



# Joinery machine **ROBOT-Drive**

From a CAD drawing to the finished part –  
Complete, precise, in one step

Innovation in timber engineering





The new Hundegger ROBOT-Drive joinery machine perfectly combines the advantages of a completely new machine concept with the experience of more than 4,400 Hundegger machines supplied.

The new machine generation is particularly characterised by high flexibility, little space requirement and low costs.

The machine is perfect for timber construction companies which are mainly interested in high flexibility with almost unlimited processing possibilities. With the ROBOT-Drive it is now possible to realise all processings which are current in carpentry joinery in one step, precisely and without turning or over-turning, even for large part cross-sections.

The ROBOT-Drive machine has a modular design and can optionally be adapted to the respective task. Even if the requirement profile changes in the course of time, the ROBOT-Drive can be extended thanks to simple retrofitting possibilities.

Depending on the respectively requested processing width, 3 standard versions are available.

### ROBOT-Drive 450

from 20 x 60 mm to 300 x 450 mm.

The standard machine for every carpentry.

### ROBOT-Drive 625

from 20 x 60 mm to 300 x 625 mm.

For the trend towards larger timber cross-sections.

### ROBOT-Drive 1250

from 20 x 60 mm to 300 x 1250 mm.

The solution for all requirements including glued wood construction.



Parts until 300 x 1250 mm  
Complete, precise, in one step



Economic solution,  
also for small companies



### Hundegger Motion-Control-System HMC for absolute precision

The completely new, patented measuring and infeed system HMC is the basis of the innovative machine concept.

For the first time it is possible to measure the actual movement of the timber directly so that timber transport can be carried out with space-saving infeed rollers, similar to a planer.

On the one hand this means high precision without damaging the parts; on the other hand the HMC makes extremely space-saving machine construction possible.

### Standard version already with ROBOT unit

Even the standard version has a 6-axis ROBOT unit with rotation speeds up to 12,000 rpm with automatic tool change for 16 different tools. It is thus possible to realise all processings which are common in carpentry joinery precisely, without overturning and in one step with a maximum cross-section of 300 x 1250 mm.

Moreover, thanks to its compact design the machine is perfectly encapsulated against dust and noise emission and can be mounted on an even concrete floor without requiring building measures.



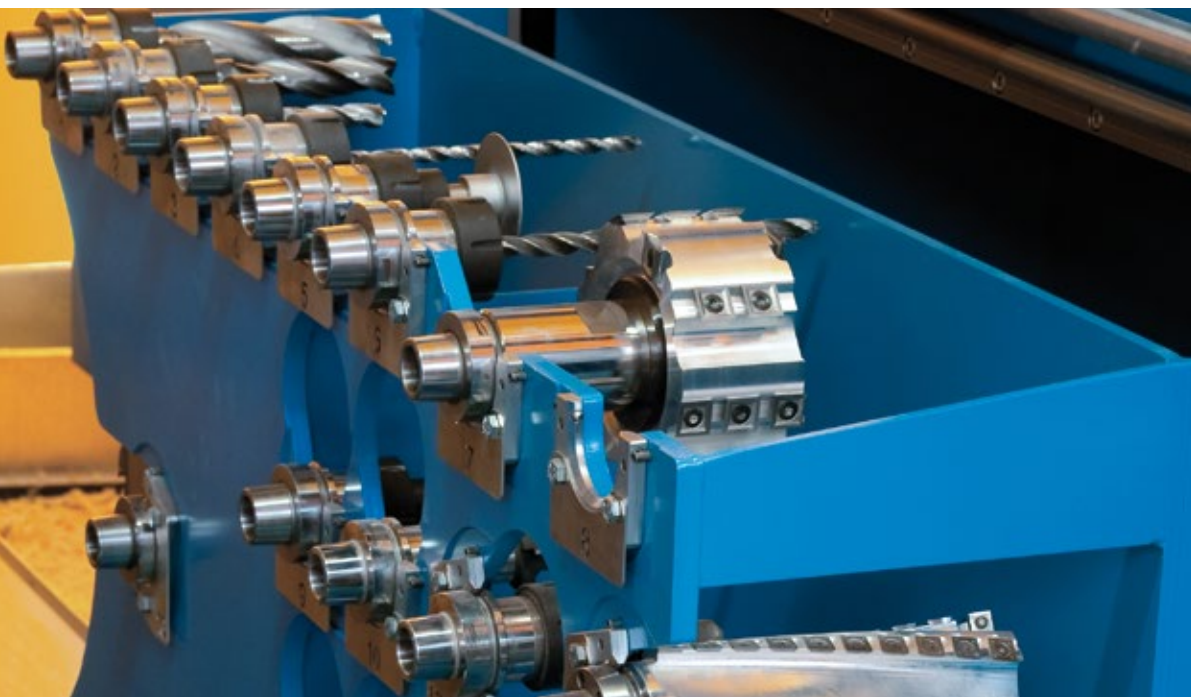


## ROBOT unit

### The 6-axis ROBOT unit leaves nothing to be desired

The ROBOT unit has a power of 12 kW and a stepless rotation speed range from 0 to 12,000 rpm. The tool changer has a magazine for 16 different tools with a length up to 295 mm. With HSK-63-F tool holders saw blades, drills, endmills, plain side cutters, dovetail milling cutters, plain milling cutters and markers for part labelling can be replaced within seconds.

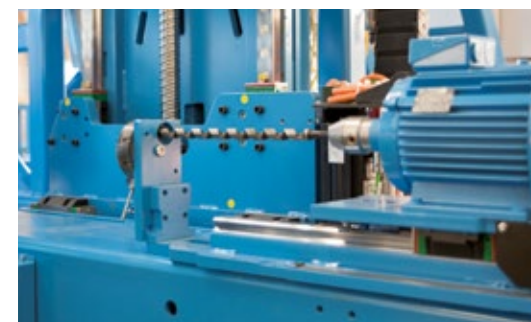
Management and selection of the tools is carried out in the Hundegger production programme CAMBIUM. Depending on the part to be processed, the correct tool is automatically selected in the magazine. The specifications concerning the milling or drilling tools do not only contain type, diameter, length and magazine position, but also the optimum rotation speed. This information is automatically retrieved when the respective tool is used.



Thanks to the special construction of the machine, the extremely stable ROBOT unit can move to the parts without restrictions from all 6 part sides and carry out processings in any angle and inclination. Turning the parts or even a second passage which were often necessary will be omitted, even for large timber cross-sections. The result is absolute precision and exactitude.



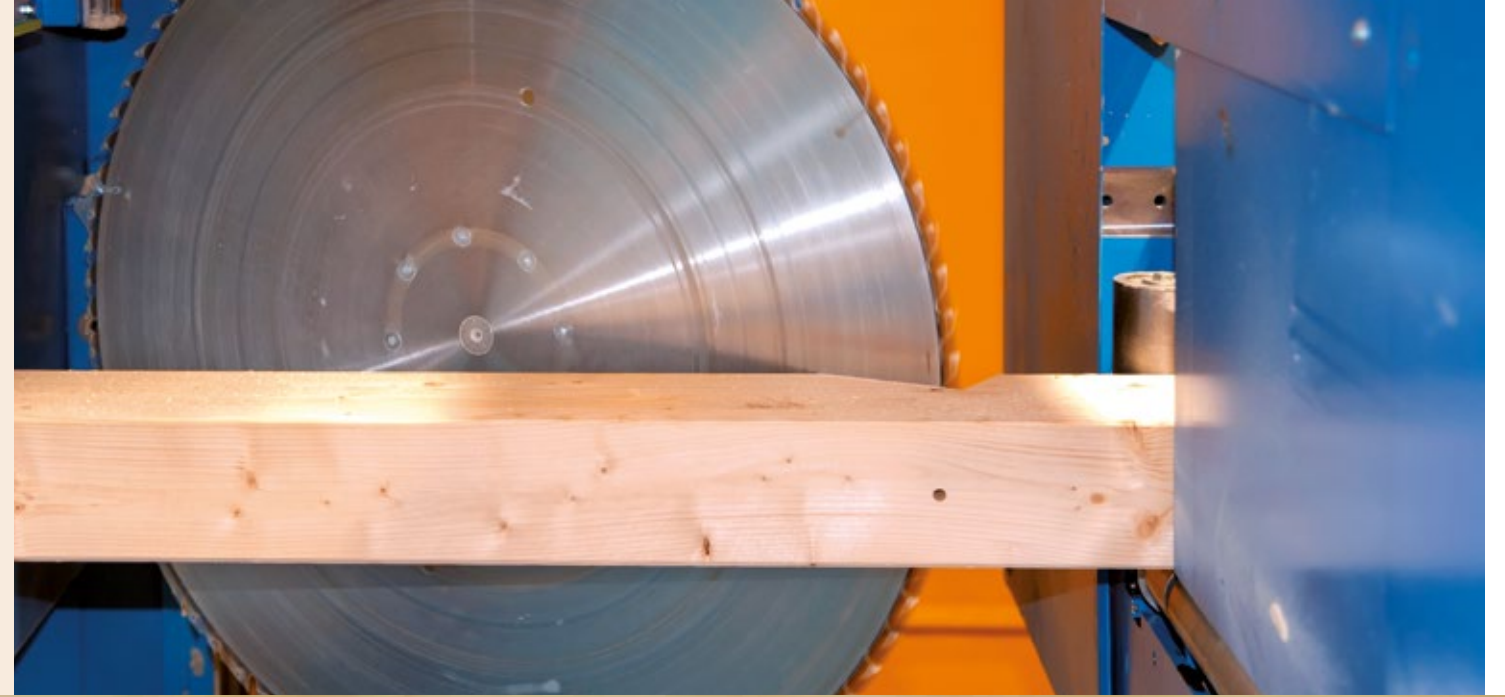
A table which can be displaced lengthwise on the ejection side makes sure that the part is clamped possibly tight and that unnecessary vibrations during processing are avoided. In combination with the high rotation speed range of the ROBOT unit surfaces in visible quality are thus created.



Up to 2 horizontally processing drills can optionally be mounted on the ROBOT unit. Thus, drillings for rafter nails, purlin doublings etc. with a max. depth of 525 mm can be carried out without tool change.

efficient and flexible





## 5-axis sawing, slotting and marking unit

The 5-axis sawing, slotting and marking unit working from above increases the throughput of the ROBOT-Drive even more.

While the highly flexible saw carries out the processings, often the next required processing tool is already prepared on the ROBOT unit.

The saw blade without flange has a diameter of 800 mm.



### Sawing-slotting unit

With the 360° swivelling 5-axis unit which can simultaneously be inclined around 180° all trimming cuts, mitre cuts, jack rafter cuts and also birdsmouths, ridge laps, laps for fascia board and scarf joints can be realised quickly, precisely and with a high surface quality.



In contrast to a solution with an undertable mitre saw the saw blade is able to cut under the 0 position and carry out slots in any angle and in all required thicknesses.



### Marker

The marker which is integrated in the sawing-slotting unit can mark within seconds rafter divisions on purlins or pillar divisions on ground sill and top plate on three part sides without requiring the replacement of a pin in the ROBOT unit.

## Material handling



### Automatic infeed system

On a loading conveyor which contains stainless steel hinge band chains the machine operator can position several timber parts at the same time. The machine separates these parts automatically and transports them to the processing zone without a risk of injury.

Thus, the machine operator can concentrate on other works.



### Hydraulic lifting table

The hydraulically controlled lifting table is mounted in front of the loading conveyor. Complete parcels of timber can be put on the lifting table. There they can be lifted to the requested height. Constant timber infeed is thus possible on the height of the loading conveyor.



### Timber support

The processed parts are transported onto plastic coated timber supports by means of an ejection guide, namely on the operator side and also on the reverse side of the machine. Additional chain elements serve as a support for heavy parts. As an alternative, the timber supports can be replaced by a cross transport.





## Disposal of chips and rest timber



The chips and rest timbers which fall in the disposal channel on the bottom will be safely and efficiently transported out of the processing zone by means of an integrated scraper. Then they will be conveyed to subsequent disposal solutions like a chipping device, a rising conveyor belt or a chip container.

As an alternative, a controlled ribbon solution is available for safe separation of short processed parts and rest timber parts.

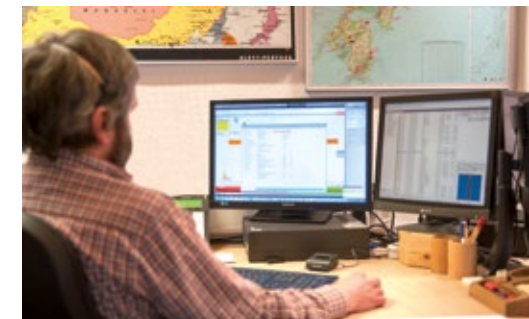


The ROBOT-Drive with a sub-structure can be mounted directly on the concrete floor. In order to reduce the infeed and outfeed height, a pit can be mounted under the processing zone.

## Services



The after-sales service department is part of the Hundegger philosophy. A great team of experts is permanently available for the customer for any questions concerning the use of the machines, also after sales. Whether it concerns assembly, mechanic system, software, spare parts, tools, retrofitting or maintenance, we will be at your disposal almost around the clock.



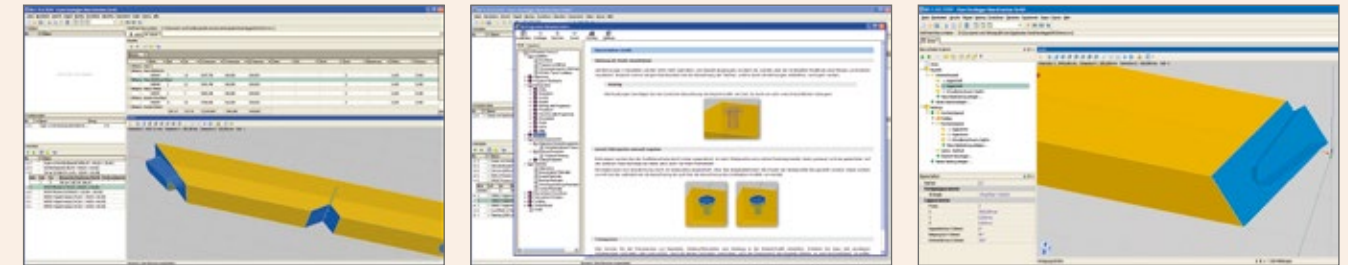
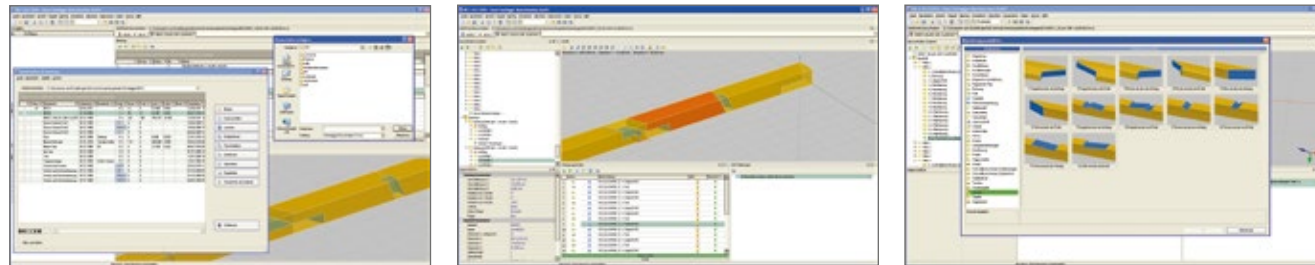
Thanks to modern remote maintenance technology the Hundegger service technicians have direct access to the machine control. The availability of the machine is thus increased even more. This service is part of our offer, just as the free use of our hotline.



Training courses for machine operators, which take place in our training centre in Hawangen and which are especially adapted to the requirements of the users, guarantee an efficient use of the ROBOT-Drive from the very beginning. Hundegger customers can make use of additional training courses or training courses for further machine operators for free and during the whole useful life of the machine.



# HUNDEGGER PRODUCTION PROGRAMME CAMBIUM



## Complete software included in the scope of supply of the machine

The best mechanical system is only as good as the corresponding software.

For this reason, Hundegger attaches great importance to the in-house software development department.

As a result we can provide solutions which are perfectly adapted to the customers' requirements and which are also consistently further developed and updated. In order that our customers benefit from these solutions also after sales, we naturally provide regular software updates which are free of charge.

The new Hundegger 3D production programme CAMBIUM is characterised by operator convenience and simple input which is suitable for timber construction.

On demand CAMBIUM can be quickly and flexibly adapted to the specific demands of different users like planning engineers, machine operators etc.

Different processing strategies are now available in CAMBIUM for perfectly adapting the machine to the production quality respectively requested by the customer.

For particular requirements they can even be freely configured by the user thanks to the selection of approach, tool, speed, rotation speed etc.

This offer is completed by an open structure for a simple integration of the Hundegger machine into company networks, by comprehensive operating data collection, sophisticated remote diagnostics and remote maintenance options.

### Language

CAMBIUM will naturally be configured and supplied in the respective national language.

### Data transfer

Automatic transfer of all requested data from joinery and timber construction programmes without manual finishing and additional effort for programming.

### Direct input

Parts can also be created with CAMBIUM directly. The clearly arranged 3D presentation supports the user and makes input a mere child's play.

### Processing group

Separate processing macros like drilling patterns, complex profiles etc. can be defined and saved.

### Integrated online help

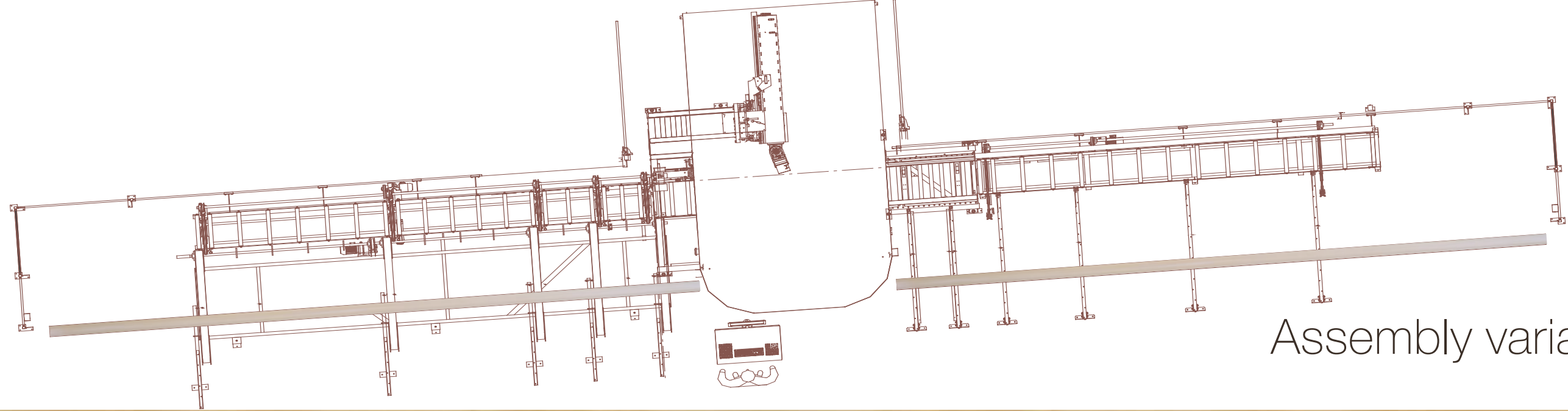
User-friendly help functions are available for every function (message – description – solution).

### Automatic optimisation

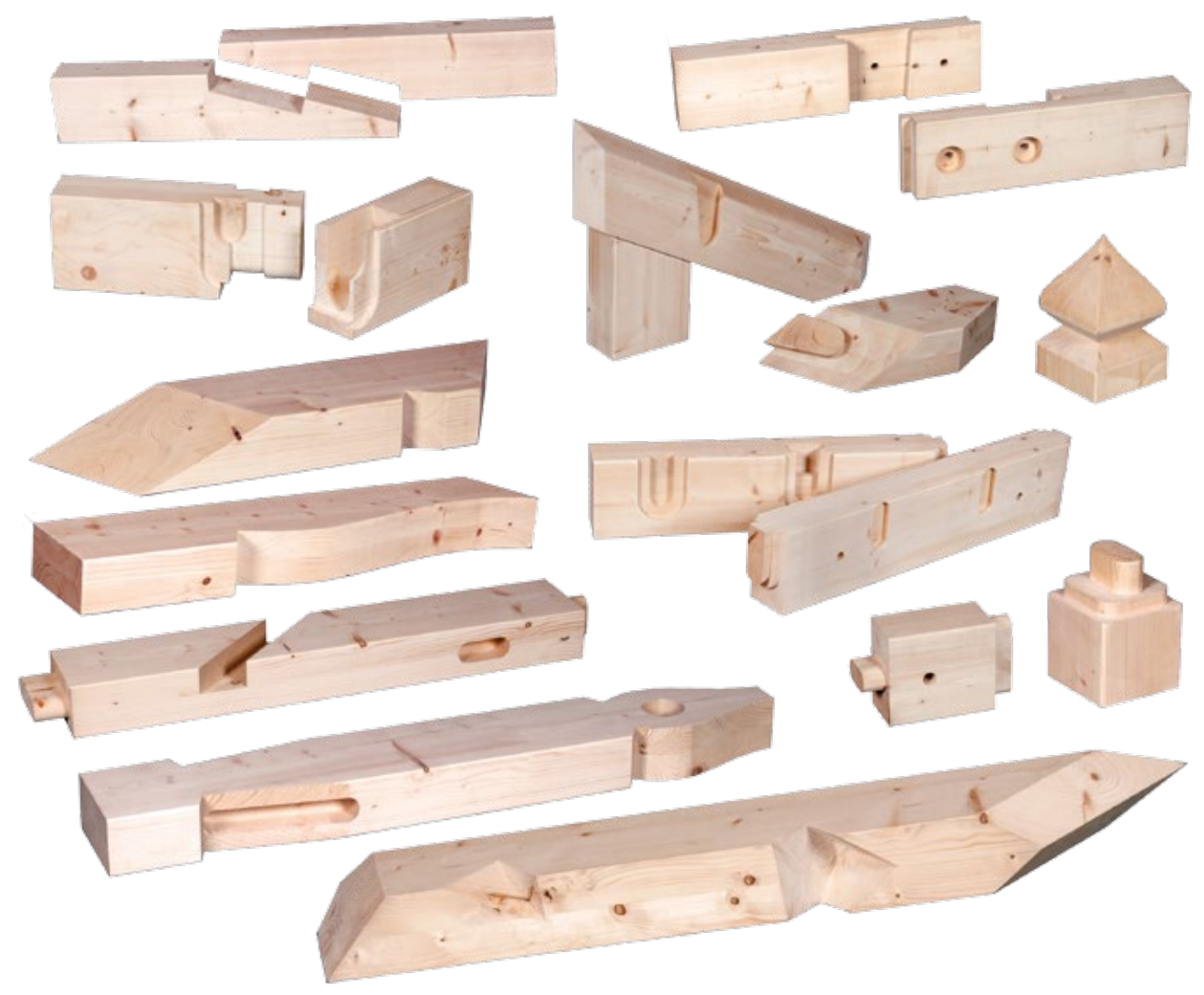
For optimum timber utilisation CAMBIUM provides bar optimisation and optionally also surface optimisation.

### List presentation

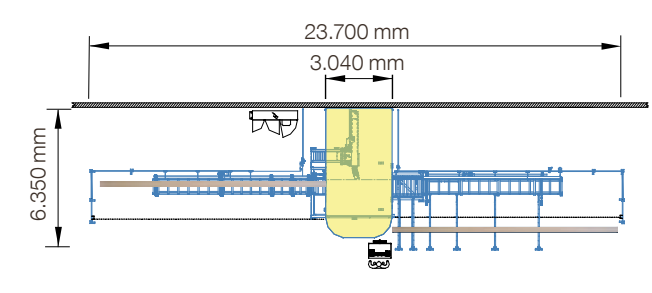
At the touch of a button CAMBIUM generates all required lists for every project (parts lists, sawmill lists, stock lists etc.).



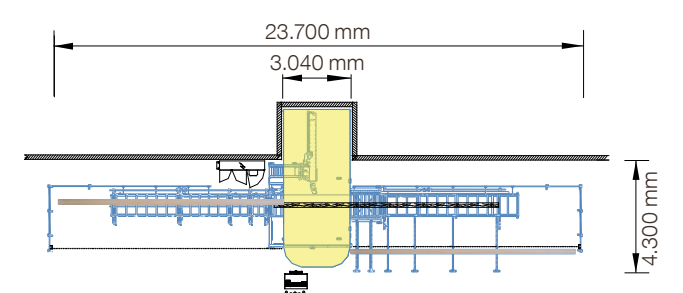
# Assembly variants



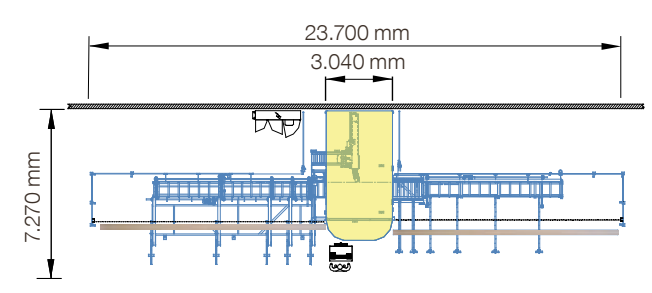
### Assembly examples and dimensions



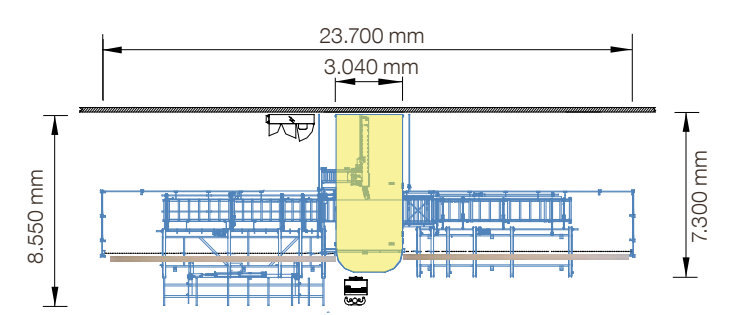
ROBOT-Drive 450 / 625 for max. timber length of 10.00 m (infeed and outfeed side)\*



ROBOT-Drive 1250 for max. timber length of 10.00 m (infeed and outfeed side)\*



ROBOT-Drive 450 / 625 with automatic infeed system for max. timber length of 10.00 m (infeed and outfeed side)\*



ROBOT-Drive 1250 with infeed unit and lifting table for max. timber length of 10.00 m (infeed and outfeed side)\*

\* any extension possible

From CAD to the finished part - unlimited diversity - precise, quick, flexible

About the specifications in this prospectus: subject to technical alterations. Illustrations may contain accessories or special equipment which are not part of the standard scope of delivery. For better comprehensibility illustrations sometimes do not contain standard safety equipment.





## Hundegger advantages

- Experience gathered from 4,400 machines installed worldwide
- Precise adjustment of machines to customer requirements using the modular system with the benefit of qualified advice
- High degree of flexibility through internally developed software
- Continuous further development and free software updates
- Sophisticated interface to all leading timber construction CAD programs
- Convenient machine operation developed specifically for the needs of the timber construction industry
- Qualified training and instruction in the Hundegger Training Centre
- Close cooperation with leading institutes and vocational colleges, particularly in the field of vocational training
- Extensive warranty benefits
- Worldwide after-sales service and spare part availability guaranteed
- Round-the-clock service as a cornerstone of our corporate philosophy
- Incomparable price-performance ratio



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