

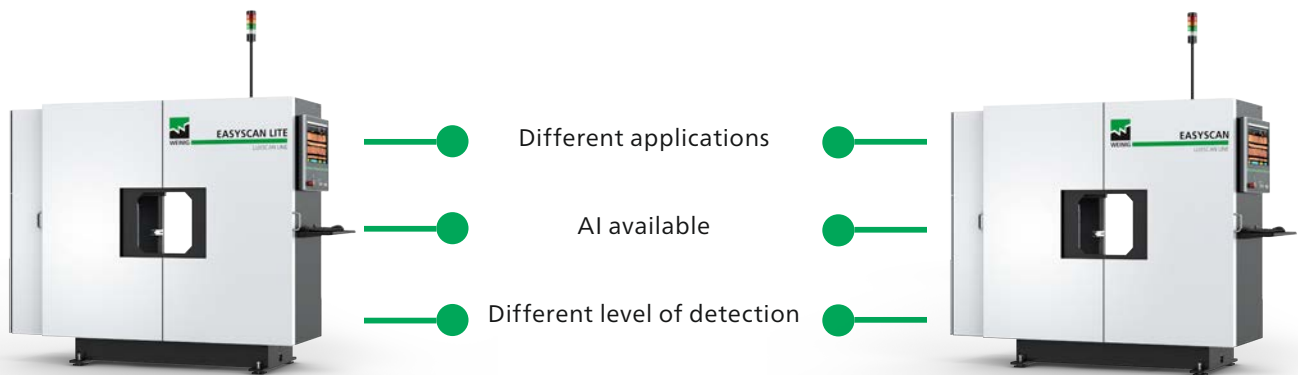
EasyScan & EasyScan Lite

Economical scanning



Economical scanning solutions

The EasyScan and EasyScan Lite series set a new benchmark for economical scanning. These innovative scanners have been developed from the well known CombiScan Series. They feature high performance combined with economical production and reasonable pricing. With the EasyScan and the EasyScan Lite, optimizing becomes affordable for everyone.



Entry-level scanners have never been as sophisticated as they are today. By integrating AI, we have enabled new defect detection possibilities for small budgets.

Thanks to its simple all-in-one design, the scanners have a small footprint and are an affordable investment in automatic detection systems.



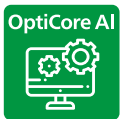
Flexible and simple



Laser and color cameras (or color modules) enable accurate and fast reading of wood characteristics on all sides.



3D lasers optimize each board based on the accurate geometric reconstruction of its surface shape.



OptiCore AI supports defect detection on the most common wood species with artificial intelligence.



Dot lasers detect the grain pattern and improve cut accuracy. Available only in the Easyscan.



Automatic camera positioning ensures the best image quality regardless of the length or thickness of your boards.



OptiCore is a powerful optimizing software to help you maximise your yield and profit.

You can expect a lot from us!

Fast return on investment

We offer you the best optimization solution for each board processed in your sawmill. Every tiniest piece of wood that you can recover will translate to profit for your company.

Quality assurance

Scanners guarantee a consistent quality of your products. Thus, you will be able to deliver the best possible product to your customers.

Increased output

Scanners are able to process a large number of pieces per minute, which is much faster than the manual process. Automated defect detection will increase your performance and output.

Lower labor costs

It can be challenging to find qualified personnel. With automatic scanning, you need not worry anymore. Furthermore, labor costs are reduced.

WEINIG offers more

Economical scanner with AI

EasyScan Lite

EasyScan Lite is a new entry-level scanner equipped with artificial intelligence. However, a lower investment does not necessarily mean lower expectations. AI is revolutionizing many fields, including the wood industry.

Thanks to this technology, the scanner offers the level of performance comparable to that of the premium models from a few years ago.

- Affordable technology ●
- Sets new detection standards ●
- Easy to operate ●
- Driven by artificial intelligence ●



Available technologies:



Economical scanner with AI

EasyScan

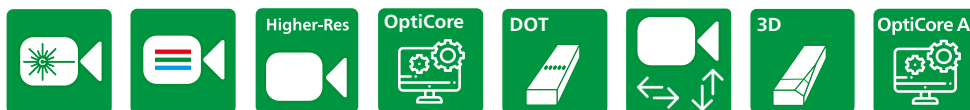
Thanks to its high-quality components and sensors, the EasyScan delivers extremely accurate results. The high-quality LED illumination and sensor positioning are particularly eye-catching, guaranteeing the best

possible performance. Due to its compact design, the EasyScan can be used in new, small lines as well as in existing ones. Whether your company is small or large, the EasyScan opens the door to optimization.

- Higher detection capabilities
- Larger application spectrum
- Higher throughput
- Driven by artificial intelligence



Available technologies:





Detection with AI

OptiCore AI is an intelligent image processing software. This revolutionary method uses Deep Learning, a class of Neural Networks from the field of AI, to automatically analyze and identify wood defects.

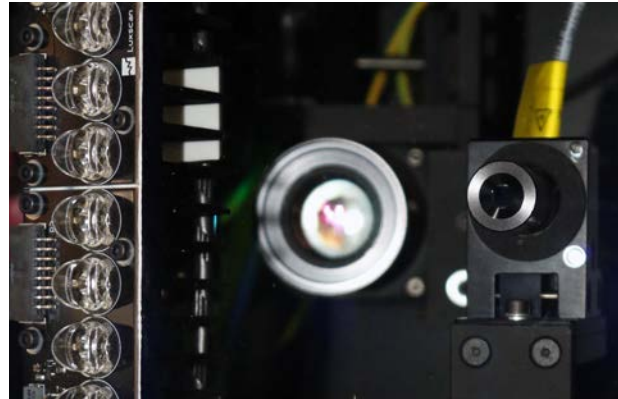
OptiCore AI allows training of the scanner to recognize and classify timber characteristics for multiple qualities to meet your final product requirements. The software learns to process images like a human brain and is trained by being shown multiple defect examples.

Deep Learning leads to improved accuracy, improved detection repeatability with changing wood characteristics, and reduced set-up times.

The sensors: Key to success



All our systems are fitted with laser cameras as standard equipment. The very high scan rates guarantee the best detection and results. With continuous development in these industrial sensors the performance is continually improving. Using this technology, it is possible to identify defects such as knots, pith, cracks, etc. The 3D laser system also allows detection of 3D surface defects such as holes, wane and edge defects.

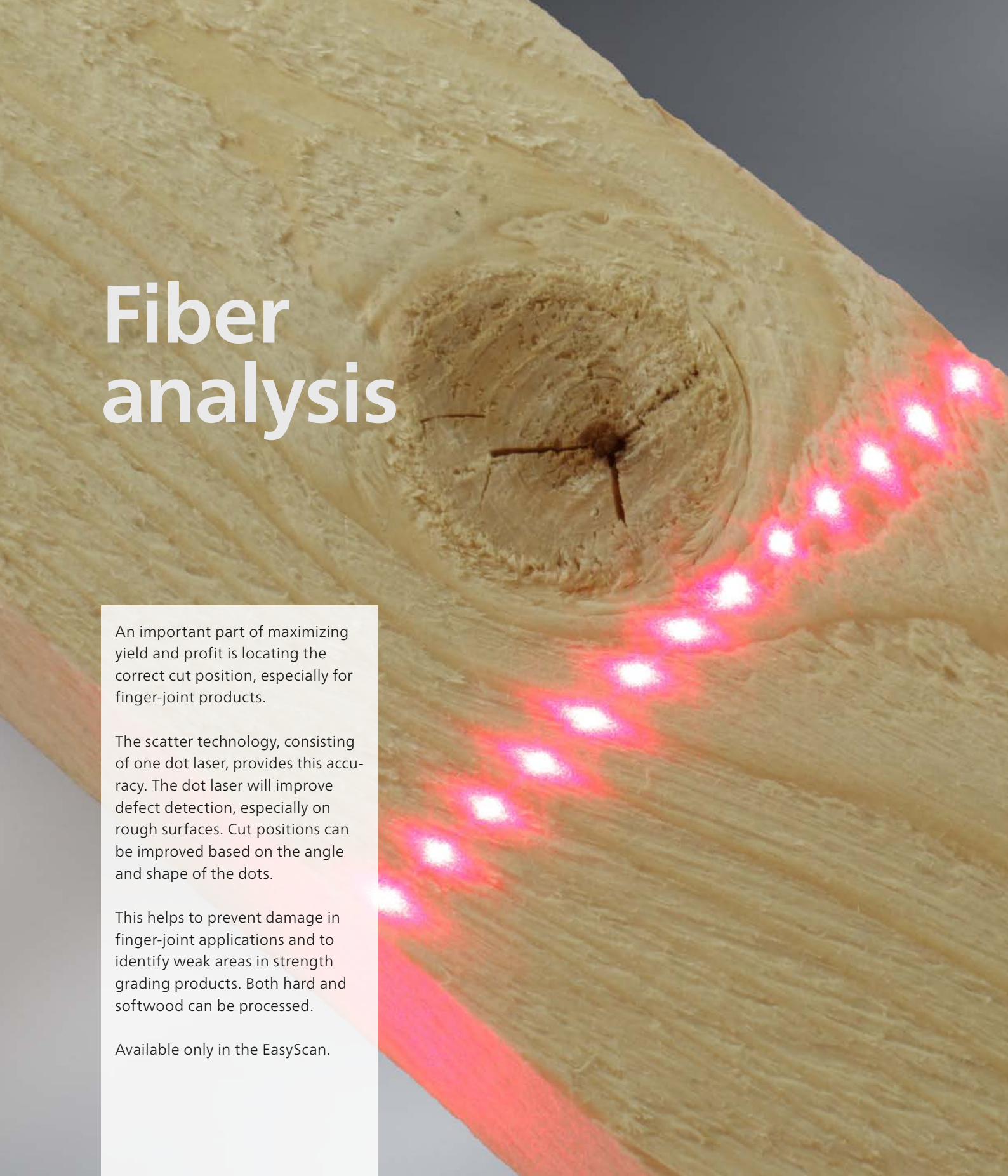


Color detection



Standard scanners face serious issues as soon as it comes to accurately identifying color defects. These problems are effectively addressed and eliminated by the color sensors in both, the EasyScan Lite and the EasyScan. A high resolution in both the longitudinal and transverse direction provides a high detection of color defects. Defects such as blue stain are detected, measured and optimized with the highest accuracy.

Fiber analysis



An important part of maximizing yield and profit is locating the correct cut position, especially for finger-joint products.

The scatter technology, consisting of one dot laser, provides this accuracy. The dot laser will improve defect detection, especially on rough surfaces. Cut positions can be improved based on the angle and shape of the dots.

This helps to prevent damage in finger-joint applications and to identify weak areas in strength grading products. Both hard and softwood can be processed.

Available only in the EasyScan.

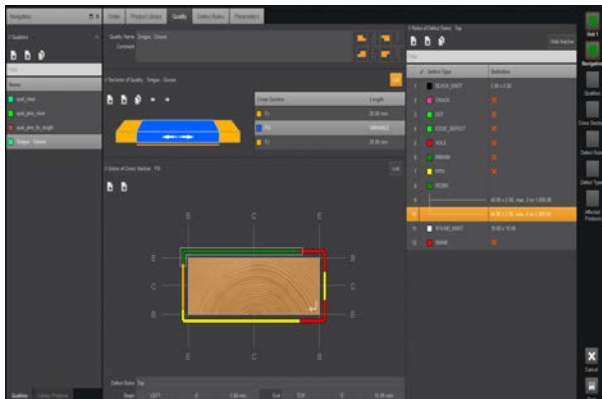
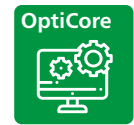
Simple adjustment is the key



Simple does not mean lacking in performance. Minimising adjustment and calibration times increases the available production time and therefore output. Automatic camera positioning ensures the cameras are in the ideal position to achieve the best resolution and image quality. It also prevents mistakes in set-up, meaning production errors are reduced to the minimum. This feature is available in the EasyScan.



Powerful optimizing software



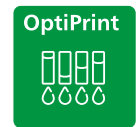
The powerful optimizer, OptiCore, allows you to optimize multiple qualities and zones, tailored to your final product requirements. Multiple products and qualities are stored in a library and can be quickly and easily combined using the "drag and drop" feature. The logical interface of the scanner improves the set-up, which is simple for any operator to use. This ensures high reliability, maximum availability and excellent performance.

ShapeScan

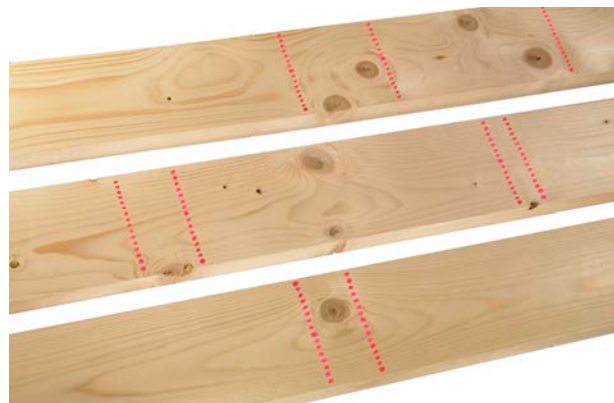


The ShapeScan is the ideal option when a certain degree of bending, bow or twist is to be detected. The measurement of cup is optional. The ShapeScan T uses multiple sensors to measure transversally on any cross conveyor. The ShapeScan L measures in a longitudinal direction. The shape data can be included in the optimization so that, for example, a maximum bow per product is allowed. As a stand-alone product it can be used to remove pieces out of tolerance.

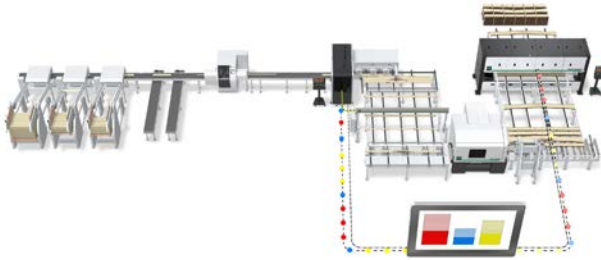
Marking station



If a direct data connection is not possible or complex mechanization is to be prevented, a marking station lends itself to solve the issue of information transfer. Cuts, qualities, and rotation can all be printed on each cut piece, providing the perfect identification for further processing. The marking station is also a useful addition to strength grading and sorting lines.



OptiLink



Combining different applications and production lines complicates the flow of information. OptiLink has been designed to optimize production management by centralizing the information flow. With only one access point to your production, producing just-in-time is no more a complex task. OptiLink minimizes operating errors on one hand and reduces intermediate stock on the other, which is a central benefit.

Front End Scanner

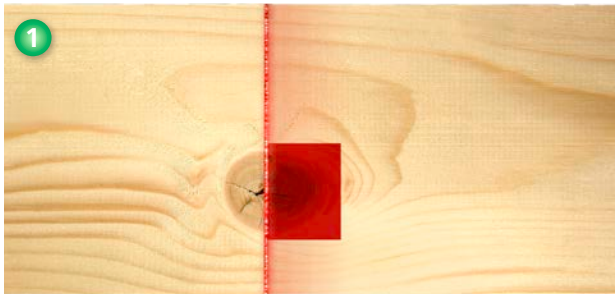


The Front End Scanner is a system mounted behind a crosscut saw to scan both ends of the cut pieces. With it, internal contrasting defects, such as pith, can be detected. That information can be used to regrade pieces going to a fingerjointer or for products which are later split, minimizing rework and maximizing yield. It can be added to existing scanner lines as well as manual marking lines.

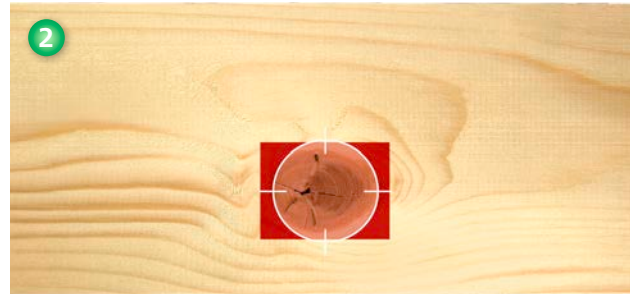


Optimizing in three steps

Step 1: Our scanners use multiple sensor technologies such as laser and color cameras. Suitable for many applications, your WEINIG expert will advise on the appropriate scanner based on the wood species, surface quality and required performance. Our goal is to achieve the best possible information quality for each customer's application.

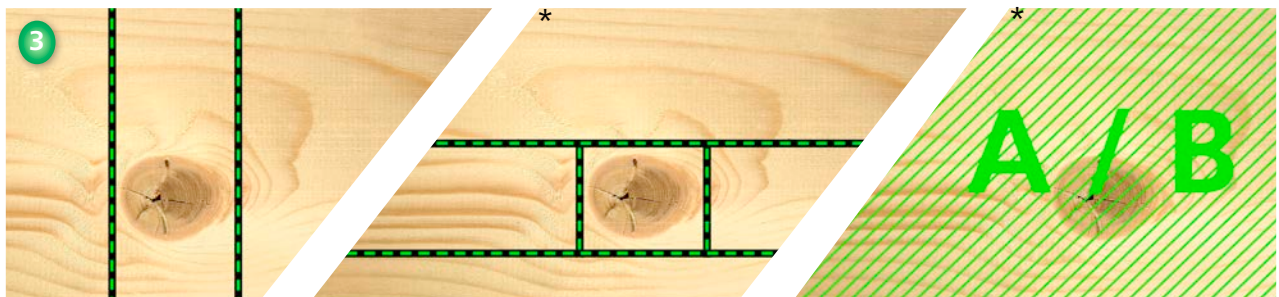


Step 2: In the next step, image processing, the highly developed OptiCore software takes over. It can see and identify different defects as well as color variations on the board. Quality data from the multiple sensors allows for optimal data processing and defect identification.



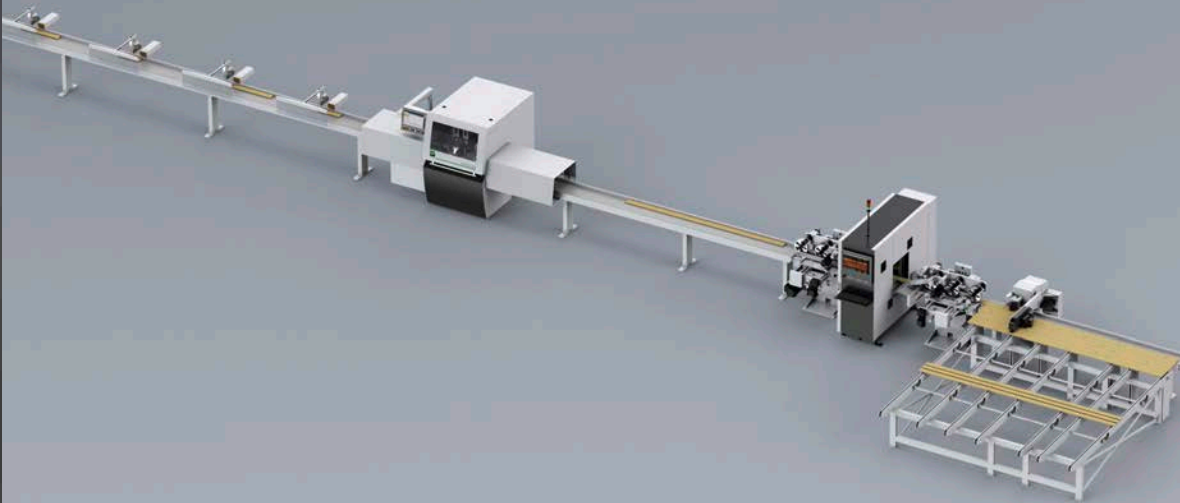
Step 3: The optimization from the powerful OptiCore software provides the best solution for cross-cutting. It considers various customer requirements and quality demands. Based on the exact characteristics identified during image processing, the board is optimized according to pre-defined requirements. There are

unlimited possibilities in the definition of products and qualities. By dividing the products into diverse zones, complicated qualities can also be easily dealt with. Therefore, all kinds of end products can be produced.

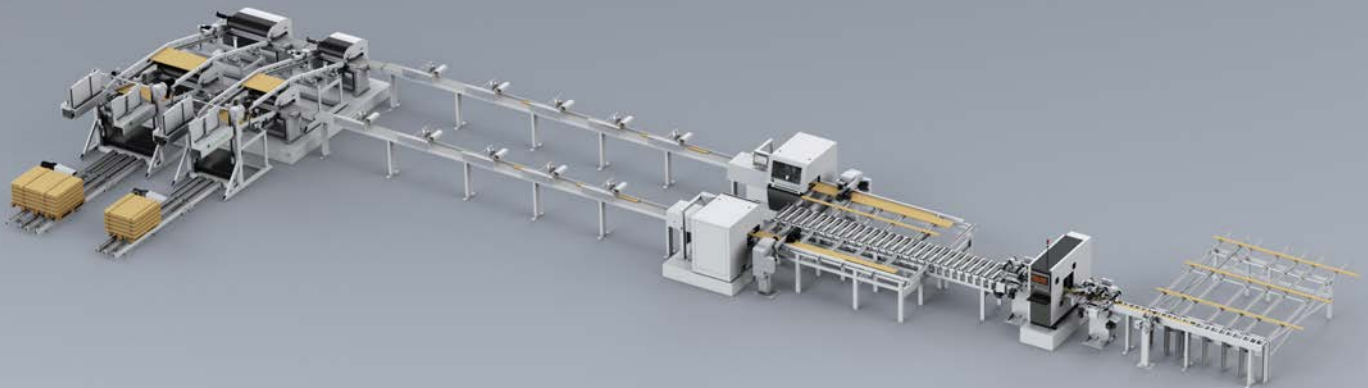


* not available in all scanner models

One scanner and one crosscut saw



One scanner and two crosscut saws



Overview of the specifications

The table shows the standard technical specifications. For further, more detailed information, according to your individual needs, please contact an expert from WEINIG.

Technical Data	EasyScan Lite C	EasyScan C
Max. speed (m/min)	150 *	180 *
Max. boards/min (3.6m)	up to 20 *	up to 30 *
Max. throughput linear m/min	80 *	100 *
Min. / Max. input length (mm)	900 – 6500 *	900 – 6500 *
Min. / Max. input width (mm)	35 – 160	35 – 260
Min. / Max. input thickness (mm)	15 – 120	15 – 120
Hardwood / Softwood	– / ●	○ / ●
Working height (mm)	920 *	920 *

Standards and options (internal)

Laser camera	●	●
Color camera/ Color Module	●	○
3D analysis	●	●
Fibre analysis	–	○
Optimizer	●	●
OptiCore AI	●	○
High definition camera	–	●
Automatic camera positioning	–	○

*Technical changes possible. Statements and illustrations in this brochure include optional extras which are not included in the standard specifications. Covers are sometimes removed for photographic purposes.

● Standard ○ Option

Foetz, Luxembourg: Centre of Excellence for Engineering and Manufacturing

WEINIG offers more

We are here for you.

Comprehensive advice on optimum process integration is a standard service at WEINIG as well as a well-tested training plan with effective training sessions.

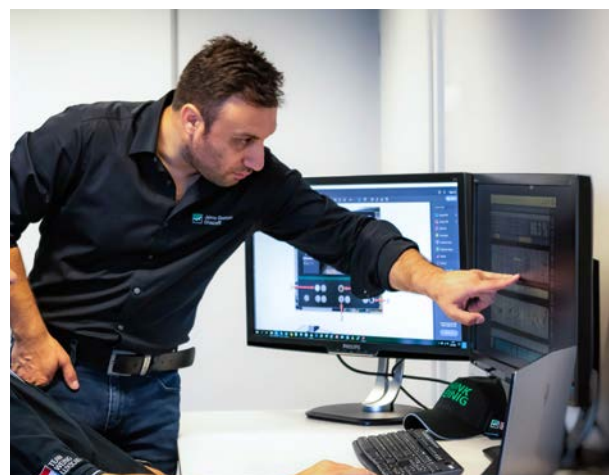
Our branches in all four corners of the earth and an extensive service team guarantee rapid help where and when you need us.



Advice



Mounting



Training

WEINIG GROUP

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