



Circular Sawing Technology PANEL RIPPING SOLID WOOD RIPPING OPTIMIZED CROSS-CUTTING SYSTEM SOLUTIONS

+ SCANNING AND HANDLING

PAUL MASCHINENFABRIK GMBH & CO. KG



Intents



80 System Solutions





- + Know-how and tradition since 1925
- + High level of in-house production and fastest availability of spare parts
- + High quality and reliability

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Panel Ripping

- User friendliness
- H Worldwide service

12 Solid Wood Ripping 20 **Optimized Cross-Cutting**





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Reinhardt – Smart solutions Scanning, handling











FOR DECADES, PAUL HAS BEEN IMPLEMENTING THE VISIONS OF ITS CUSTOMERS IN THE PLANNING AND CONSTRUCTION OF INDUSTRIAL WOODWORKING MACHINES.

Advice and confidence

"Appreciation and respect form the basis for honest and successful cooperation with customers all over the world."





System Solutions

CUSTOMIZED SOLUTIONS - AS SIMPLE AS POSSIBLE, AS COMPLEX AS NECESSARY -ACCOMPANIED FROM PLANNING TO COMMISSIONING.

- All components for feeding, automatic defect detection, edging and ripping, cross-cutting, mechanization as well as sorting and stacking from a single source
- Interlinking of processing steps and system automation
- Maximization of productivity and added value
- Relief for the operating personnel
- Increase of the safety standard
- Complementation of existing components to form a complete system







Panel Ripping

RELIABLE MACHINES FOR A WIDE VARIETY OF REQUIREMENTS AND HIGH-PERFORMANCE SYSTEMS.







- Highest flexibility
- 1, 2 or 3 tool shafts
- Wide range of applications
- Ripping, grooving, profiling and hogging
- Fast cutting pattern adjustment by CNC-controlled saw units or saw shaft quick-change system
- Great variety of materials from mineral wool to woodbased materials to fiber-reinforced concrete

FIELDS OF APPLICATION:

Parquet, flooring and furniture industry, profile moulding and panel production, packaging, plastic and building material manufacturers and many more







Variable panel ripping

Ripping, grooving, profiling and hogging









SOLID WOOD RIPPING

Edging and Ripping

FROM THE CIRCULAR EDGER TO THE AUTOMATIC RIPPING SYSTEM.





- Manual or automatic edging and ripping
- Robust machines, proven thousands of times
- Adjustable saw bushes and jumping splitting wedges
- Can be combined with destacking/singling systems, infeed pinch roller units, slab extractors, offcut separators and much more
- High economic efficiency

FIELDS OF APPLICATION:

Sawmills, industrial solid wood processing



Cutting height	[mm]	up to 160
Opening width	[mm]	up to 1100
Driving power	[kW]	up to 132



SOLID WOOD RIPPING

Resawing

POWERFUL MACHINES AND SYSTEMS FOR MAXIMUM FLEXIBILITY.

Series

- Heavy, powerful machines for heavy-duty use
- High dimensional accuracy of the manufactured products
- Best cutting quality
- Flexible use due to large range of accessories
- Climb-cutting machines and machines cutting against the feed
- Components for automation and rationalization

FIELDS OF APPLICATION:

Sawmills, industrial solid wood processing

Cutting height	[mm]	up to 225
Opening width	[mm]	up to 1500
Driving power	[kW]	up to 250







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SOLID WOOD RIPPING

Width Optimization

OPTIMUM MATERIAL YIELD THANKS TO ADVANCED CONTROL AND HIGH PRECISION.



POWER_RIP

- Optimized combination of AB-MA or AB920 infeed system and rip saw
- Maximization of performance and material yield
- Optimal measurement, optimization and alignment
- Board crook can be taken into account
- Highest edging and ripping precision
- Intelligent system control for maximum yield

FIELDS OF APPLICATION:

Sawmills, industrial solid wood processing





SOLID WOOD RIPPING

Precision Cutting

CLEAN GLUE-LINE CUT SURFACES ON DRIED HARDWOODS.



Series

Q/K34V/1000/CGL

- Economical rip saws, also for processing dried hardwoods
- Glue-line cut surface due to best surface quality
- Feed system combining the robustness of transport rollers with the precision of a chain bed (Q, K34V/1000)
- Climb-cutting operation or operation against the feed
- Up to 4 adjustable saw bushes

FIELDS OF APPLICATION:

Industrial hardwood processing, furniture production

Cutting height	[mm]	up to 100
Opening width	[mm]	up to 1000
Driving power	[kW]	up to 90





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MODERN MACHINERY AND EXCELLENTLY TRAINED EMPLOYEES ENSURE THE OUT-STANDING QUALITY OF THE PRODUCTS MADE BY PAUL.

Quality is our motivation

"The quality of each component contributes decisively to the longevity of our machines - that's why Paul still manufactures a great many components in-house today."







Optimized **Cross-Cutting**

HIGHER ADDED VALUE BY OPTIMIZING THE **RAW WOOD YIELD, FASTER THROUGHPUT** TIMES AND LESS PERSONNEL REQUIREMENT.

Series C11/C14/18/24



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- The optimal model for every cross-section
- Precise and clean cutting result
- Saw stroke, gap close und kick out ensure maximum performance
- Marking of wood characteristics and qualities
- Automatic detection of defects (Wood Scanning System)

MAIN APPLICATION:

Sawmills, parquet, flooring,





OPTIMIZING STRATEGIES



Q1 – Quality 1 1F – 1st Quality fixed length FJ – Finger Joint (finger jointing length) Q2 – Quality 2 2F – 2^{nd} Quality fixed length A – Waste

Smart Solutions

WITH PRACTICE-ORIENTED SOLUTIONS, REINHARDT, UNDER THE UMBRELLA OF PAUL, OFFERS PIONEERING TECHNOLOGY WITH GREAT POTENTIAL.

SAM – stack&move

- Automated stacking and sorting of various workpieces directly onto racks or electric hand pallet truck
- Great relief for the operating personnel no manual stacking

FAST – fully automatic stacker

- Automatic adjustment to the workpiece length to be stacked
- Automatic placing of sticks
- Stacking of individual workpieces and packs
- Finished packs only have to be transported away

Comprehensive solutions

- From the powerful undertable cross-cut saw to the system solution with a high degree of automation
- Ground-breaking concepts that improve the entire workflow and increase added value
- Concepts and software packages specially optimized to meet the needs of packaging and pallet manufacturers





Slim*line*

- New generation of the push-feed cross-cut saw with a wide range of improvements
- Flexibility, efficiency and precision
- Minimized adjustment and set-up times
- Maintenance-free push-feed system
- Processing of packs



- Basic**line**
- Reasonably priced entry-level model
- Numerous model versions and extensive accessories
- Wide range of applications
- Cutting heights up to 225 mm, cutting widths up to 1000 mm
- Pre-cross-cutting, cross-cutting of heavy planks and round wood

Quick*stop,* Slim*line* formatic, Formatic – www.cross-cut.de



Rip Scanning System

- Detection of edged and unedged boards in the longitudinal pass
- Special algorithms calculate the best optimization result
- Adjusted feeding system
- "AB920 Spot" positions each board optimally



Wood Scanning System

- Multisensor camera system for affordable premium functionality
- Direct transmission of the scanning results to the cross-cut system
- Economical solution with a lot of potential



Face Side Scanning System



- Detection of annual ring alignment and drying checks
- Workpieces can be automatically turned to the desired position and drying checks can be cut out



Handling

WITH THE RIGHT COMPLEMENTS, A SAW CAN BE TURNED INTO A SYSTEM WITH SEMI-AUTOMATIC OR FULLY AUTOMATIC PROCESSING STEPS.

Loading/Singling

- Semi-automatic and automatic feeding systems for optimizing material yield and combination options with numerous saw models
- Feeding systems for solid wood, edged and unedged boards as well as panels
- Semi-automatic and fully automatic alignment systems
- Singling systems for edged and unedged boards that can also serve as buffers



Stacking/Sorting

- Efficient destacking and stacking systems for panels or boards
- Vacuum gantries, robot systems, tilt hoist destackers
- Transport and buffer systems
- Devices for turning and/or turning over workpieces
- Sorting systems for a wide variety of workpieces
- Automatic placing of sticks









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