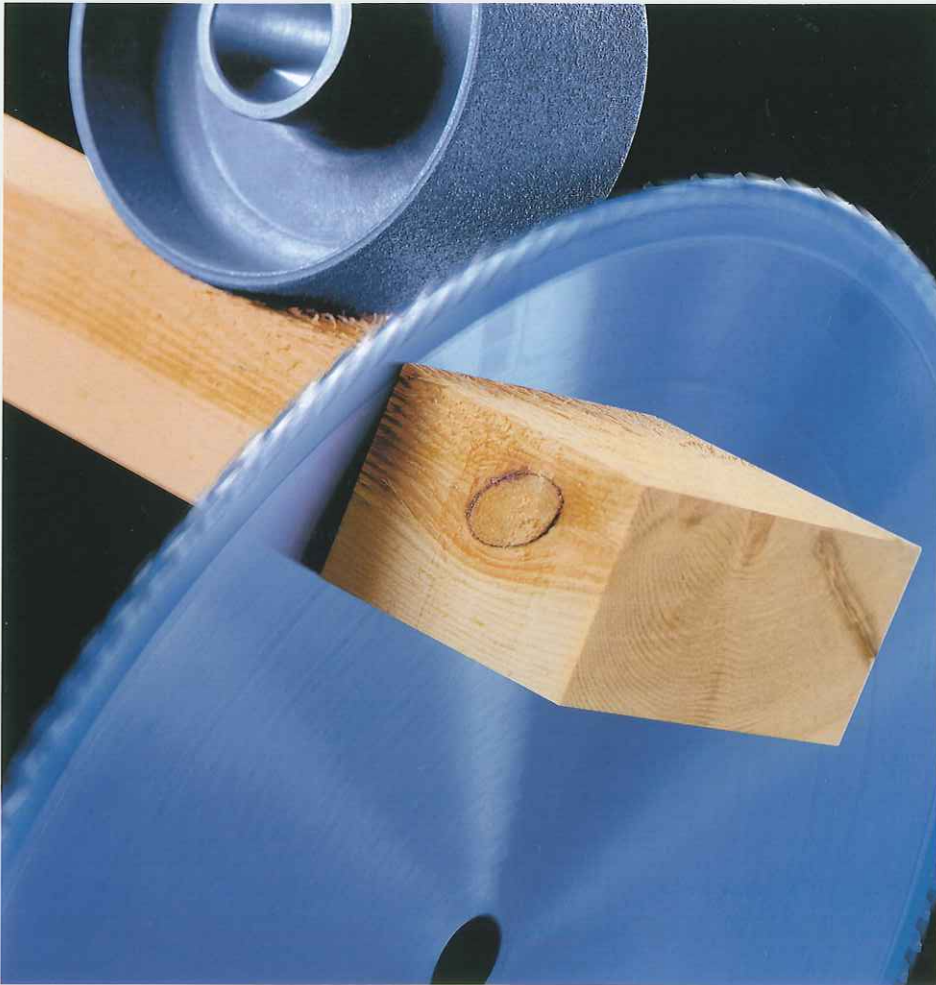


# OptiCut Highspeed-Serie

Innovative cross-cut and optimisation systems  
for highest yield and maximum profits



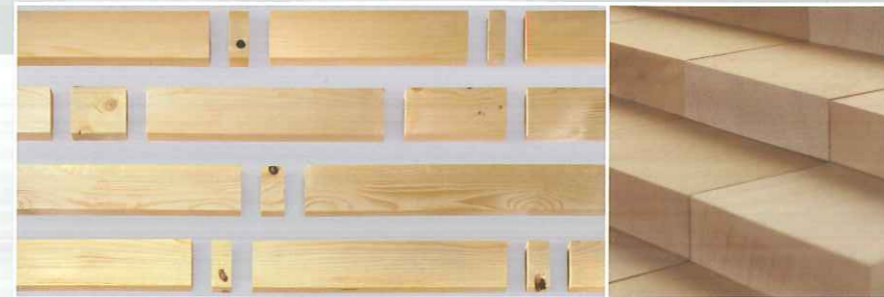
Dimter  WEINIG  
GROUP

US

[www.hoechsmann.com](http://www.hoechsmann.com)

## Always a cut above with DIMTER: profitable cross-cutting with market leading know-how

DIMTER supplies high-speed cross-cutting systems for all industrial requirements, including fixed-length cutting, defect cutting and optimisation. OptiCut high-speed cross-cut saws are not only the fastest around, but also give you top reliability, accuracy and user-friendliness. Simply install and you can begin profitable, high-performance cross-cutting right away– thanks to the technology leader DIMTER.



Fixed-length cutting  
Defect cutting  
Optimisation

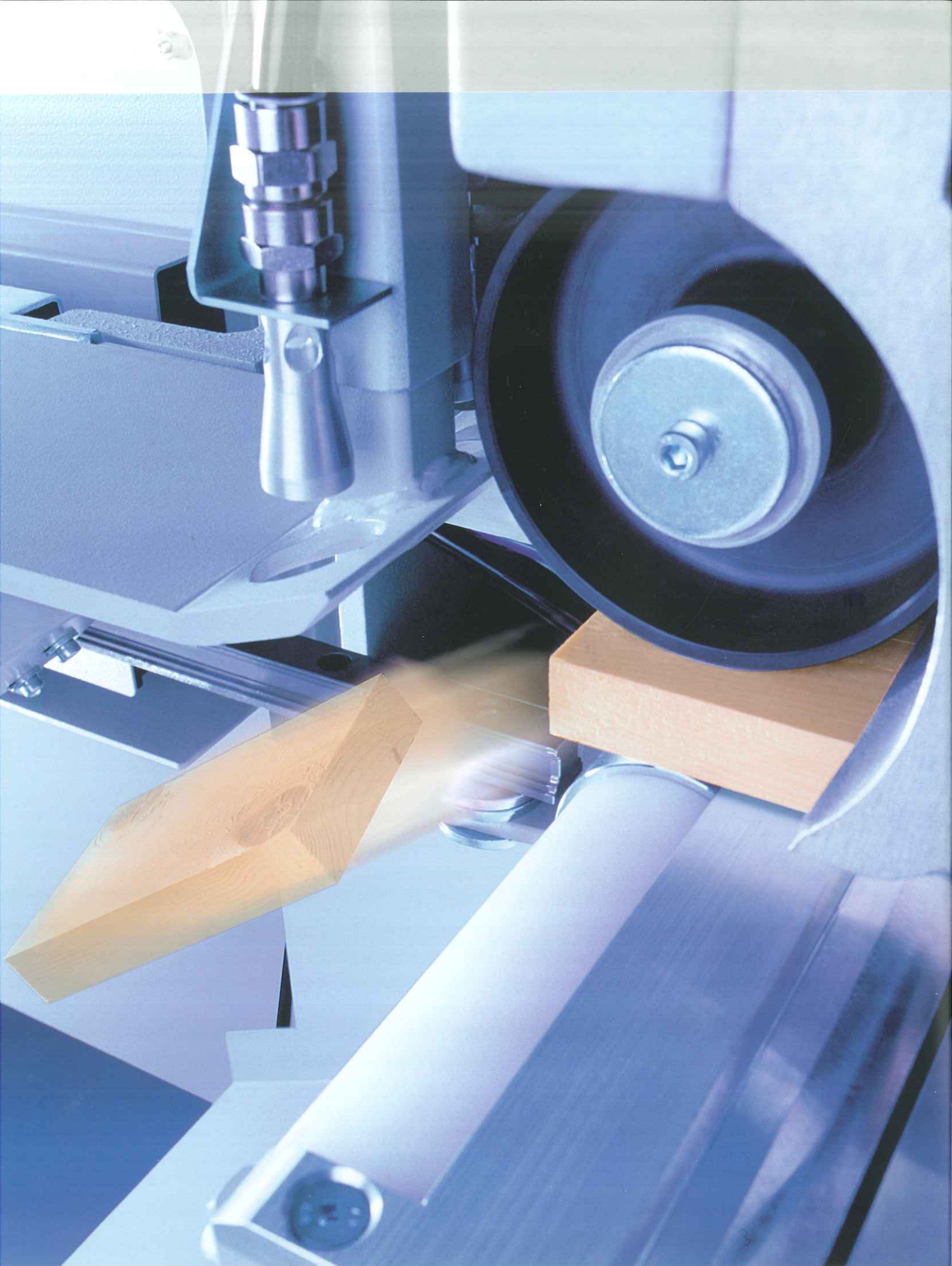
DIMTER produces the latest computer technology and software in-house. One attractive option is to use scanners in OptiCut lines instead of manual defect and quality marking. Upgrades and retrofits are possible at any time, allowing the OptiCut to grow with the user's needs. What's more: DIMTER customers benefit from the comprehensive service of an experienced manufacturer and the security of the world-wide WEINIG GROUP. What are your requirements? Simply select from our OptiCut range, from simple to fully automatic solutions.



### The OptiCut – a cut above the rest:

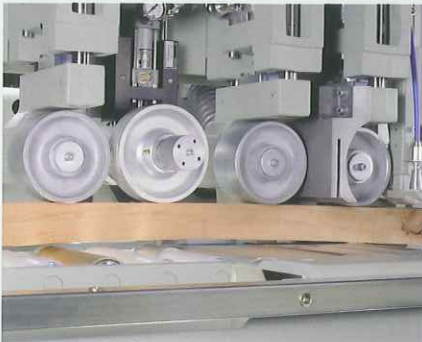
- High performance and speed
- High productivity
- Maximum profit
- Top reliability
- Absolute cutting accuracy
- Maximisation of timber yield
- Easy to operate
- Robust and durable
- Expandable and upgradable
- Individual cutting solutions
- Use of scanner technology
- Fully automatic production





## DIMTER gets things moving: perfect cross-cutting in record time

High-speed positioning, cross-cutting and sorting – plus a maximum yield. Modern, high-output businesses need this kind of power in their production. The innovative machine concept embodied in the top model of the OptiCut series allows feed speeds of up to 415 m/min. Exact positioning from full speed followed by re-acceleration is performed within  $50\text{m/s}^2$ . By way of comparison: a Formula-1 racing car takes almost three times as long just to accelerate! One cut takes just 0.085 seconds – the blink of an eye!



### Ultra-fast feed, exact positioning and precise cut

Heavy top-driven feed rollers hold the wood firm, ensuring secure, trouble-free transportation through the OptiCut. Even with rough, bowed or twisted timber – the drive rollers follow the contours of the material. DIMTER High-Grip rollers allow extremely dynamic positioning and acceleration. Powerful drive units guarantee a high continuous performance. The extremely fast sawing stroke ensures a very high cutting frequency.



## DIMTER OptiCut: flexible cutting and optimising cross-cut saws

Each production plant has different conditions and possibilities. The OptiCut adapts accordingly. It cuts preset lengths based on fixed cutting patterns. It also cuts out faulty parts. Or it optimises and calculates the ideal lengths and qualities to get the maximum value out of a minimum material input. The OptiCut finds the best combination every time. Even more value can be extracted if defects are intelligently integrated into defined »qualities« instead of scrapping them. The OptiCut measures the complete workpiece before the optimisation program devises the best combination of lengths and qualities.

### Fixed-length cutting

For many products, timber can be purchased in the required quality. From this, OptiCut cuts different lengths in fixed batch sizes. The result is an extremely high output with a minimum labour input.

### Cutting out faulty parts

If the aim is merely to remove defects, the OptiCut cuts out the faulty parts and generates the maximum lengths which are then sorted for delivery to processing plants.

### Optimisation

This means getting the most out of a minimum of material. The OptiCut works out the best combination, then cuts out the faulty parts while simultaneously cutting the wood into lengths. The yield can be increased still further by defining qualities with »admissible« defects.

Optimisation can easily save 8% of waste or even more.

The OptiCut therefore pays for itself in next to no time. The diagram shows the extra profit achieved by an 8% waste reduction.



100 x 50 mm

0 mm

variable length

Yield 97.3%

Length	Prio1	Req.	Nom.					
2544	1.00	50	0	1	1			
500	1.00	90	73	1	1	1.00		
800	1.00	120	100	2	1	1.70		
1000	1.00	200	56	2	1	1.98		
1500	1.00	500	488	3	1	2.88		
250	1.00	70	32	4	1	0.19		
350	1.10	90	67	5	1	0.33		
750	1.00	360	288	4	1	0.89		
845	1.00	486	56	1	1	1.00		
862	1.00	122	78	1	1	1.00		
445	1.00	65	64	4	1	1.00		
2445	1.00	88	0	3	1	1.00		
		223	120	4	1	1.00		



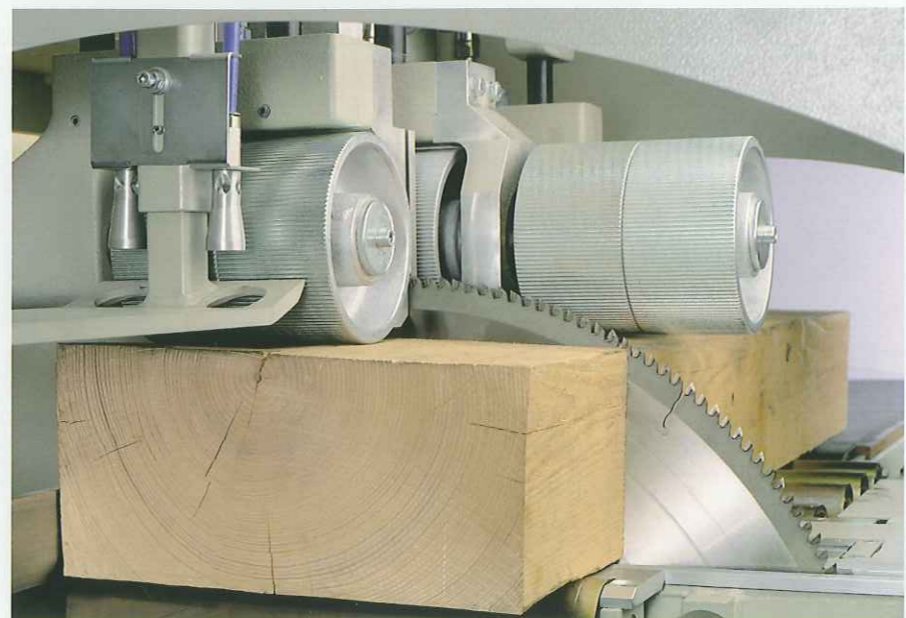
### DIMTER OptiCut 350: The powerpack for universal application

The OptiCut 350 can tackle timber of almost any quality. Even bowed and twisted timber can be reliably used in production with the ample power available. Thanks to the non drive-dependent length measuring system, the OptiCut 350 cuts with an accuracy of up to +/- 0.8 mm. A controlled waste gate and the Vario-Speed feed system for non-stop cross-cutting are available as standard. Also included is a full optimisation function for deriving the maximum yield from a minimum material input. What's more, the OptiCut 350 can also cut large cross-sections.



### DIMTER OptiCut 350 XL: high performance – even with extra-large cross-sections

The OptiCut 350 XL is equipped with extra-wide feed rollers which bring a higher torque to bear on heavy timber cross sections. Despite the large cross-sections, a surprisingly high cutting capacity and linear accuracy are achieved. The feed speed can be switched between 120m/min. and 180m/min. depending on the relevant cross-section. And suitable loading, marking and sorting solutions are of course also available for the OptiCut 350 XL – including ones specially designed for heavy timber.



### DIMTER OptiCut 450 Quantum: the fastest OptiCut in the world

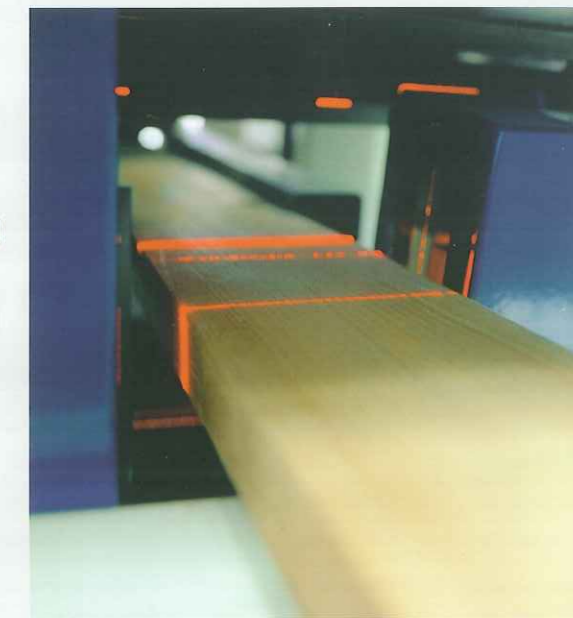
The OptiCut 450 Quantum is the ultimate sawing machine, enabling you to increase your daily output by up to 30%! Besides its cleverly designed Vario-Speed feed system, it also has an intelligently controlled waste gate which only opens as far as needed. HighGrip rollers specially designed for different types of wood ensure effective power transmission to the workpiece and precise positioning.

The positioning function is supported by the non drive-dependent length measuring system. The special saw unit can be precisely controlled, thus minimising tear-out, for example.

Its outstanding performance makes the OptiCut 450 Quantum ideal for use with automatic loading systems, scanners and stacking machines.



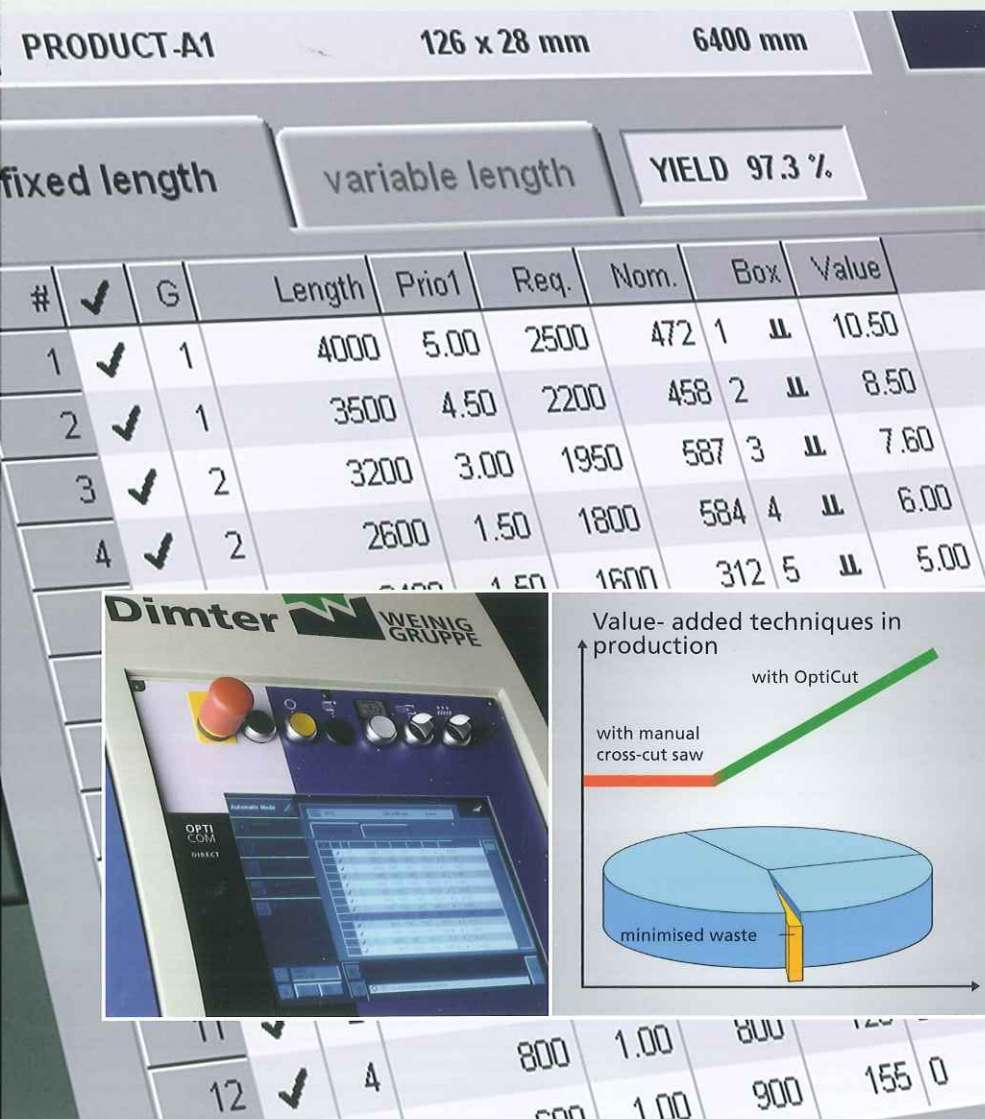
Integration of scanner technology





## The OptiCut optimisation function: more profit, more transparency, easy operation

OptiCut high-speed cross-cut saws can be operated via the extremely user-friendly user interface OptiCom Assist. This software helps you to get the most out of the material and so maximise your profits. The package includes a function for recording the production statistics. Additional possibilities are offered by OptiCom Direct: this progressive solution can be integrated in customer networks and ensures transparency in timber purchasing and production capacity.



### Well organised OptiCom Direct Operator terminal

OptiCom Direct offers intuitive user prompting in several languages. Operation couldn't be easier: simply enter your cut list and off you go! The progressive, large-format touch screen with its ideal display facilities gives the user direct access to the available functions. The screen only shows the currently available functions.

### Further advantages:

Reliable operation due to absence of sensitive hard disk. Secure saving of production data on flash card – even under difficult production conditions and with unreliable power supplies. Direct printer connection. Can be directly integrated in Ethernet networks. Easy generation of cut lists and statistics evaluation in the office. OptiCom Direct is the ideal solution for linking management and production. It can also be integrated into customer specific solutions.



## Perfect sorting: fully automatic with the patented waste gate

Clearing the way for accepted stock... When sorting at extremely high cutting speeds, it is particularly important to ensure the reliable separation of accepts and rejects. That's why DIMTER high-performance saws are equipped with a waste gate as standard.

### Automatic sorting

The OptiCut cuts at record speed – and identifies every cut length. It therefore makes sense to sort the material automatically in advance according to length, quality, etc. – particularly when producing to order. That way you simplify your logistics and save on personnel.



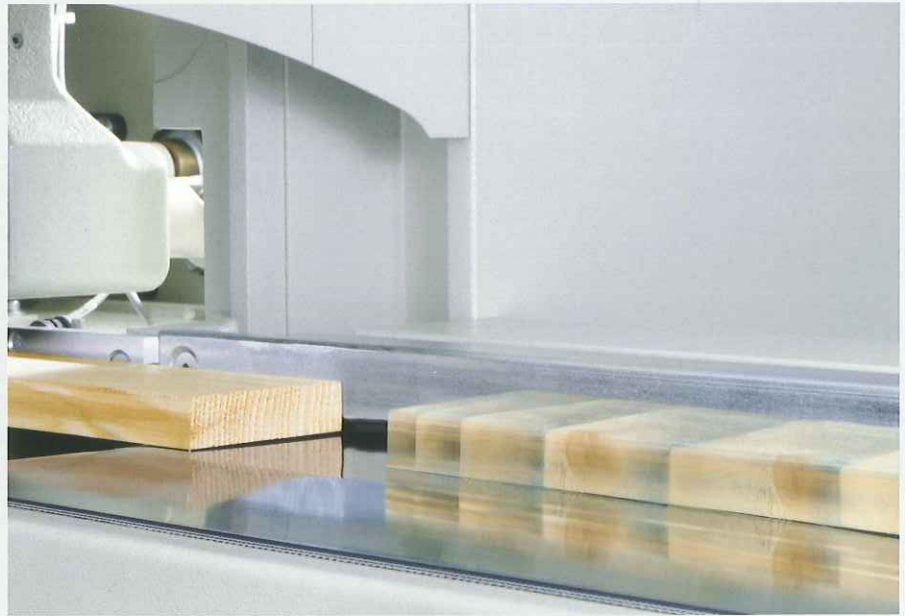
### The patented waste gate

Situated inside the saw itself is the intelligently controlled waste gate, which is precisely adapted to the output of high-speed cross-cut saws. This ensures that waste is reliably separated from accepted stock and so avoids problems at the sorting and processing stages. Accepted stock cannot get mixed up with the waste. The ultimate solution for reliable sorting and trouble-free production.



## OptiCut with VarioSpeed: continuous cross-cutting thanks to non-stop loading

Why pay out for more saw than you need? The OptiCut offers enormous performance potential right across the board. In order to exploit this potential to the full, the intelligently controlled VarioSpeed reduces the space between workpieces as far as possible. That way the OptiCut is continuously supplied with timber, making the system even more economic.



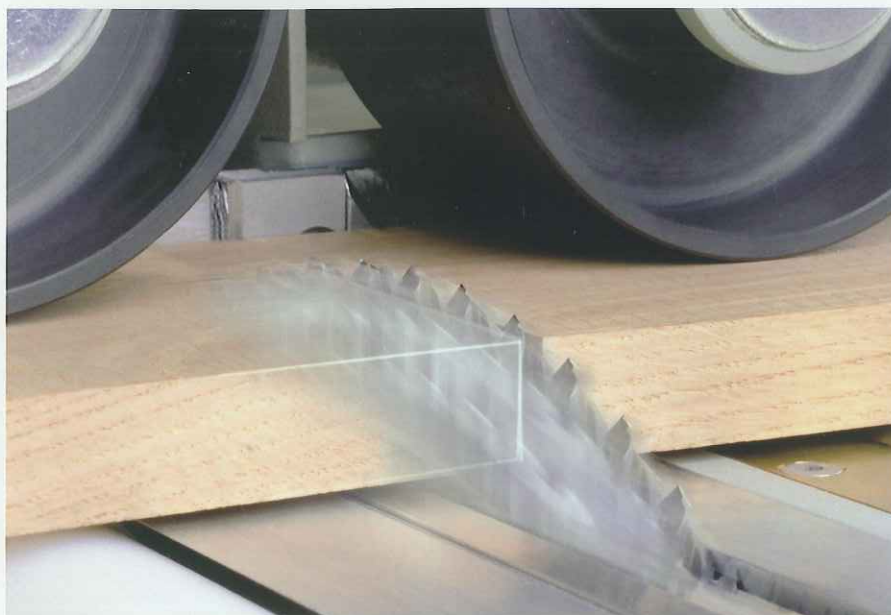
## DIMTER length measuring system: even better positioning and yield

The length measuring technique used by DIMTER measures – regardless of slip – directly on the workpiece surface. This ensures the right conditions for accurate cross-cutting: The beginning and end of the board, the position of the marked defects and the quality divisions are recorded with great precision. This results in less waste thanks to shorter initial and final cuts. Exact lengths (up to +/- 0.8 mm) thanks to positioning support. Perfect, defect-free lengths.





## OptiCut with intelligent saw blade control: clean cut and minimum tear-out



The saw stroke is carefully managed. Its exit from the workpiece is controlled in order to reduce tear-out to a minimum, while the other cutting phases are performance-optimised. Waste or timber qualities in which tear-out is a less critical factor can be cross-cut at maximum speed.

## OptiCut with identification technology: clear workpiece identification



Easy handling of the sawn timber, warehouse identification, order-based assignment, product-based logistics – in all these cases, the identification of the cut lengths has an important role to play. The result is a clearer overview, lower costs – and the opportunity to use cost-optimised production processes in the first place. Identification is performed with numbers or codes printed directly on the workpiece or on barcoded labels.





The timber is fed reliably to multiple OptiCuts via a sophisticated automatic system which takes into account both

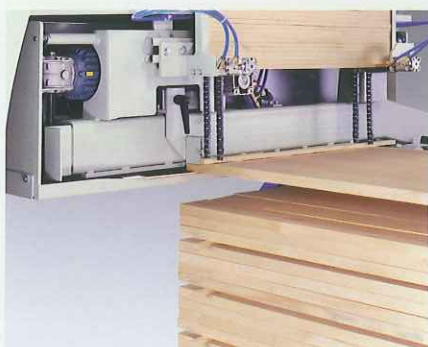
the suitability and capacity of the cross-cut saws in order to maximise productivity.





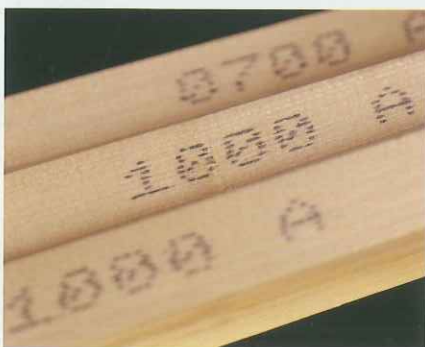
## DIMTER offers you an all-round package: the right environment for the OptiCut

There is more to DIMTER solution concepts than an impressive set of cross-cut saws. We also offer a comprehensive range of peripherals to complement the OptiCut: made-to-measure integral solutions for modern, progressive production lines. Ask us for details.



### OptiCut Stacker – automatic stacking

The DIMTER OptiCut Stacker is the ideal complement to high-output lines producing large quantities of identical lengths. It is even possible to load a stacker from multiple OptiCut machines.



### Integrated scanner

High-speed OptiCuts can cut a lot of timber, creating a need for good logistics. A scanner can serve two to three cross-cut saws. In order to calculate the best combination from the cut list, it scans up to 4 sides of the workpiece simultaneously. The yield is significantly improved by allowing »defects« to remain in admissible sections. That means less waste, more high-grade quantities and more of the popular longer lengths.



### De-stacking, distribution, buffering

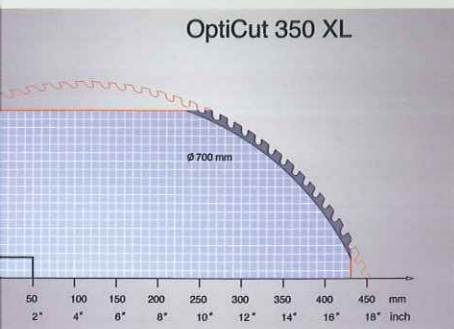
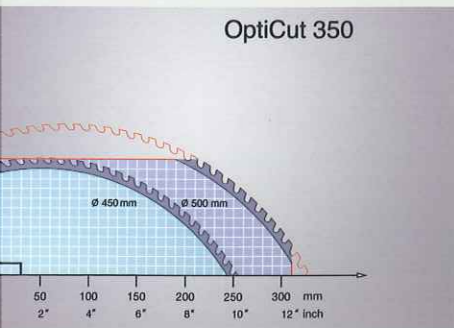
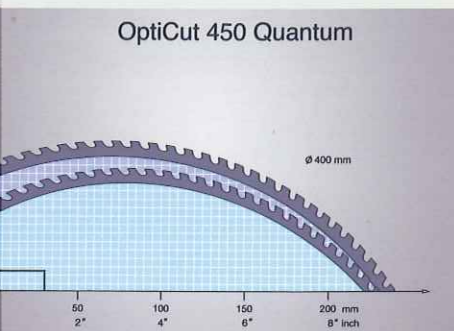
Linking machines, loading the stack from the drying chamber, transferring cut lengths to follow-on machines: DIMTER and the WEINIG GROUP have the ideal solutions!





## OptiCut chart: standards and options

The table shows the main differences between the various models.  
More detailed information based on your individual needs can be  
obtained from your DIMTER expert.



Attention! When determining a possible timber cross-section, bends and irregular timber dimensions must be taken into account.  
The nominal values in our technical data apply.

The figures provided are standard values for guidance only.  
Please ask us if you have other requirements. Different values may apply to different versions. ( ) = optional.

### Technical data

- Min. nominal cross-section
- Max. nominal cross-section
- Minimum input length from
- Minimum input length (automatic loading) from
- Maximum input length to
- Maximum feed speed
- Accuracy up to 1 m cutting length
- Accuracy up to 2.5 m cutting length
- Minimum cutting length (at end of workpiece)
- Working height

### Equipment

- VarioSpeed
- Fixed-length cutting
- Defect cutting
- Full optimisation up to maximum input length:
- Fixed and variable lengths, up to 8 qualities, 16 groups, 800 lengths
- Automatic waste gate
- Automatic sorting
- Automatic loading
- Integration in lines
- Integration of scanner

Subject to technical modifications. The information and illustrations in this brochure also include extras which are not part of the standard package. Protective coverings may have been removed for purposes of photography.

	OptiCut 450 Quantum	OptiCut 350-4	OptiCut 350XL-4
Min. nominal cross-section	30 mm x 12 mm	30 mm x 12 mm	50 mm x 25 mm
Max. nominal cross-section	210 mm x 12 mm (220 mm x 12 mm) 150 mm x 50 mm (120 mm x 75 mm)	235 mm x 12 mm (310 mm x 12 mm) 120 mm x 100 mm (190 mm x 120 mm)	325 mm x 150 mm 235 mm x 200 mm
Minimum input length from	500 mm	500 mm	600 mm
Minimum input length (automatic loading) from	1500 mm	900 mm	900 mm
Maximum input length to	6.3m (3.3 m)	6.3 m (3.3 m)	6.3 m (3.3 m)
Maximum feed speed	415 m/min	240 m/min (300 m/min)	variable: 120 m/min /180 m/min
Accuracy up to 1 m cutting length	± 0,8 mm	± 0,8 mm	± 1 mm
Accuracy up to 2.5 m cutting length	± 1.5 mm	± 1.5 mm	± 1.5 mm
Minimum cutting length (at end of workpiece)	150 mm (180 mm)	150 mm (180 mm)	300 mm
Working height	900 mm	900 mm	900 mm
VarioSpeed	●	●	Not available
Fixed-length cutting	●	●	●
Defect cutting	●	●	●
Full optimisation up to maximum input length:	●	●	●
Fixed and variable lengths, up to 8 qualities, 16 groups, 800 lengths	●	●	●
Automatic waste gate	● High-speed gate!	●	●
Automatic sorting	○	○	○
Automatic loading	○	○	○
Integration in lines	○	○	○
Integration of scanner	○	○	○

● Standard

○ Option



## We will meet all of your expectations: WEINIG GROUP – Your partner for the future

Concentrate on your business, we will do the rest for you!  
The WEINIG GROUP is not only the leading technology supplier for the solid wood processing industry and trade. With comprehensive services and system solutions to turnkey production plants the WEINIG GROUP is your ideal all-around partner, whenever production has to be flexible and profitable.



### The WEINIG ExpoCenter

In our ExpoCenter we demonstrate what top technology can do for you. Here, you can see our machines life in operation.



### Training

We want that you benefit the best way possible as quickly as possible from your investment. The proven WEINIG training concepts provides for it. Effective training by experienced WEINIG experts ensures that the machine will be available to you with its full potential.



### Kaizen

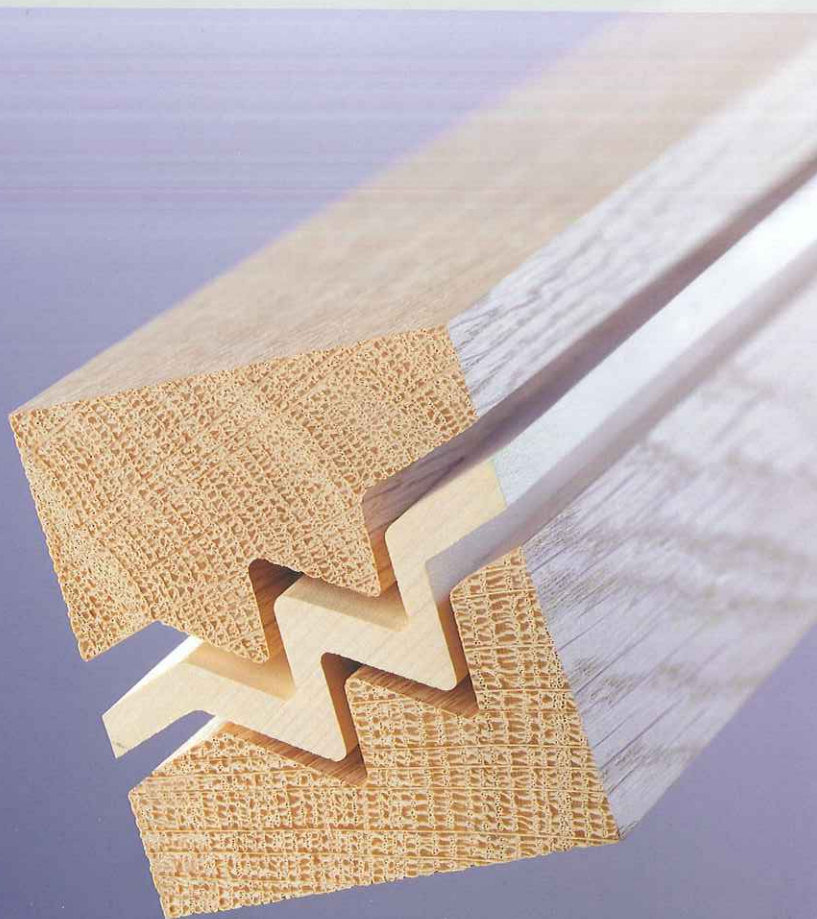
The production organisation at WEINIG is based on the Kaizen method, consequently and successfully. In a continuous improvement process quality and efficiency are optimised step-by-step. Benefit from it for your business: we appreciate to impart our experience of many years in workshops.



### Service

With offices in all parts of the world and a large, mobile team of service technicians we guarantee worldwide service, which is unique in this industry. Quickest spare parts supplies at any place as well as contact partners who speak your language are part of our traditional customer orientation.



**WEINIG**

World market leader  
for automatic moulders

**WACO**

The No. 1 for high-speed  
planers and moulders

**GRECON**

High-capacity finger  
jointing lines

**DIMTER**

The specialist for  
optimizing cross-cut  
saws and laminating  
presses

**RAIMANN**

Top technology for  
length cutting

**CONCEPT**

The experts when it comes  
to turnkey projects

## The WEINIG GROUP: We combine all components from the solid wood treatment seamlessly

**To the turnkey production plant**

To build innovative machines is one thing, to offer system solutions is something completely different. More and more often our customers wish to have the whole works. This is a job for our team of WEINIG CONCEPT where the competence of the WEINIG GROUP is combined in a very special way.

From planning to turnkey production plants, our pros do the entire job. Worldwide. Taking the complete responsibility. For you.

**A strong team**

Every member of the WEINIG GROUP is a leader in his field of activity generating valuable synergy effects from which you can benefit incomparably.







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