

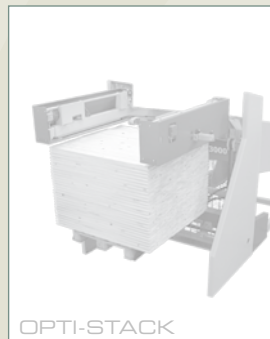
OPTI-KAP

OPTI-KAP

Optimizing Cross-Cut Saws
Opti-Kap 2000
Opti-Kap 3000
Opti-Kap 4000



OPTI-KAP



OPTI-STACK



OPTI-FEED



Optimizing Cross-cut Saws



Optimizing cross-cut saw series - Opti-Kap 2000, 3000 and 4000

An optimizing cross-cutting system ensures you optimal utilization of your wood and staff resources with a minimum of waste. This will provide a higher yield and increased efficiency in your production.

The Opti-Kap 2000, 3000 and 4000 series are characterised by user-friendly design, focusing on easy, fast and reliable operation. The highly flexible saw automatically measures, optimizes and cuts incoming timber into components. If requested, the saw can be equipped with optional extras such as automatic thickness and width measuring, just to mention a few of the possibilities.

In order to reduce labour costs and to better utilize the cross-cut saw's capacity the saw can be provided with automated handling equipment. You can choose from many competitive standard or customized solutions.

Why choose an Opti-Kap saw from System TM?

- Best acceleration/deceleration with 6 serrated power driven rollers (Opti-Kap 2000 has 5 rollers)
- A heavy-duty top pressure construction with strong double side supported top pressure rollers. These ensure maximum contact between the work piece and the feed rollers which enables reliable cutting precision at high rates of acceleration and deceleration
- All System TM's saws have been designed with a smooth maintenance-free saw cycle carried out by an eccentric cam.
- Waste gate – for optimal removal of waste and defective pieces
- Saw and automated handling equipment (Opti-Feed and Opti-Stack) from one supplier ensures optimal communication and integration between all electrical and mechanical parts of the system, and thus the highest productivity
- Designed to meet your specific requirements which will give you the best return on investment
- At a later stage you can easily add on our handling equipment Opti-Feed and Opti-Stack to create a fully automated saw line
- High performance
- High focus on the operator's safety and machine reliability
- After Sales Service – 24 hours - worldwide



Optimizing methods

- Minimum waste
- Parallel ending of cutting lists
- Value of optimization
- Length x number

The optimization methods above can be combined

Opti-Kap 2000

- Vertical blade movement controlled by a cam
- High or low cutting speed
- Infeed (Opti-Feed) and stacking (Opti-Stack) equipment available for optimal utilization of saw
- 5 driven bottom rollers and 5 top rollers

Opti-Kap 3000

- Vertical blade movement controlled by a servo driven cam
- Adjustable cutting speed
- Optimized blade positioning depending on wood dimensions and saw blade diameter
- Infeed (Opti-Feed) and stacking (Opti-Stack) equipment available for optimal utilization of saw
- 6 serrated driven bottom rollers and 6 top rollers
- Powerful servo infeed and transmission

Opti-Kap 4000

- Extra powerful vertical blade movement controlled by a servo driven cam for extremely fast cutting
- Adjustable cutting speed
- Optimized blade positioning depending on wood dimensions and saw blade diameter
- Infeed (Opti-Feed) and stacking (Opti-Stack) equipment available for optimal utilization of saw
- 6 serrated driven bottom rollers and 6 top rollers
- Extra powerful servo infeed and transmission
- Motorised adjustment for different wood dimensions

Opti-Kap computers

- Very user-friendly PC with software everyone can operate
- Web-based PC with external log-on option
- Data can easily be changed via the simple user interface
- Extensive range of production statistics available
- Optimizing methods for value, quality- and defect optimization
- Individually designed customer programs
- Multiple saws in one production line can be controlled by a single optimizing computer



optimization of staff and wood resources

*Opti-Kap 2000-3000-4000
A wide, servo-driven timing belt to the bottom rollers ensures accurate cutting. This heavy-duty design has proven to be extremely durable, requiring only a minimum of maintenance.
(Picture Opti-Kap 4000)*



*Opti-Kap 2000-3000-4000
The Opti-Kap movement is carried out by a cam and programmable servo motor which provide controllable high performance and quality cutting at all times.
Opti-Kap 2000 is driven by an electrical motor.
(Picture Opti-Kap 4000)*

The bottom feed rollers are set high above the bed plate of the machine which allows feeding of bent or twisted timber, ensuring maximum productivity and accuracy.



A heavy-duty top pressure construction with strong double side supported top pressure rollers. These ensure maximum contact between the workpiece and the feed roller which enables a very reliable cutting precision at high rates of acceleration and deceleration.

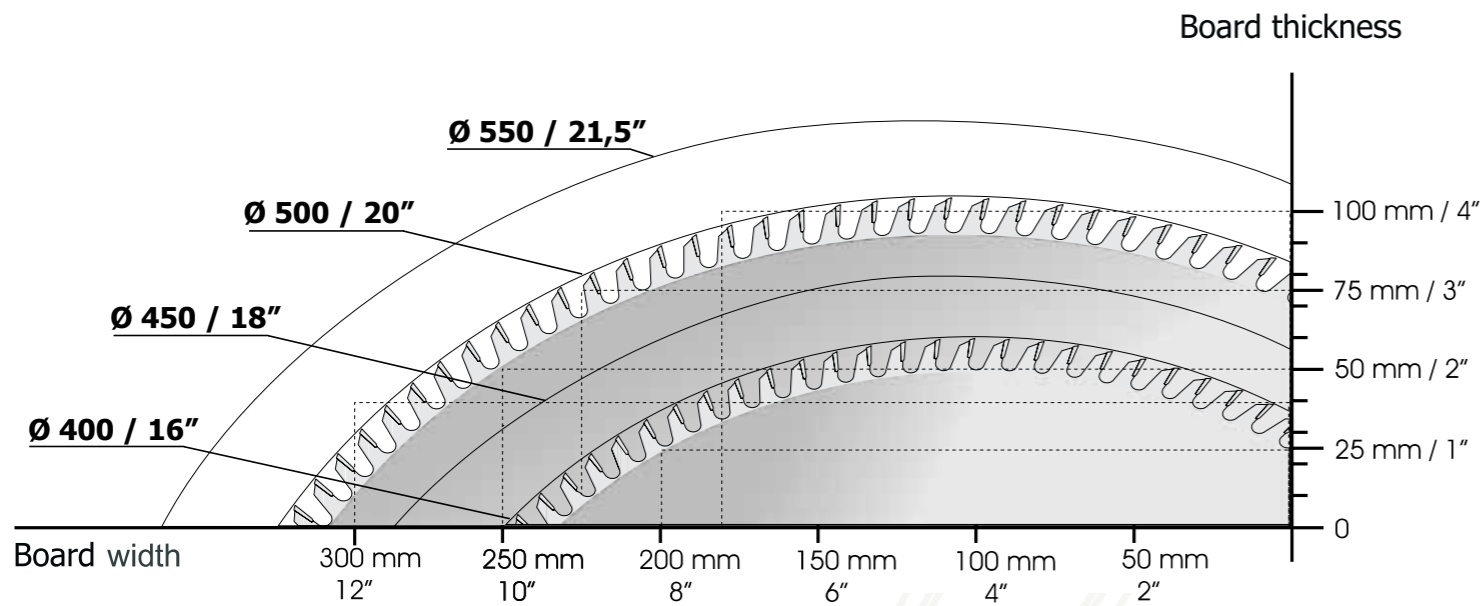


Waste and defects are efficiently removed by air nozzles and blown out at the back of the saw.



Heavy-duty measuring unit designed for a long life. The raw workpiece is measured before cutting.

Technical Features



Standard features

- Infeed roller conveyor
- Measuring station
- Measuring belt
- PC user interface
- Optimizing programme
- Printer
- Electrical equipment and control programme
- Safety fence

Optional features

- Equipment to feed min. length 500 mm (20")
- Thickness and width measuring
- Cutting edge support
- Saw with left side fence
- Waste belt
- Sensors for increased length accuracy
- Sorting belt with kicker
- Opti-Feed (infeed equipment)
- Opti-Stack (stacking equipment)

Technical information

- Board length: 900 - 6,300 mm (3' - 20.7')
- Board width: 50 - 300 mm (2" - 12")
- Board thickness: 12 - 100 mm (1/2" - 4")
- Length accuracy, for boards under 1 m (39"): +/- 1 mm (0.04")
if longer than 1 m (39"): +/- 1/1000 of length
- Compressed air: 6 bar 500 l/min (87 psi 132 gal/min)
- Saw dust extraction: 2500 m³/hour (87,500 ft³/hour)
25 m/sec, 180 Pa (82 ft/sec, 180 Pa)

Opti-Kap 2000 capacity

- Acceleration: 19 m/s² (62.3 ft/s²)
- Speed: 162 m/min (531 ft/min)
- Saw motor: 5.5 kW (7.5 hP)
- Cutting time for 50x100: 0.14 sec
- Torque at roller: 187 Nm (140 lb.-ft)

Opti-Kap 3000 capacity

- Acceleration: 38 m/s² (125 ft/s²)
- Speed: 218 m/min (715 ft/min)
- Saw motor: 9 kW (12 hP)
- Cutting time for 50x100: 0.08 sec
- Torque at roller: 338 Nm (249 lb.-ft)

Opti-Kap 4000 capacity

- Acceleration: 40 m/s² (131 ft/s²)
- Speed up to: 500 m/min (1,640 ft/min)
- Saw motor: 9 kW (12 hP)
- Cutting time for 50x100: 0.068 sec
- Torque at roller: 338 Nm (249 lb.-ft)



*Technical data subject to change without prior notice. The data may vary according to the specific design of the line. Please contact us if you need any further information.

Cutting methods

Raw timber before cutting



Opti-Kap 2001-3001-4001

Full optimization



Opti-Kap 2002-3002-4002

Full optimization. Manual defect and quality marking



Opti-Kap 2003-3003-4003

Full optimization. Automatic scanning of defects and quality



Opti-Kap 2003-3003-4003

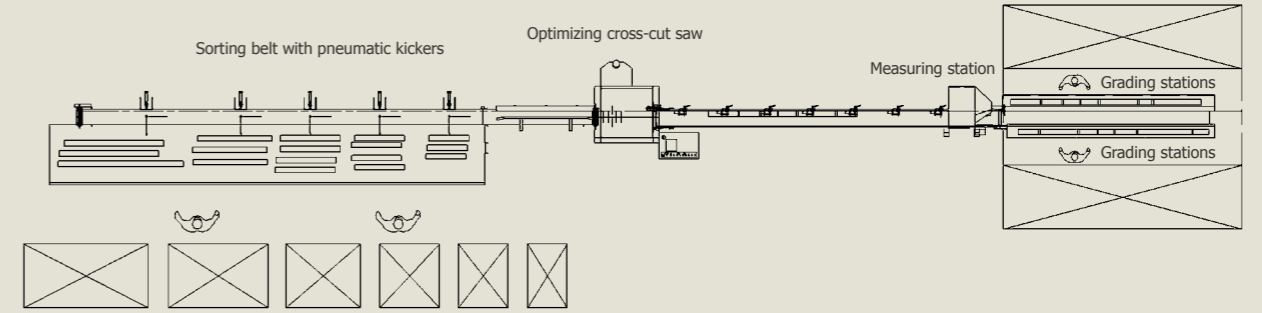
Automatic scanning of defects and quality. Defect cut for finger jointing



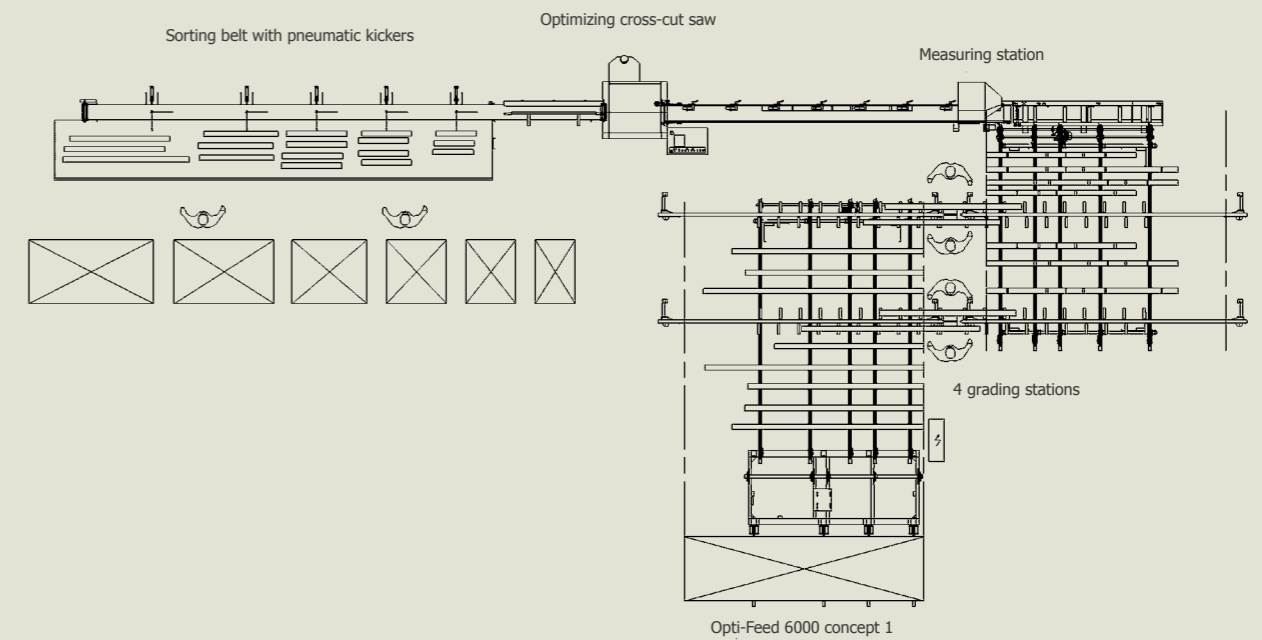
- A = A quality
- B = B quality
- C = C quality
- D = Defect
- F = Finger joint
- R = Re-rip
- T = Trimming
- W = Waste

Examples of solutions for Opti-Kap

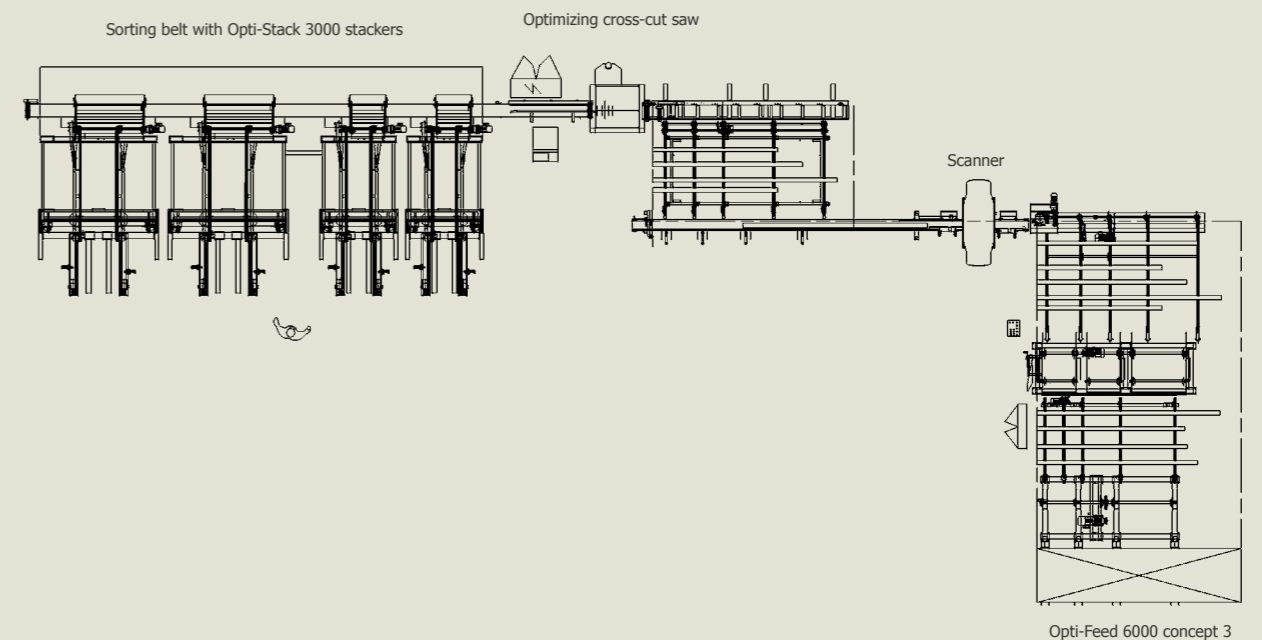
Opti-Kap 2002 cross-cut line



Opti-Kap 3002 cross-cut line



Opti-Kap 4003 cross-cut line





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optimization of staff and wood resources...