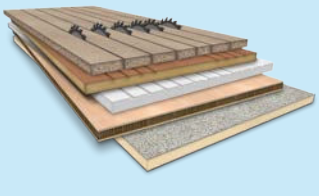
made
in
Germany

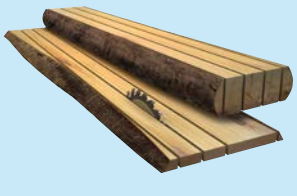
Paul
Maschinenfabrik GmbH & Co. KG

Cross-Cut Systems
Series C14

PANEL RIPPING

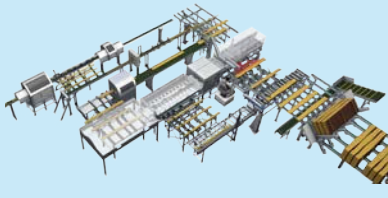


SOLID WOOD RIPPING



OPTIMIZED CROSS-CUTTING

SYSTEM SOLUTIONS



sawtec.paul.eu

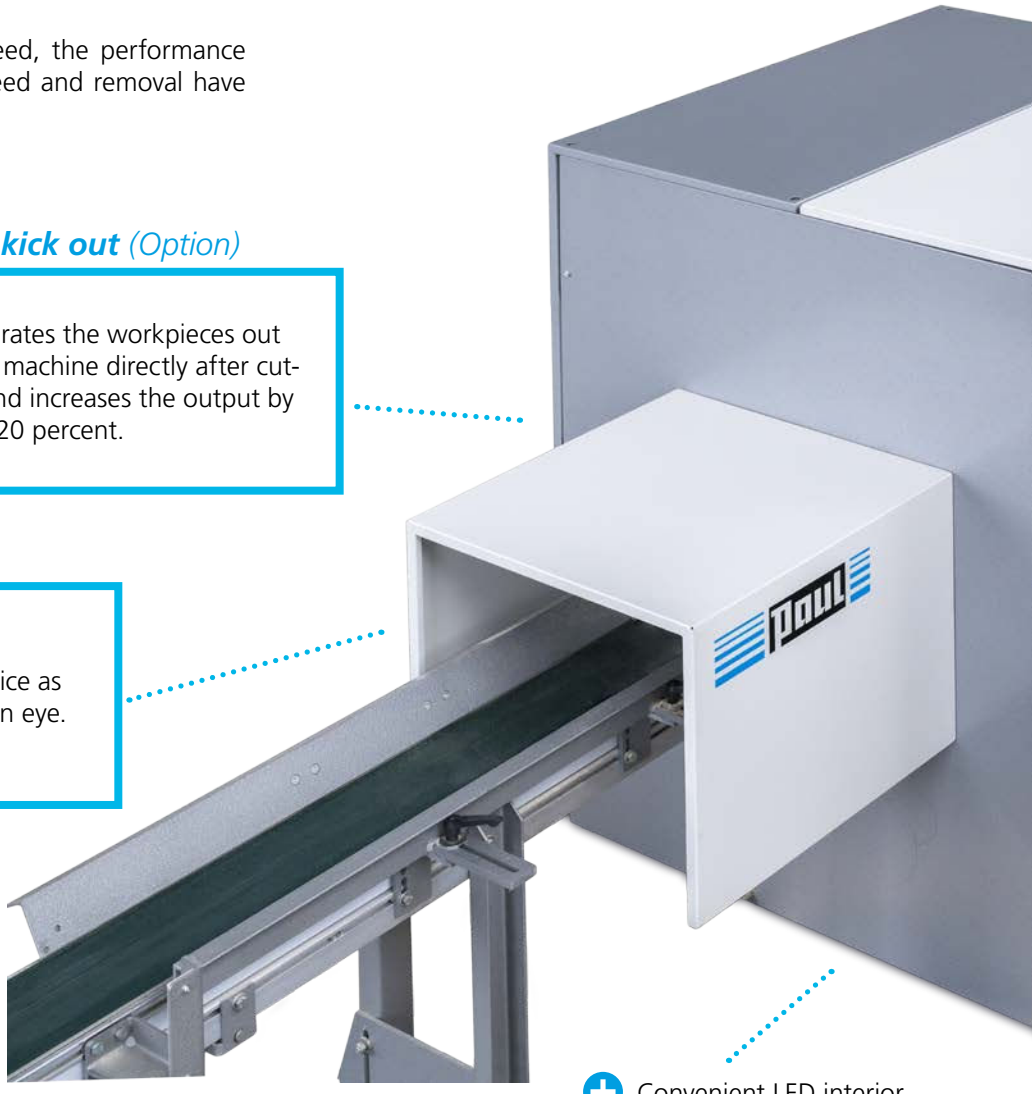
Robust and powerful

A POWERFUL CROSS-CUT SAW FOR ALL THOSE WHO SET A HIGH VALUE ON AN EXCELLENT PRICE-PERFORMANCE RATIO AND A WIDE RANGE OF APPLICATION POSSIBILITIES.

The C14 is designed for cutting medium to large-sized timber sections and ensures an accurate and clean cut at very high throughput rates. The robust machine is designed for a long service life and can be expanded by modular upgrades into a high-performance system with automatic defect detection and powerful handling components.

To increase the working speed, the performance data as well as workpiece feed and removal have been improved.

Whether in sawmilling, parquetry, flooring, crate or furniture production, a multitude of extensions and options make the C14 exactly the machine that meets your requirements to the letter.



Paul *kick out* (Option)

Accelerates the workpieces out of the machine directly after cutting and increases the output by up to 20 percent.

Paul *saw stroke*

Highest cutting speed, twice as fast as a human blink of an eye.

Controlled clamping device made of metal composite with integrated dust extraction.

Convenient LED interior lighting, also serving as a status indicator.

keine raketentechnik,
aber raketengeschwindigkeit

no rocket science,
but rocket speed

*Paul **turbo blower***

Aerodynamically optimized blowers for the efficient and reliable disposal of residual timber pieces.

Heavy-duty, hard-chrome plated, large diameter feed rollers to maximize process reliability.

Top rollers that are electrically adjustable to the board thickness (option).

*Paul **gap close** (Option)*

Minimizes the distances between incoming workpieces and increases output by up to 20 percent.

Excellent sound insulation for maximum working safety.

Inclined working plane: Perfect workpiece guidance, squareness of the cuts and optimized disposal of residual pieces without side pressure unit, mixed workpiece widths without the need for retooling.

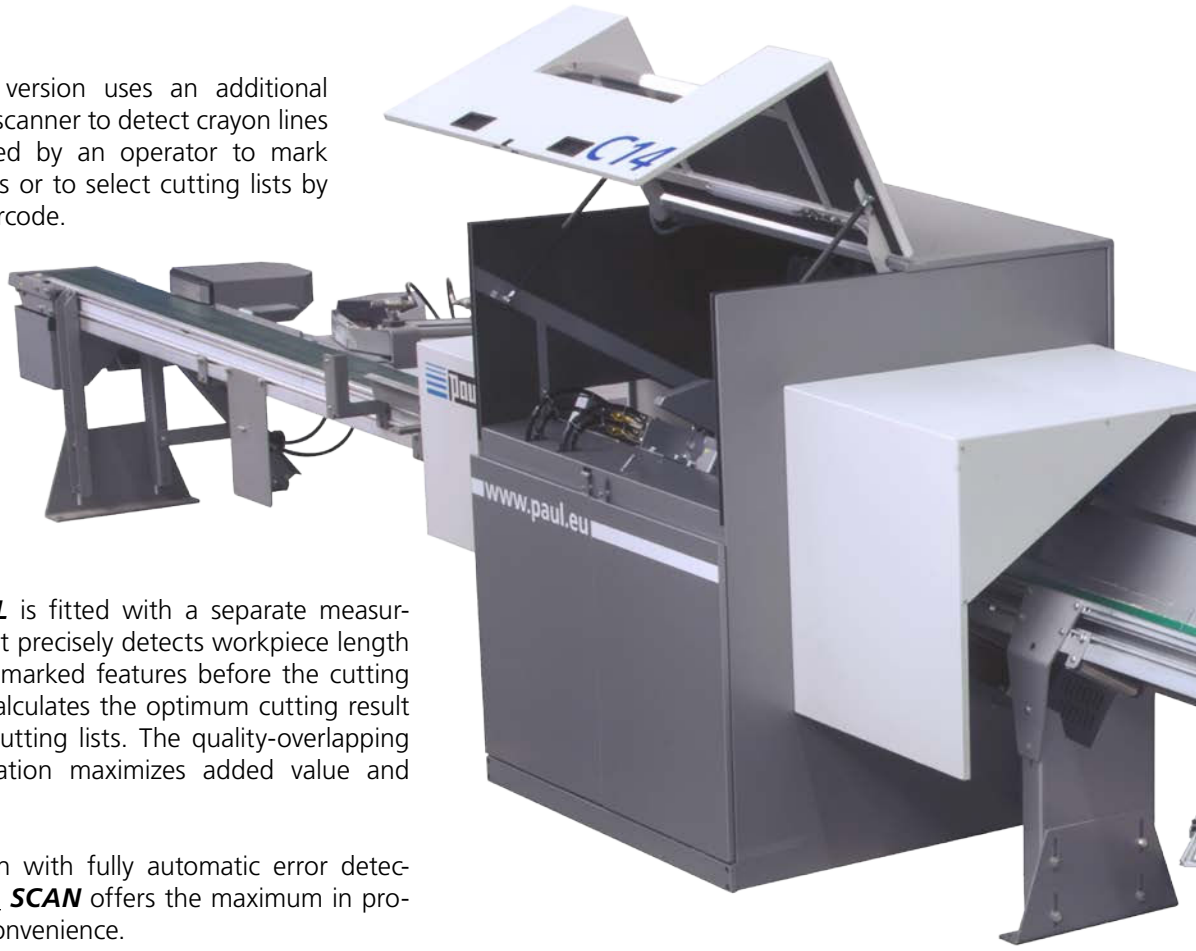
Solid machine stand for maximum stability and vibration damping.

Exactly what you need

VARIOUS VERSIONS FORM THE BASIS OF THE C14 SERIES, WHICH CAN BE EXPANDED TO A FULLY AUTOMATIC PROCESS LINE WITH SCANNER-SUPPORTED DETECTION OF TIMBER CHARACTERISTICS, DEPENDING ON REQUIREMENTS.

The entry-level version ***C14_E*** saws workpieces to the desired fixed lengths. The machine does not take into account timber characteristics and quality zones.

The ***C14_KE*** version uses an additional luminescence scanner to detect crayon lines which are used by an operator to mark timber features or to select cutting lists by means of a barcode.



The ***C14_MKL*** is fitted with a separate measuring station that precisely detects workpiece length and manually marked features before the cutting process and calculates the optimum cutting result using stored cutting lists. The quality-overlapping value optimization maximizes added value and timber yield.

In combination with fully automatic error detection, the ***C14_ SCAN*** offers the maximum in production and convenience.

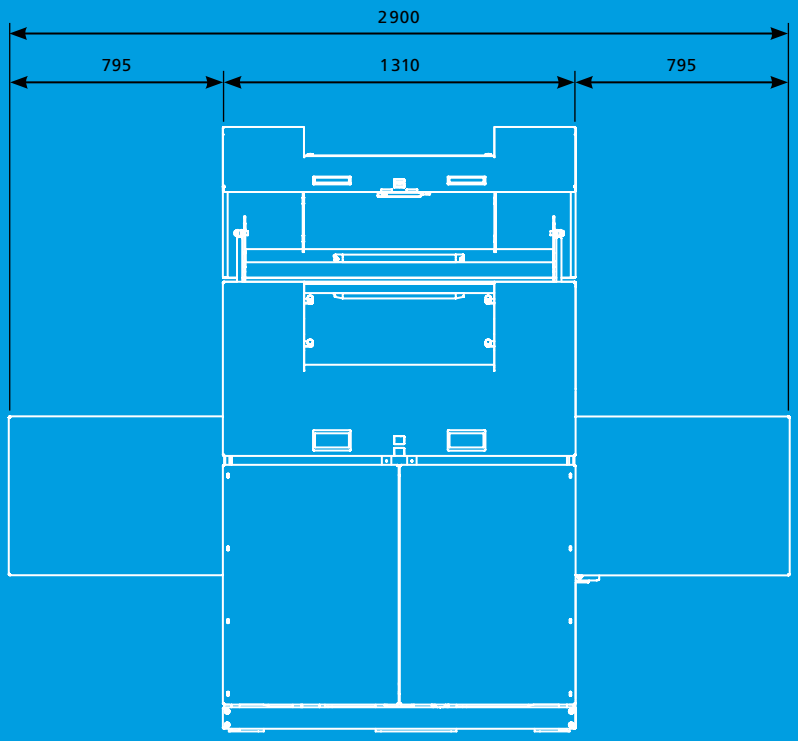
Model	E	KE	MKL	SCAN
Partial optimization	■	■	■	■
Defect cutting with luminescent scanner		■	■	■
Full optimization	■*		■	■
Measuring station for quality and value optimization			■	■
Scanner for automatic detection of defects				■

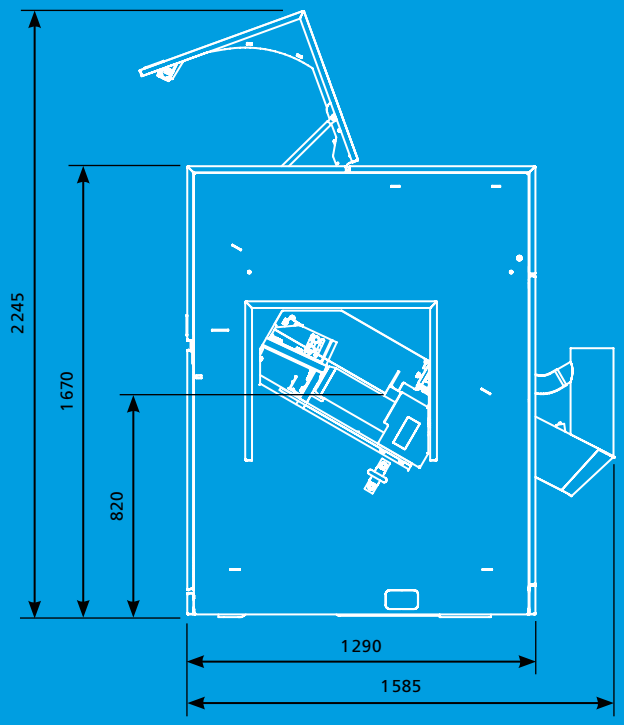
** Infeed length identification feature available as an option*

leistung an den grenzen der physik

performance at the physical limits

- Durability and stability thanks to an elaborate design and generous dimensioning of the components.
- Ease of maintenance thanks to a clear design and state-of-the-art diagnostic software.
- Maximum added value due to customized optimization algorithms in up to eight qualities.
- Dynamics and high continuous duty due to powerful and maintenance-free servo systems.
- Reliability thanks to many years of international experience and good spare parts availability.
- Pleasant working conditions due to intuitive operation and low-noise design.
- Measuring station with wide, hard-coated measuring rollers: robust and durable.


2900
795
1310
795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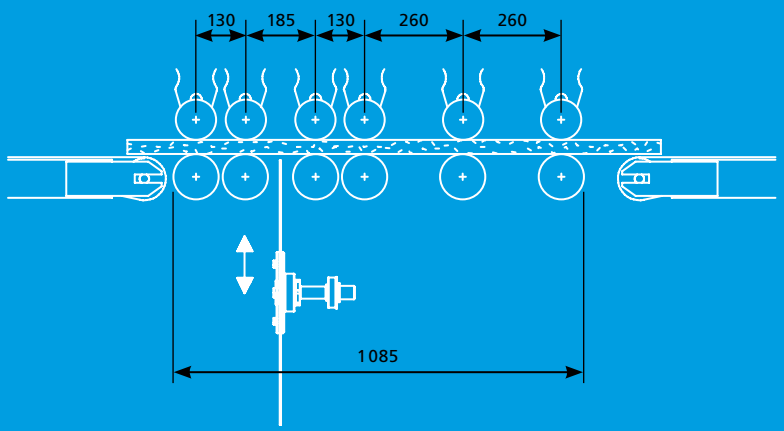
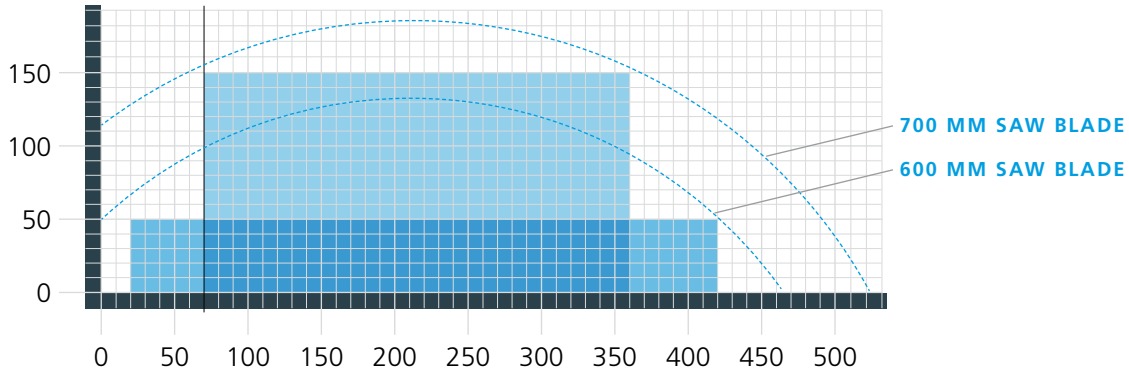
1670
820
1290
1585


130
185
130
260
260
1085

Technical data

CUTTING DIAGRAM



WORKPIECE DATA

Cutting height	[mm]	2 - 150
Opening width	[mm]	40 - 400
Min. workpiece length	[mm]	600
Timber cross section	[mm]	see cutting diagram
Min. cut length (board end)	[mm]	140 (180)

MACHINE DATA

Driving power		[kW]	7.5 - 11
Max. feed speed		[m/min]	400
Saw blade diameter		[mm]	600/700
Speed of saw blade (ø400/450/500)		[U/min]	3600/2750
Powered bottom rollers			6
Rubber-coated top rollers			6
Sound pressure level*	At no load / in operation	[dB(A)]	80 - 84
Sound power level*	At no load / in operation	[dB(A)]	82 - 87
Dust outlet diameter		[mm]	2 x 160/1 x 80
Dust extraction requirement		[m3/h]	4100
Weight		[kg]	1700

** with Ø 600 mm saw blade*

Accessories and options

FEED

- Hard-chrome plated feed rollers with different surfaces, fluted, with soft grip or semi-smooth, depending on requirements

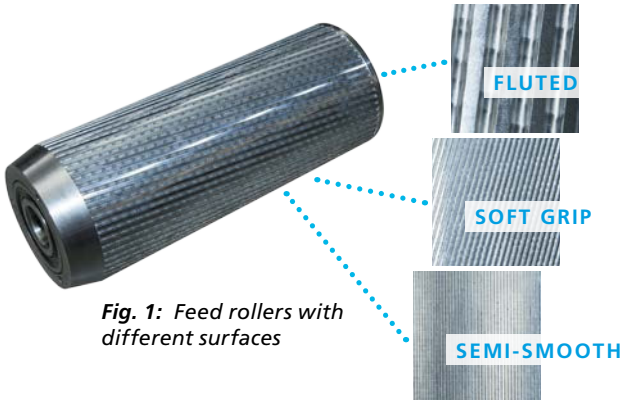


Fig. 1: *Feed rollers with different surfaces*

STACKING AND DESTACKING

- Automatic vacuum destacking system
- Automated handling and buffer feeding systems
- Distribution systems to several cross-cut stations
- Auto stackers
- Articulated arm robot for stacking and destacking

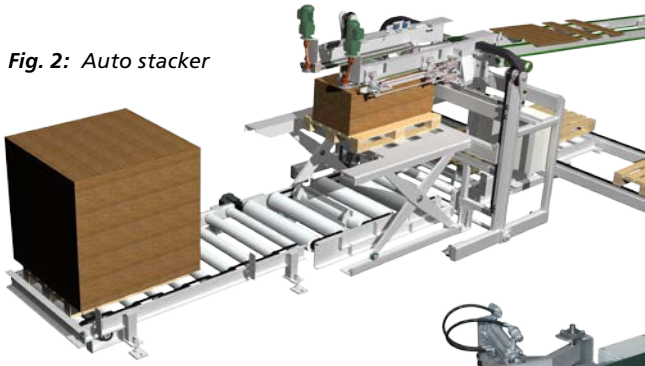


Fig. 2: *Auto stacker*

SORTING

- Ejecting to one side only using pneumatic ejectors
- Compact cross-belt sorting for limited floor space
- Wide pneumatic ejectors made of composite material with protective housing, for maximum performance and durability with minimum weight

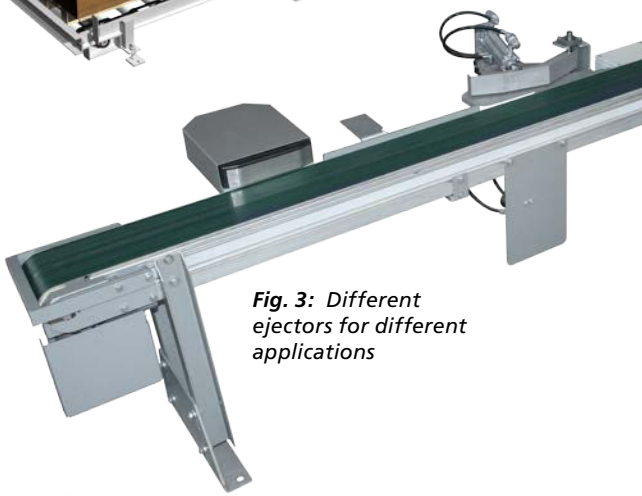


Fig. 3: *Different ejectors for different applications*

MEASURING AND MARKING

- Scanner
- Marking systems
- Ink-jet printer for letter or color code printing on top or bottom face and end face
- Optical length correction for accurate cutting of long workpieces
- Width and thickness measurement with triangulation measuring system

Fig. 4: *Paul Wood Scanning System*

eine maschine,
zahllose möglichkeiten

one machine, countless possibilities

PROCESS MANAGEMENT

The PALETTI software offers you the possibility of managing your cutting orders even more efficiently. The simple data exchange between machine, office and warehouse enables the optimization of the material yield across all orders. Different assignment options and the high level of user-friendliness allow precise adaptation to your workflow.

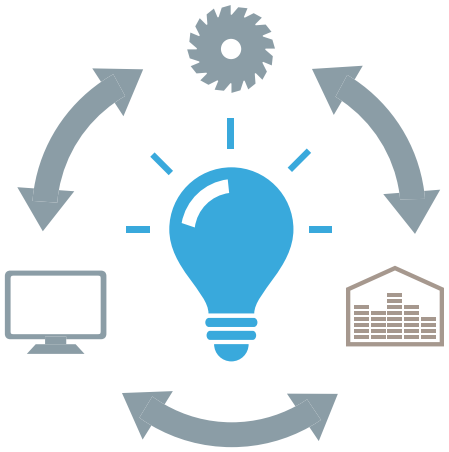


Fig. 5: *MAXI control Operator terminal with touch panel, keyboard and mouse*

CONTROL SYSTEMS

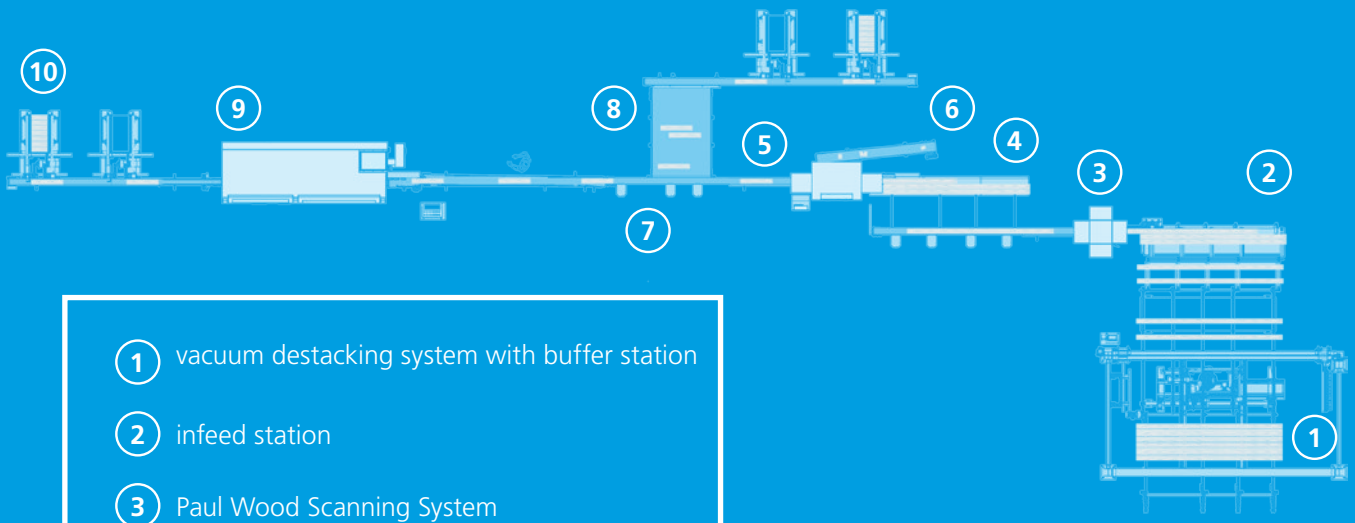
Sustainability is rooted in our DNA

The optimization algorithms for the maximum yield of the valuable raw material wood have been continuously developed and adapted to the practical needs of our customers for decades.

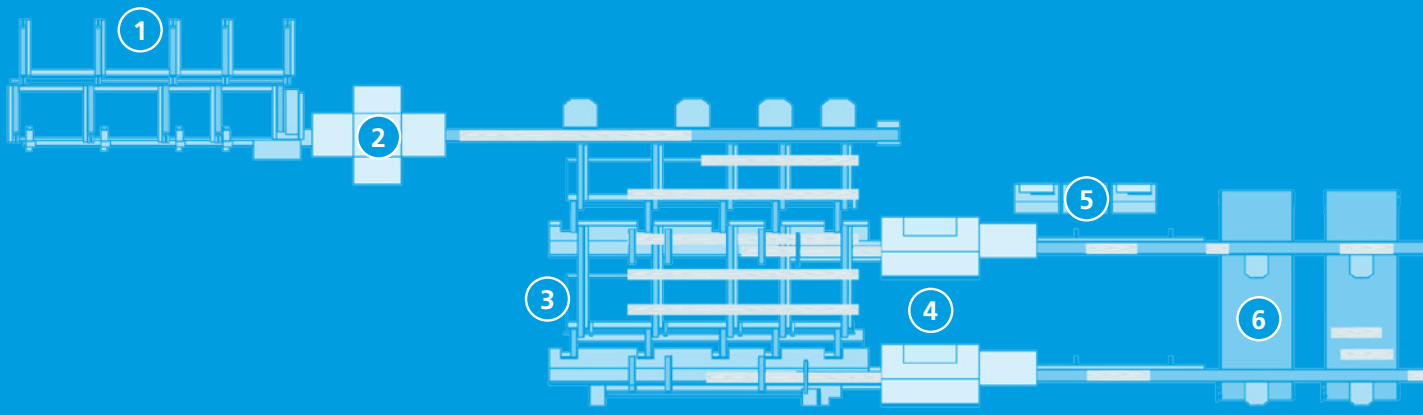
- Programming of preset lengths
- Length optimization (in conjunction with length measurement)
- Diagnostic software
- Network capability
- Remote maintenance
- Yield statistics
- Scanner connection (option)
- Robust housing for heavy-duty use in sawmilling
- Operating terminal freely positionable
- Further options

effiziente systeme für effiziente anwendungen

efficient systems for efficient applications



1. vacuum destacking system with buffer station
2. infeed station
3. Paul Wood Scanning System
4. infeed station
5. C14 cross-cut station
6. waste belt conveyor
7. belt conveyor with ejectors
8. cross belt conveyor
9. moulder
10. SA-15 auto stackers



1. Multi-strand cross conveyor for buffering
2. Scanner (e.g. PAUL Wood Scanning System)
3. Distribution system to two cross-cut stations
4. Two cross-cut stations C14
5. Operating terminals for cross-cut stations and automated handling
6. Length sorting system with ejectors and cross belt conveyors

C14 in a system

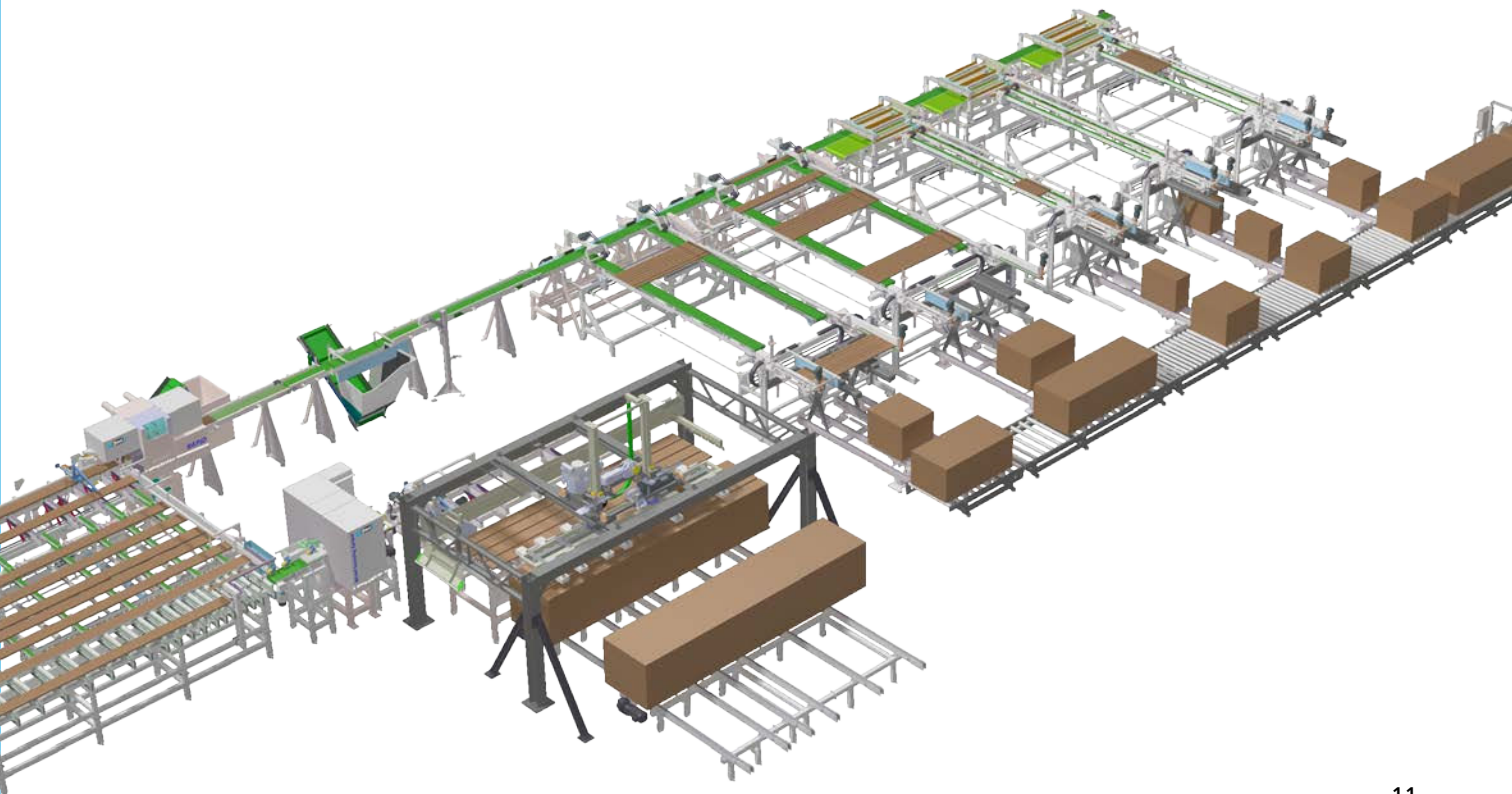
AS A SYSTEM COMPONENT, THE C14 IS A CROSS-CUT SYSTEM WITH LOW SPACE REQUIREMENTS AND HIGH PERFORMANCE.

Fig. 6: *Articulated arm robot*

Fig. 7: *Transfer system*

In combination with ripsaws and numerous other system components, the C14 becomes an integral part of high-performance automatically linked timber processing lines.

Processing lines tailored precisely to your requirements ensure the necessary efficiency and the desired degree of automation - from destacking, measuring and sorting to palletizing.



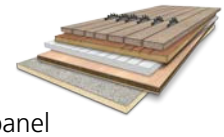
Strong Partner

A GOOD DECISION

Since 1925, Paul has slowly, yet steadily developed to become one of the leading manufacturers of woodworking machinery.

We manufacture high-quality machinery at three sites in Southern Germany which we export all around the world.

- tradition and experience since 1925
- competent contacts
- worldwide services
- competent phone support
- high quality and reliability
- operator convenience



PANEL RIPPING

Efficient and versatile machines for panel ripping enable our customers to find finely coordinated solutions for any demand.

SOLID WOOD RIPPING

Long-lasting and robust machines for the use in rough sawmill and industrial wood processing environments. Several product lines featuring a variety of options offer a suitable machine for each application.

OPTIMIZED CROSS-CUTTING

High-quality and powerful cross-cut systems featuring an extensive range of options and accessories offer custom-fit solutions meeting the customers' demands with regard to budget, cutting performance and cutting quality.

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