HUNDEGGER

Innovationen für den Holzbau

Hundegger K2-Industry

The high performance class for industrial joinery.

Joinery Machines

Hundegger K2-Industry

The leap in performance for industrial joinery.

K2-Industry sets completely new standards in performance, flexibility and capability for processing structural timber components.

Our engineer's ingenuity and years of experience has enabled Hundegger to launch a completely new machine generation.

Every detail and manufacture of each component is uncompromisingly designed for high-performance and the demands 24 hour, 3-shift operation. The K2-Industry brings a significant leap forward in performance for every user.

The advantages of the K2-Industry:

- Superior performance and impressive availability
- Flexibility and modularity for customer-specific adjustments
- Huge variety of different processing units to meet the demands of all applications
- Processing of massive timber sections up to 1,300 mm x 300 mm – to any length
- Designed for continuous 3-shift operation

Modular build - to customer-specific requirments

For an optimum leap in performance, With Hundegger ‘s modular machine building the K2 industry offers a wide range of options to meet customer requirements and applications.

Series and one-off production

Whether you choose series or one-off production, the K2-Industry always offers maximum flexibility at speed. Tool changeover times become a thing of the past. The machine is ready for operations of all types: from conservatories with small cross-sections to massive laminated beams, CLT timber elements, LVL - measuring up to 1,300 mm x 300 mm.

Revolutionary guide system

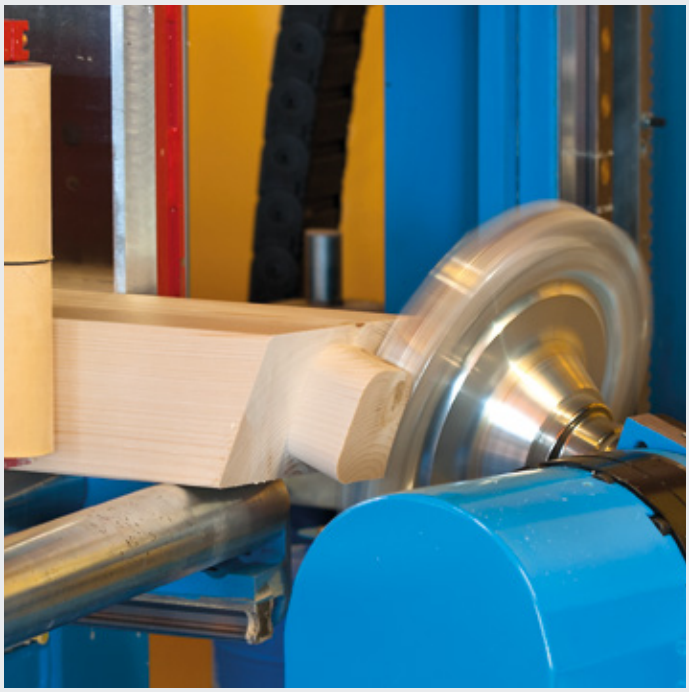
The revolutionary handling system of the K2-Industry with two gripper and guide carriages fixes the timber directly to the machine and therefore ensures maximum precision even for the processing of bent or twisted beams. This leads to a new standards of accuracy.

Flexibility on top form

Machining timber flexibly and efficiently without measuring or marking and without changeover times – the K2-Industry makes this possible for all timber construction companies that value maximum productivity for structural joinery through to log house construction.

Without any retooling, the K2-Industry also processes and transports round timber, log house profiles, t-profiles and multiple layers, for example.

For cross-sections from 20 x 50 mm to 300 x 450 mm / 650 mm / 1,300 mm



Highlights of the K2-industry

Technology that impresses.

In contrast to joinery machines with just one spindle and with tool change systems, the K2-Industry performs particularly well in industrial joinery thanks to its multi-unit concept.

For each operation, a specially developed unit is provided with tools tailored to that unit.
The result: maximum performance without tool changeover times.

Benefit from impressive performance, speed and accuracy that will bring a new dimension to your productivity.

Sawing unit with block disposal

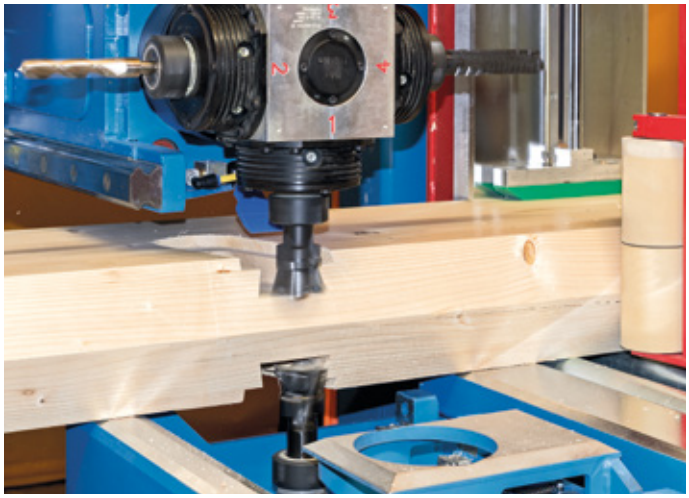
Maximum performance even with large cross-sections with a 13 kW sawing unit and open sawing table.

5-axis universal mill

Power and precision with up to 35 kW.

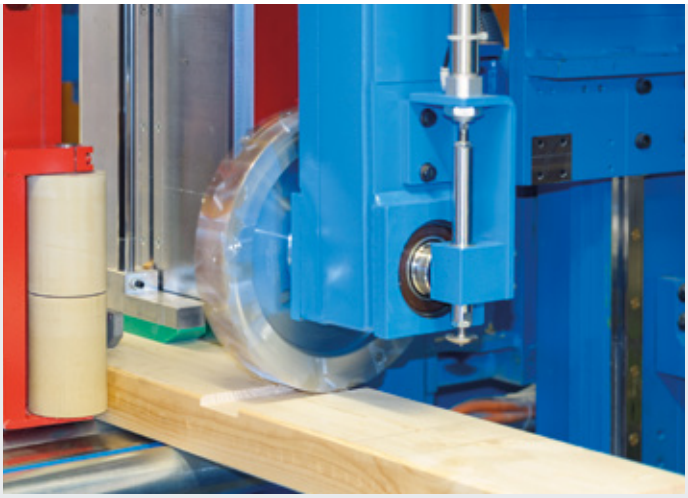
Horizontal saw

Slotting at highest quality and maximum depth.



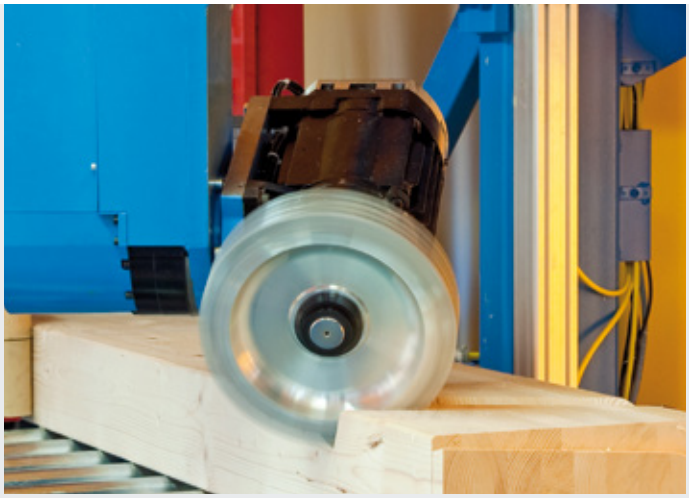
Synchronous unit

Simultaneous processing from both sides for maximum productivity.



Universal lap milling unit

Perfectly coordinated high-performance unit for operations in timber framed construction.



6-axis robot unit

Full power with 12 kW and infinitely variable speed range for all tools and applications.

The sawing unit

Optimized waste disposal and fast sawing processes.

During development of the K2-Industry, we focused on providing maximum productivity and efficiency.

This also goes for the sawing unit, which now offers 13 kW capacity at 1,500 rpm and boasts optimized block disposal. In conjunction with the perfect table overlay, open sawing table and intelligent CAMBIUM software, there are practically no limits when it comes to the efficient production of your product ideas.

- High-precision, fully automatic jack rafter cuts, hex cuts, regenerative cuts or diagonal cuts
- At every angle, every inclination and every length
- Grooving and hip ridge cuts, of any length
- Blocking grooves in any width and at any angle

The table plate is made of robust plastic and offers first-class sliding properties. This avoids all abrasion on the timber and ensures precision during processing thanks to minimized sliding friction.

The saw table, open on one side, reveals its strengths from the very first saw cut. Depending on the dimensions, a block ejector not often required, which leads to considerable time savings in production.

The ingenious thing here is that CAMBIUM automatically determines whether a block fits through the opening. If it doesn't, a support surface is generated by rotating the saw, and the block can be ejected.

The advantages:

- Drive rating 13 kW
- The table plate is made of robust plastic for minimized sliding friction
- Open sawing table for higher efficiency in a run

Universal mill with 4 or 5 axes

Optionally with 35 kW high-performance unit.

Equipped with a 15 kW unit in the standard version, the new 5-axis universal milling machine can also be fitted with the new 35 kW high-performance unit on request. This option more than doubles performance.

All axis are equipped with servo drives, which enables not only maximum speed and precision, but also simultaneous repositioning. Both the timber overlay surface and the use of space are optimized thanks to the adapted geometry. For the mill, too, the table surface is made of robust plastic and therefore offers best sliding properties.

Abrasion on the timber is therefore a thing of the past, and the precision during processing is increased thanks to the minimized sliding friction.

Instead of 5 axes, the K2-Industry can alternatively or additionally be fitted with a 4-axis unit 11 kW instead of a 5-axis unit.

The advantages:

- Direct drive without intermediate gearing
- Infinitely variable speed from 0 to 5,200 rotations per minute
- 3 tools can be installed simultaneously
- Highly efficient milling of tenons, mortises, grooves, profiles, bird's mouths, dovetails joints, etc.
- Cylindrical mills, end mills and dovetail mills or special tools are available
- Excellent performance and impressive availability

The 6-axis robot unit

The all-rounder for fastest processing.

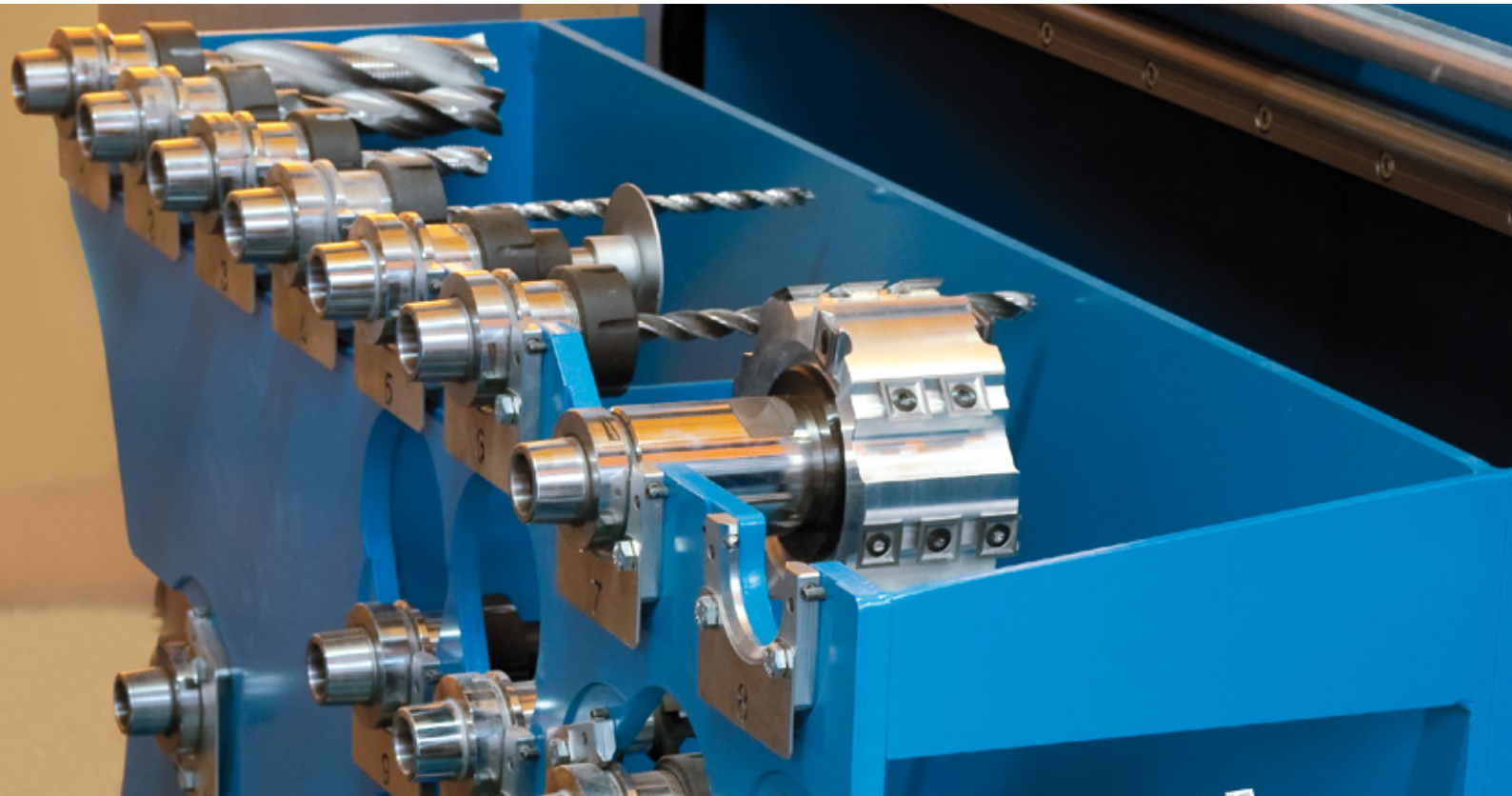
The 6-axis ROBOT unit with an output of 12 kW and a stepless speed range from 0 to 12,000 rpm caters for every need.

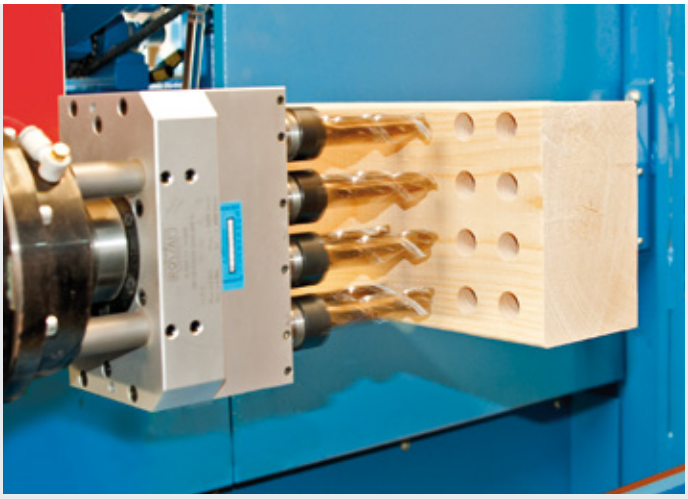
The 17 station tool changer In combination with HSK-63-E-tool holders, the tool can change over saw blades, drill bits, end mills, side milling cutters, dovetail mills, cylindrical mills and markers for labelling parts in seconds.

The tools are managed in the Hundegger production program CAMBIUM. Depending on the type of processing to be performed, the machine automatically selects the tool from the magazine. The type, diameter, length and tool position in the magazine, the characteristic data of the milling and drilling tools also includes the optimal speed. The speedis called up automatically when the respective tool is used.

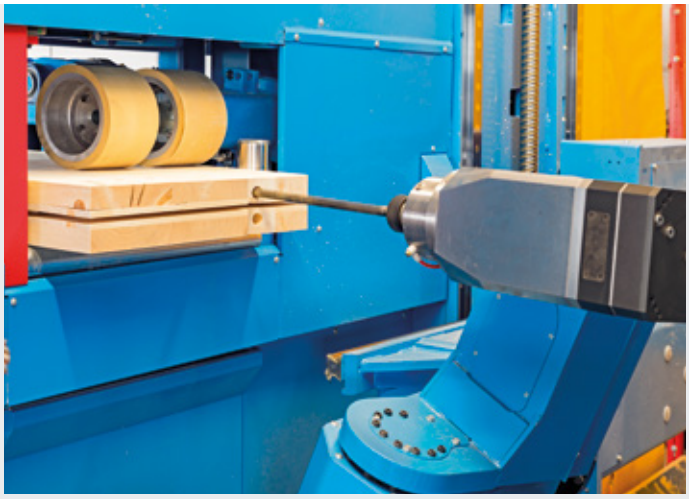
The advantages:

- Greater flexibility thanks to the 6-axis ROBOT technology
- Machining at all angles and inclinations
- Machining on all part sides without turning





Use of a wide variety of special tools such as multispindle drilling heads



For special applications, drills of up to d=50 mm and an effective length of 420 mm can be used

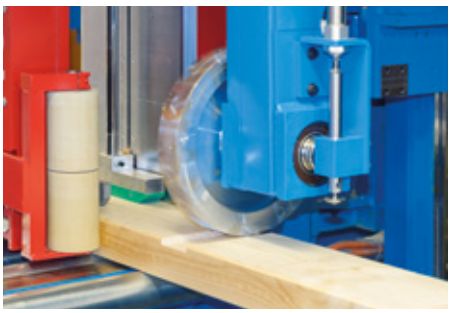
The universal lap milling unit

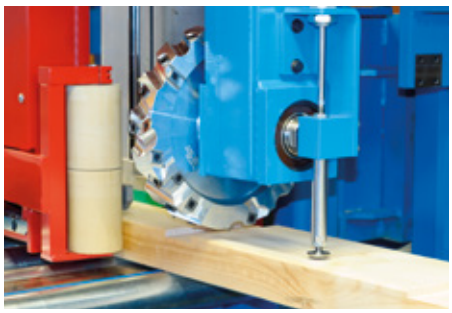
A quantum leap in processing timber framed structures.

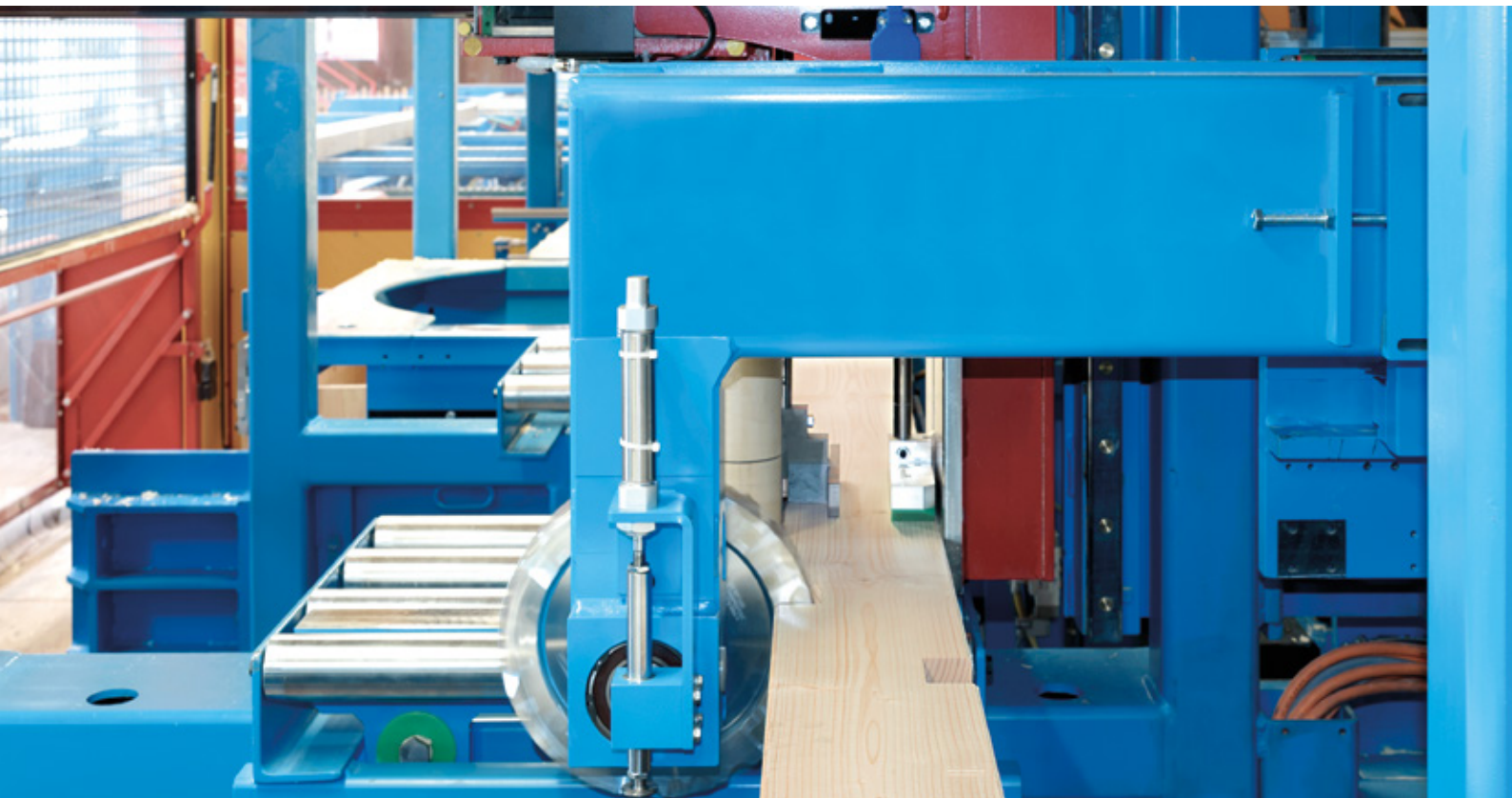
The universal lap milling unit was developed especially for typical operations in timber framed construction, such as recesses and markings on purlins.

Thanks to the unique Hundegger 2nd transport system, the part is clamped and held down on the processing surface and at the same time, continuous workpiece transport is ensured without unnecessary re-clamping.

The result: high-precision parts even from curved or twisted raw material, and maximum throughput.







Drilling, milling and slotting

Simultaneous working for maximum economic efficiency.

Simultaneous processing is a prerequisite for maximum economic efficiency and higher productivity. The Hundegger turret mill unit on the K2-Industry meets these requirements with a unique concept.

In many cases, performance can be increased further through the simultaneous execution of operations lying opposite each other. Through the arrangement of two units on exactly one axis, the K2-Industry can be used to execute both horizontal and vertical operations simultaneously to ensure maximum economic efficiency.

The advantages:

- Simultaneous operations on two opposite sides of the part
- Fast, accurate and splinter-free machining
- Maximum efficiency during milling, drilling and slotting

The horizontal saw

The all-rounder providing two processes in one.

In addition to the production of high-precision slots, the horizontal saw can also be used to produce large recesses.

Thanks to the clever interplay between the horizontal saw and the sawing unit, large recesses can now be completely sawn rather than milled in an even shorter space of time.

The size of the resulting waste pieces can be sent to the downstream waste disposal system.

Technological options

Combi-support for horizontal tools.

Slot cutters

With slot chains of different widths, machining on four sides of the part is possible. Hidden slots can also be produced. The slot cutters are available in different designs for slots of up to 1,300 mm deep. The corresponding slot cutters can be mounted on the stop side, operator side or even on both sides.

Swiveling drilling unit

The swiveling drilling unit enables precise side drilling up to an angle of 45°.

Inkjet system

All labelling options up to and including barcode.

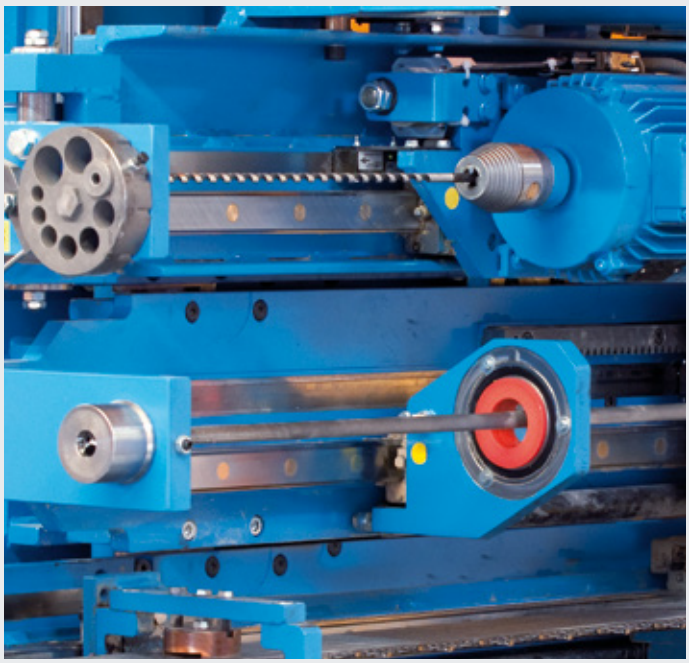
Marking system

The marker is used to make diagonal marks and labels on the part, on the stop side or from underneath.

Combi-support

With our value-adding options, you can further increase the efficiency of your processes. The horizontal combi-support serves to hold two drilling units, one of it is swiveling 45°, slot cutter, marker and inkjet marking system.

A special deep-hole drill unit horizontal is also available for drill holes of up to 1,300 mm, it is swiveling about 360°.

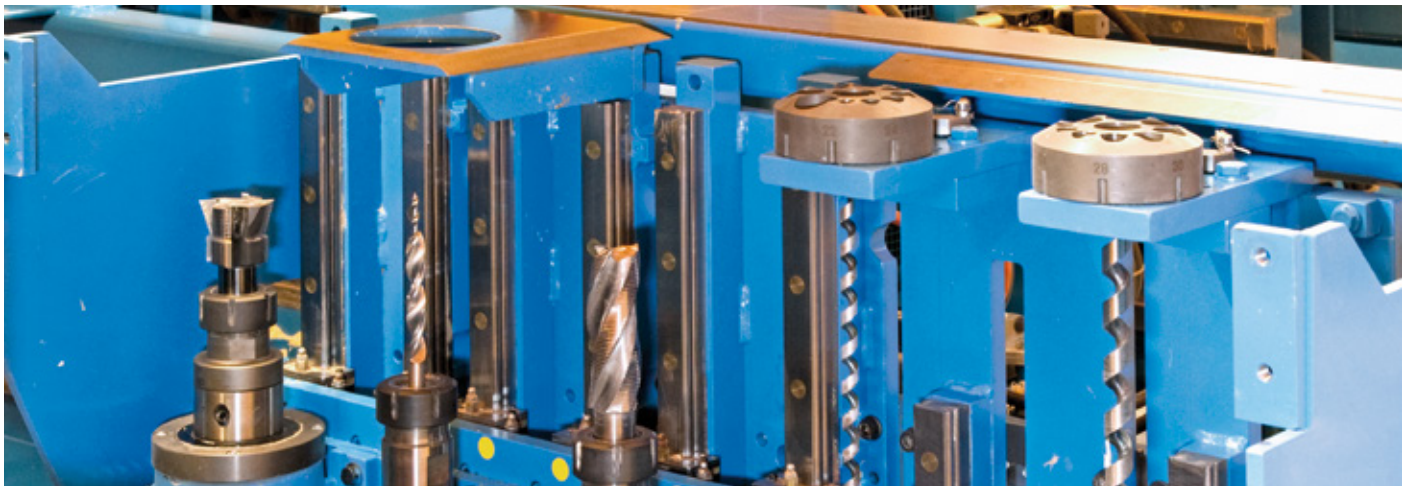


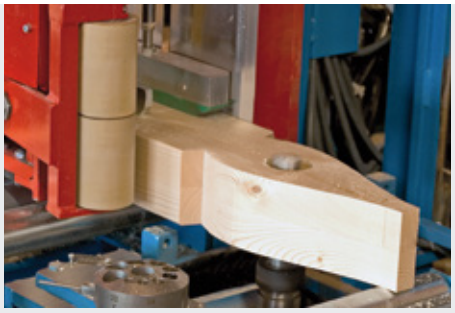
Technological options

Combi-support for vertical tools.

The he vertical combi-support enables the installation of up to five milling or drilling units. Blind holes, countersinks or ring dowel milling are possible in addition to all kinds through holes.

With the end mill it is possible to process any kind of profile, even freely definable variants.





End mill

Equipped with an end mill and a slot mill, the tool, that operates from below, can perform all milling tasks: mortises, drill holes, countersinks, ring dowels, profiles, etc.

Drilling units

The drills are guided in a turret drill bushing directly under the part. For larger drill diameters there is a drive with higher power, hydraulic feed and speed control.

Side milling cutter

A side milling cutter can be used to cleanly and quickly produce perfect longitudinal grooves. Special mills allow other geometries to be produced without problem.

Units for special applications.

Vertical turret mill

The unit with four tool holders enables processing on the end faces as well as from above or below. Together with the combi-support for vertical tools, the workpiece can be simultaneously processed from two sides. The tool holder for collets can be equipped with up to 4 tools.

Horizontal turret mill

The turret mill can be rotated through 360° and can hold up to four tools. Designed for end-face and lateral operations, but angled drill holes, special operations or recesses are also possible.

Top end mill

The end mill processes parts from above without them having to be rotated. Depending on the diameter and length of the end mill used, it is suitable for all operations. These include cutting recesses, mortises and drill holes, longitudinal milling or blocking grooves.

Universal drill unit

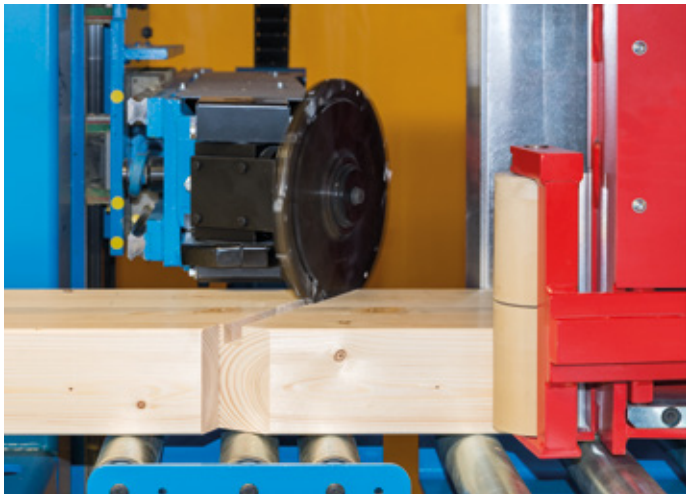
The 4-axis, 360° pivoting unit allows through holes and blind holes to be made at any angle on both longitudinal sides and end faces up to a maximum depth of 1,300 mm.

Technological options

Units for special applications.

Vertical slot cutter

The vertically mounted slot cutter is mainly used in log house construction and in panel processing for cut- outs. For maximum flexibility, the unit can be pivoted automatically up to 180°.

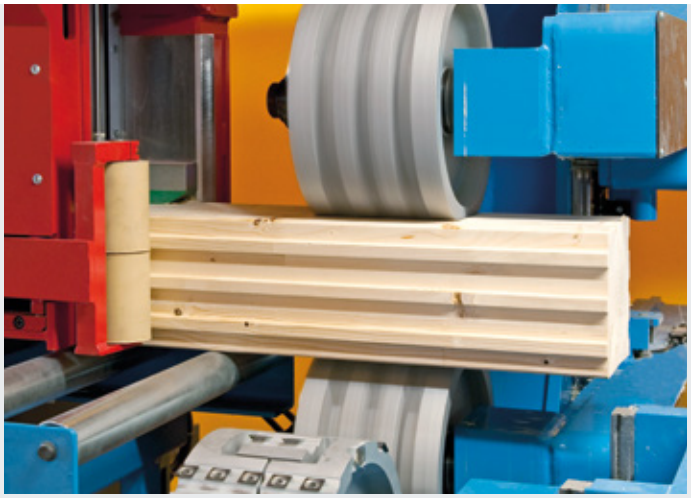


Longitudinal and cross groove mill

The angled longitudinal and cross groove mill allows blocking and longitudinal grooves to be made fully automatically and thus extremely efficiently at any angle.

Universal slot cutter

The slot cutter can be used to make side and end-face slots, boasts automatic chain lubrication and can be pivoted about 360°.



Log house unit

With two vertical and two horizontal milling units for quadruple rabbeting of log house planks. Available up to 4 x 22 kW, depending on the version.

Accessories

Recommended for an optimum workflow.

Label printer

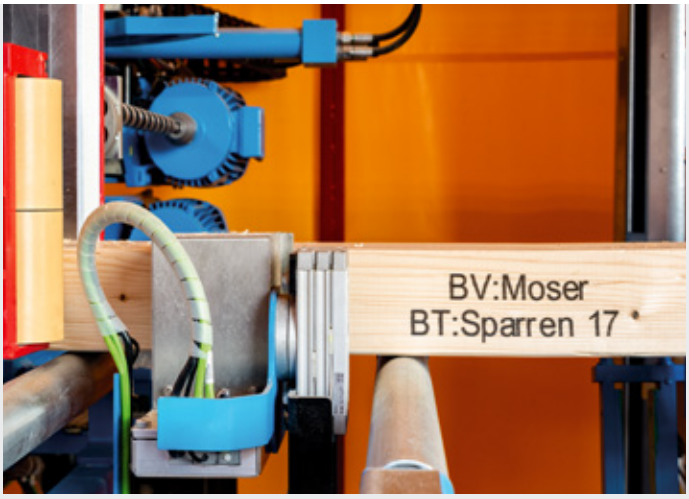
For printing labels with different, freely-definable information such as company name, part number or grade. The data can also be imported from joinery and CAD programs.

Dimensional measurement

Automatic checking of the raw timber cross-section prior to processing allows processing operations to be precisely adapted to the part cross-section.

Lifting table

To automatically optimize a series, or multi projects, the whole timber package is loaded onto the hydraulic lifting table and raised to the height of the cross conveyor.
Optionally also with an automatic lumber pull.



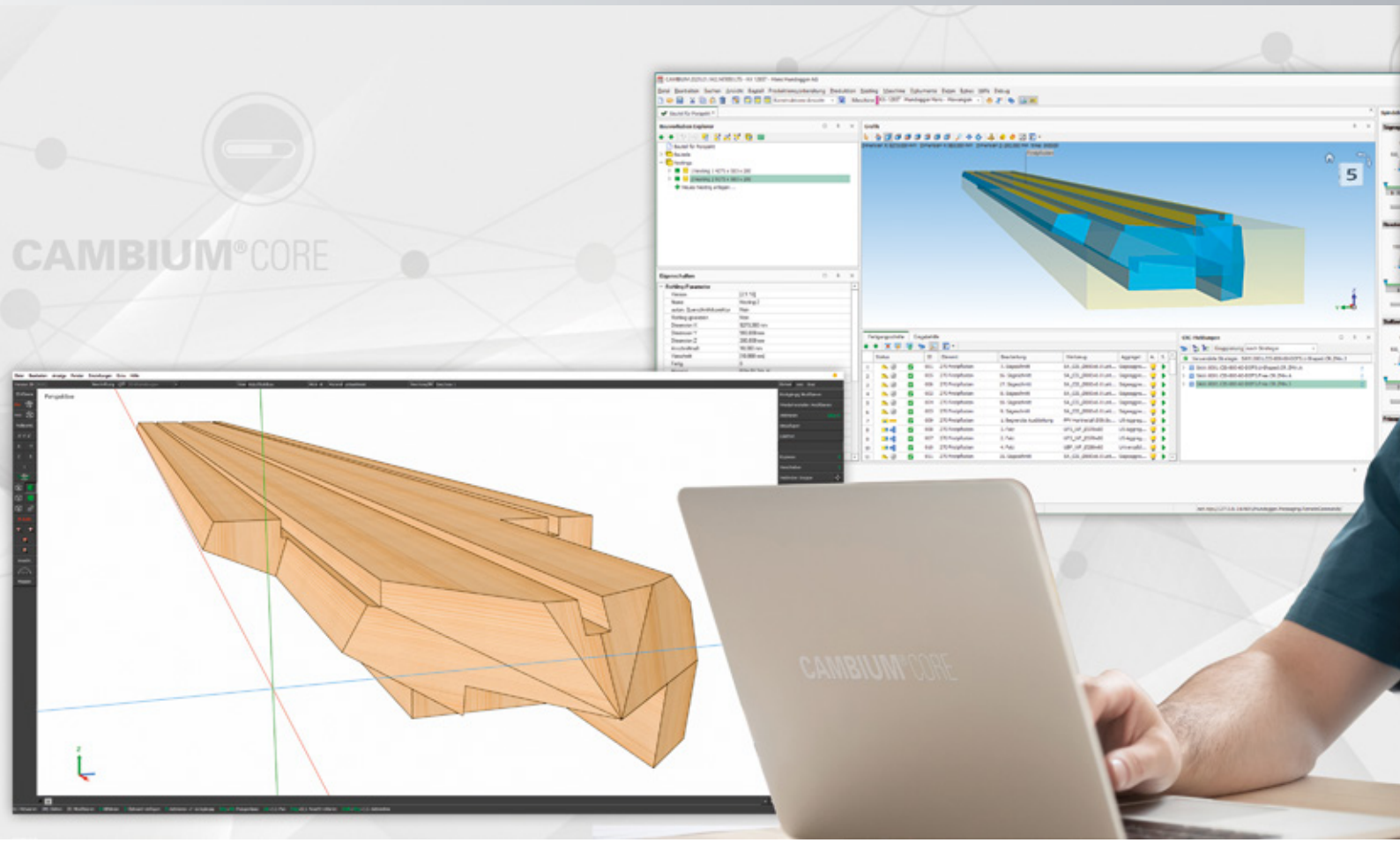
5-sided ink marking system

A high-performance inkjet system is available for labeling 5 component sides, including multiple lines.

The lettering can be done at any angle on all straight surfaces without inclination.

The highly efficient Hundegger production platform

From CAD to the finished component with CAMBIUM® CORE.



With CAMBIUM® CORE, we provide you with a highly efficient package with nine powerful modules for controlling your Hundegger machine.

Instead of having to commission complex connections with external software, the CAMBIUM® CORE modules developed by us control your entire workflow to perfection. Also a single software liscence covers both the machine and any computer in your caompany used for job preperation.

Just produce.
We control your productivity!

CAMBIUM® CORE

CAMBIUM® BVX STANDARD

CAMBIUM® DIGITAL TWIN STANDARD

CAMBIUM® CAM STANDARD

CAMBIUM® CONTROL STANDARD

CAMBIUM® NESTING 1D STANDARD

CAMBIUM® NESTING 2D STANDARD

CAMBIUM® REPORTING STANDARD

CAMBIUM® MULTIPROCESSING STANDARD

CAMBIUM® IPC STANDARD

Industry expertise in carpentry joinery

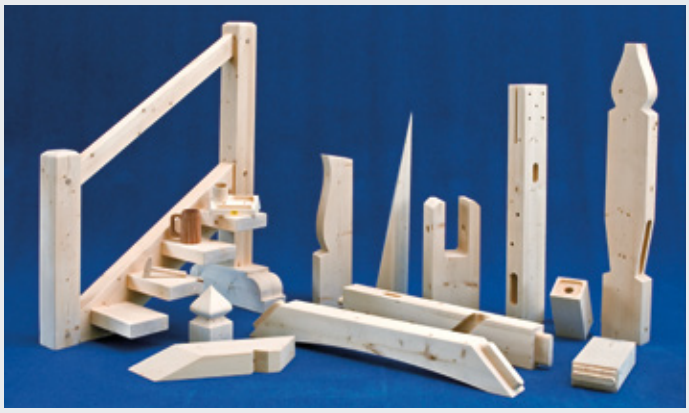
Highest cost-effectiveness.

Flexibility is top priority

In carpentry joinery, the central challenge is to process timber flexibly and efficiently without measuring, mar- king or changeover times. The new K2-Industry offers all timber construction companies maximum productivity and avail- ability, from carpentry joinery through to log house construction.

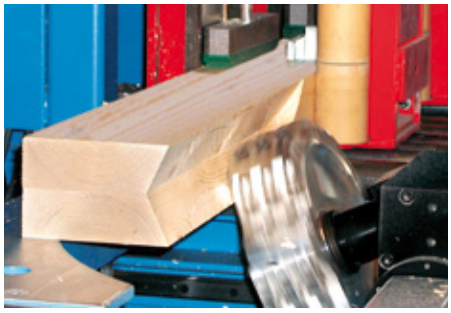
Without any retooling, the K2-Industry also processes and transports round timber, log house profiles, t-profiles and multiple layers, for example.

If more complex tasks are to be performed, the K2-Industry can be freely equipped with the necessary.

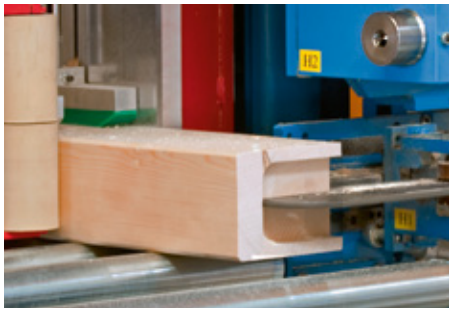


Even with just the standard equipment, most parts additi- onal units and extended as required at any time, needed in carpentry joinery can be produced perfectly.

Dovetail connections on the jack rafter



Channeling or hip ridge cuts without rest wood

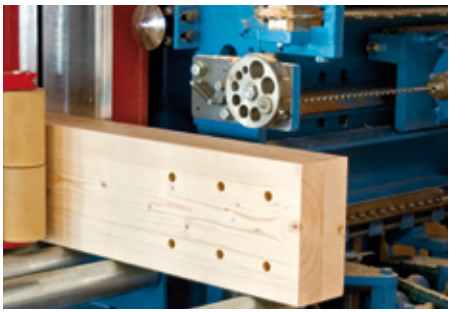


Concealed slots

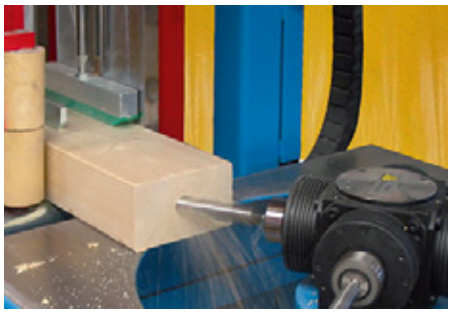
Heart and hip rafter birdsmouths

Mortises of all kinds

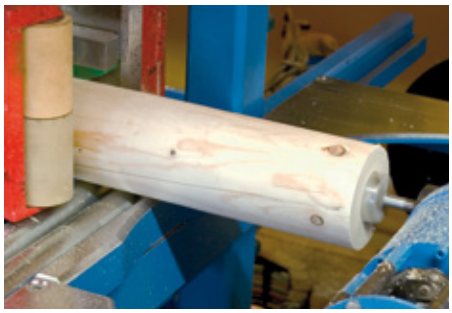
Rafter heads



Any drilling patterns, horizontal and vertical



End-face drilling



Round timber machining

The high flexibility is one of the K2-Industry's strengths. Whatever is needed in carpentry joinery can be produced quickly and cost-effectively.

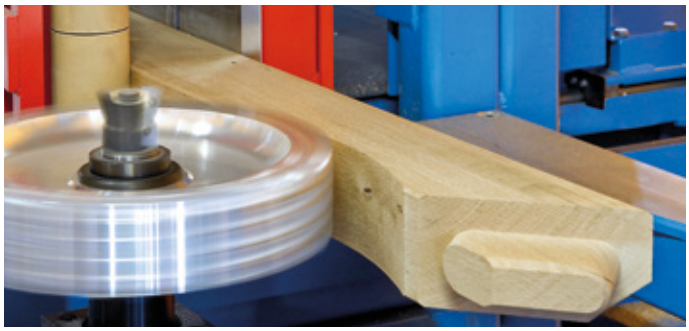
Industry competence in half-timber construction

Impressive efficiency.

The particular challenge in hybrid construction is the visible timber framework and the use of special materials such as oak.

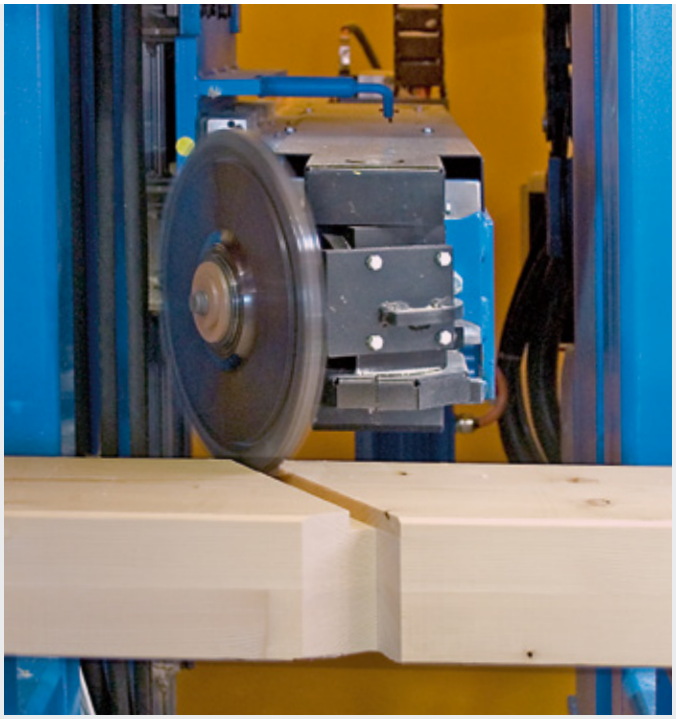
The use of historical connection elements, often with regional characteristics, requires the use of high performance technology, particularly in the case of restorations, because in addition to first-class results, the focus is also always on economic viability.

For these application scenarios, the K2-Industry has a comprehensive range of standard units and special solutions.



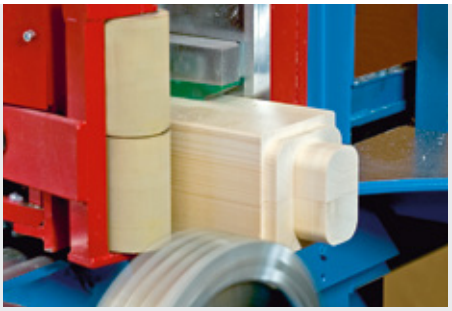
All tenon types

Tenon with chamfer

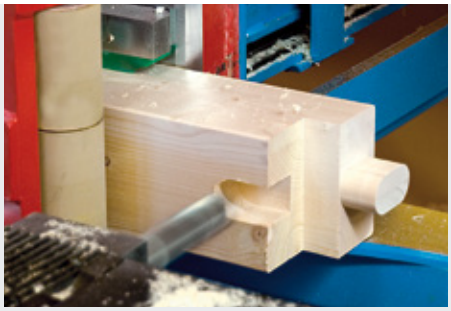


Blocking grooves

With the extremely high speeds of the ROBOT unit, the K2-Industry ensures non-splintering and visibly high quality even on tough and hard wood. As a result, all operations in hybrid construction can be carried out reliably and extremely efficiently.



Stepped tenon



Tenon

Double milling

Length cuts

Compound cuts

Milling from above

Industry competence in cross-laminated timber

High-productive processing.

With a processing width of 1,300 mm, the K2-Industry provides a highly productive solution for joining laminated timber panels. Machining of the increasingly popular cross-laminated timber requires units that are perfectly tailored to these needs.

With the K2-Industry, special units have also been developed for these applications. For example, a vertical and horizontal turret mill, a horizontal saw, a pivoting deep-hole drill unit or special slot cutters which enable the requirements in cross-laminated timber joinery to be perfectly met.

The K2-Industry concept enables 6-sided processing in a run, and maximum economic efficiency is therefore guaranteed.

Automatic infeed system also for panels

Any slots up to 1,300 mm wide

Saw cut with splitting

Rebate

Window cut-out

Industry expertise in laminated girders

Flexibility and precision.

The processing of glulam requires very specific qualities from a joinery machine.
Here, too, the K2 industry impresses with the following advantages:

- Robustness even for heaviest parts
- Absolute precision, even for excess lengths
- Comprehensive range of standard and special units
- Fast, precise and splinter-free machining

As a result, the K2-Industry is the absolute benchmark for this area of use.

Synchronous operations

Longitudinal operations

Horizontal slots

Machining from above

Conical parts

Industry competence in modular construction

Impressive efficiency.

With the K2-Industry, the precision that is so crucial for modular assembly can also be achieved for twisted or curved raw timber – while simultaneously ensuring highest speeds.

Industry competence in log house construction

The decisive production boost.

The log house unit will give your log house production a real boost!

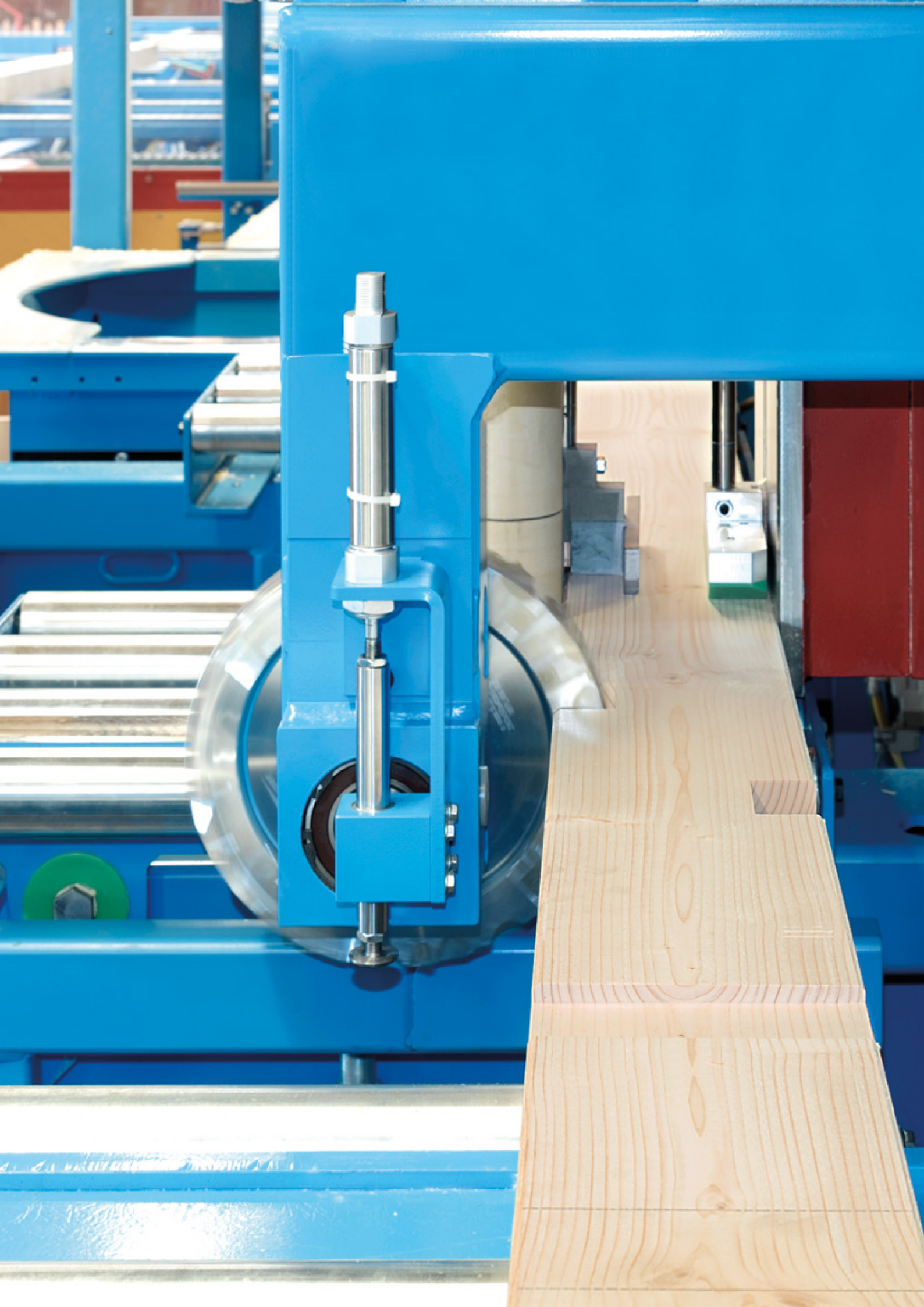
With two vertical and two horizontal milling units for quadruple rabbeting of log house planks. Available up to 4 x 22 kW, depending on the version.

One unit with many possibilities: Performing two opposing milling operations at the same time – or allowing the four milling units to operate independently of each other, set to the desired milling depth. This also allows rabbeting to be performed on one, two or three sides. The stroke is performed hydraulically.

Hundegger manufactures the profile milling cutters for the log house unit according to the specific needs of the customer.

From CAD to the finished part

Diversity with maximum precision and efficiency.



HUNDEGGER
Innovationen für den Holzbau

How you benefit:

- Service hotline included in machine price
- Software updates included in machine price
- Free retraining of machine operators and planning engineers at the Hundegger training centre
- Customer service available around the clock
- Automatic data transfer from all commonly used CAD systems without post processing and additional programming
- High value stability and machine resale value
- Experience from more than 6.000 machines installed worldwide

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Version K2-Industry_englisch_13_09_2021