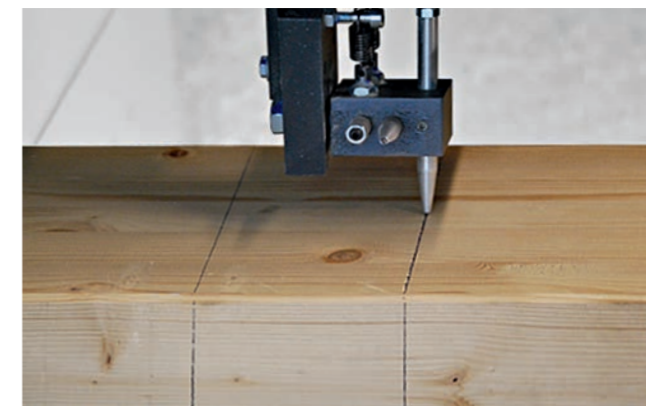
- Automatic control for low-maintenance operation



Automatic beam feeding with feeding and separating unit

Automatic feeding and separating of the beams by means of stainless steel chains. Different cross-sections are pre-stored in customer-specific sequence.

- Transport speed of up to 12 m/min
- Reduced pass through times by optimal workflow
- Ergonomic machine operation with high operation safety
- The pre-storage of the beams enables continuous production, e. g. also during breaks



Ballpoint pen / marking unit

Both the upper side as well as both narrow sides of the beam can be marked.

- 90° markings to the edge of the beam can be made
- Marking of cable glands, supports and mounting positions



Sorting unit as belt conveyor

Sorting and removal of material and waste parts directly in the machine.

- Higher performance by avoiding waiting times



Second operating monitor

The additional monitor permanently shows the operator the production history, such as the part number, dimension and quantity.

- The operator can see at a glance which part is currently being machined and he can appropriately label or sort it after machining.



Label printer

The information required for marking the components is printed and manually attached by the operator at the desired position. The information such as customer name or part number can be freely selected.

- Especially for processing visible timber
- Automatic dispense and coiling-up device
- Resolution of up to 300 dpi



Inkjet printer

The marking of the components is done automatically with the inkjet printer.

- Alphanumeric marking with variable heights
- Resolution up to 300 x 600 dpi
- Printing in non-productive times for optimum throughput time
- Protection against dust and dirt, as the printer is installed outside the processing area
- Fast, easy and clean cartridge replacement

Continuous production flow with portal and storage systems

Just in time manufacturing of individual components, high automation and minimisation of stock are just a few advantages which are offered to you by WEINMANN manufacturing cells. Our portal and storage systems ensure the right material is selected at the right time. Waiting times are eliminated and the efficiency of the machine is increased. You achieve the highest productivity in your production.



Beam lifting device

With just one operator, you can transport your beams easily. Smooth running rails are used for transport. The beam lifter is able to handle different beam dimensions.

- Ergonomic operation by chain hoist
- Suitable for both horizontal and vertical transport



Feeding portal WHP

The CNC controlled feeding portal serves fully automatic raw part feeding of the carpentry machine. The raw parts are taken by means of a screw or vacuum gripper from a raw panel stack and put on the beam separation unit of the carpentry machine.

- Picking up the raw parts from different stacking positions
- Handling of different beam dimensions and components
- Automatic stock control
- Ergonomic working due to fast and easy handling of the beams
- High performance due to continuous material feeding and automatic stacking

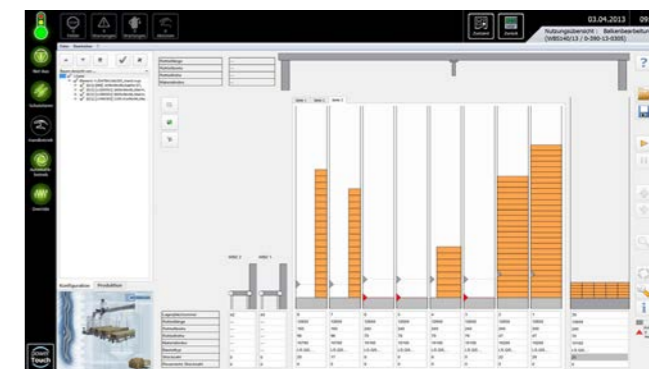


Feeding portal WHP with pole storage

If you work with many different beam widths, the combination of portal and pole storage offers you a flexible solution. The raw material is automatically removed from the stock pile and stored in the individual stanchions. From there, the respective beams are picked up and placed on the feeding and separating unit.



- Storage dimensions can be chosen according to the number of stanchions
- Simple storage of different beam cross sections
- Significantly less space required due to reduced storage area
- High performance due to continuous material feeding and automatic stack formation
- Optional feeding of several carpentry machines with one portal



- Operation via wupWorks
- Display of warehouse stock and automatic inventory control
- Definition of minimum stocks
- Optimized work processes: storage of raw parts and feeding of the carpentry machine takes place in parallel

Software – the foundation for efficient production

The software is increasingly determining the use of machines. In order to realize your wishes optimally and to guarantee short distances, we develop both the software for work preparation and the machine software entirely within HOMAG. You benefit from powerful software modules that are optimally matched to your machine.



The innovative control system: uniform, ergonomic, evolutionary

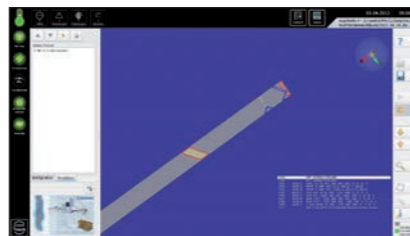
tapio
Partner

The digital platform for the value-added chain in the timber industry.



Advantages at a glance

- One software for several machines
- Standard operation for each WEINMANN machine
- Excellent user-friendliness
- Simple structure, easy comprehension of the programs
- Software operation in the national language
- Complete solutions for integrating the machine into the production process
- Coordinated modules
- Modern software architecture
- Free software updates



wupWorks 4

With the wupWorks 4 software the WUP-/BTL data generated by CAD are fully automatically modified in CNC programs. The corresponding data is graphically presented as a 3D model. Thereby they go through several optimisation routines in order to receive the best result. Additionally the suitable tools are picked fully-automatically.

- Processing, tool, moving ways and material optimisation
- Filtering out of certain components such as pre-manufactured studs or packing pieces
- Filling of waste wood with standard components, such as lintels or braisings in order to prevent residual pieces
- Support of user profiles for individual processing strategies
- Comprehensive list output (raw parts list, planned production orders, parts list, production history, etc.)



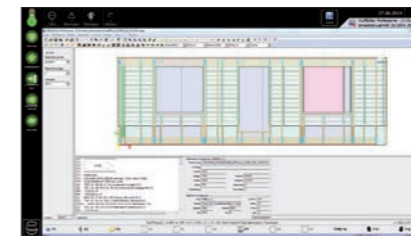
Tool data bank

The software serves the maintenance of all tool data. This includes the dimensions, collision measures as well as the admissible rotations. A graphic user surface supports the user during input. This allows the machine's software to select the optimal tools.

wupWorks AV / Wx4

The wupWorks work preparation enables the optimisation of production orders already in the office. Therefore, some real-time simulation for the determination of the processing time offers improved quoting as well as data control and optimisation already in the preparation phase of work. This means that the generation of the raw wood list plus automatic tool matching between machine and office are possible.

- Less stand still times of the machine by pre-optimization in the office
- Shortening of the machine pass through times



wupEditor Basic & Professional

The wupEditor can read in WUP or BTL data generated by CAD show them graphically and edit them. Furthermore by using macros it is possible to create components in a simple and fast manner, respectively the components can be amended and directly transmitted to wupWorks. A CAD system is not necessary for this.

- Simple data control
- Fast adaptation and extension of components
- Simple creation of complete components with help of macro functions
- Creation of own macro functions
- Short stand still times in the production by component adaptation directly on the machine
- Graphical 3D-display

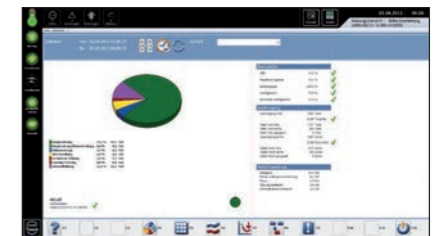


woodScout I & II

The diagnosis system woodScout shows warnings and errors for diagnosis purposes. The program enables systematic fault clearing and thereby increases the machine availability.

Furthermore it is possible to enhance the indicated expert knowledge by own comments. The integrated machine documentation opens automatically at the right position showing how to eliminate the fault. The simple and user-friendly provision of information allows the users to quickly eliminate many faults themselves.

- Indication of faults and warnings
- Simple and fast diagnosis and elimination of faults
- Reduction of machine down times



MMR Basic, Professional & Office

The software module MMR (machine monitoring & reporting) collects all production-related data. The number of produced work pieces, the operating time of the machine and a lot more is recorded. The maintenance notes, depending on usage, help you to optimize maintenance work.

- Display of the reason for possible wait states of the machine
- Required servicing is timely indicated through maintenance notes
- Analysis of operating figures as daily values and shift data
- Graphic evaluation of the machine status
- Post mortem analysis via error indication at the machine
- Office version for centralized data evaluation available

HOMAG LifeCycleService

The sale of our machines comes with all-in optimum service backup and individual advice. We support you with service innovations and products which are especially tailored to your requirements. With short response times and fast customer solutions we guarantee consistently high availability and economical production – over the entire life cycle of your machine.



HOMAG Finance – precisely the right financing

- We offer you tailored financing proposals for your machinery or plants. Our financial advice goes hand in hand with our expertise relating to technical questions. Your personal contact person will take care of the whole process
- The benefit for you: The ability to invest without delay in new technologies and remain financially flexible.

1,200
Service employees around the world

650
processed spare parts orders / day.

85.2%
less on-site services through successful remote diagnosis

>150 000
machines, all electronically documented in 28 different languages - in eParts



Remote Service

- Hotline support via remote diagnosis regarding control, mechanics and process technology. Thus the on-site service can be reduced by 85.2 %!
- Mobile applications such as ServiceBoard reduce the costs through fast help in case of troubles by mobile live video diagnosis, online service message and the online spare parts shop eParts



Spare Part Service

- Identify, request and order spare parts around the clock via www.eParts.de
- Local availability of parts offered by our sales and service companies as well as sales and service partners all over the world
- Reduction of downtimes through defined spare parts and wear parts kits



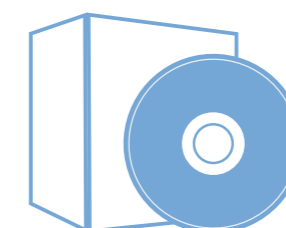
Modernization

- Keep your machinery up-to-date and increase your productivity as well as your product quality. This is how you can meet tomorrow's requirements today
- We support you with upgrades, modernization as well as individual consultancy and developments



Trainings

- The trainings perfectly suit to your requirements. Through this your machine operators can operate and maintain the WEINMANN machines optimally
- The trainings also include customer-specific training documents with practice-proven exercises



Software

- Telephone support and consultancy through software support
- Subsequent networking of your machinery with intelligent software solutions ranging from construction to production



Field Service

- Increased machine availability and product quality by certified service staff
- Regular checks through maintenance / inspection guarantee the highest quality of your products
- We offer you the highest availability of technicians in order to reduce downtimes in case of unpredictable troubles

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