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in
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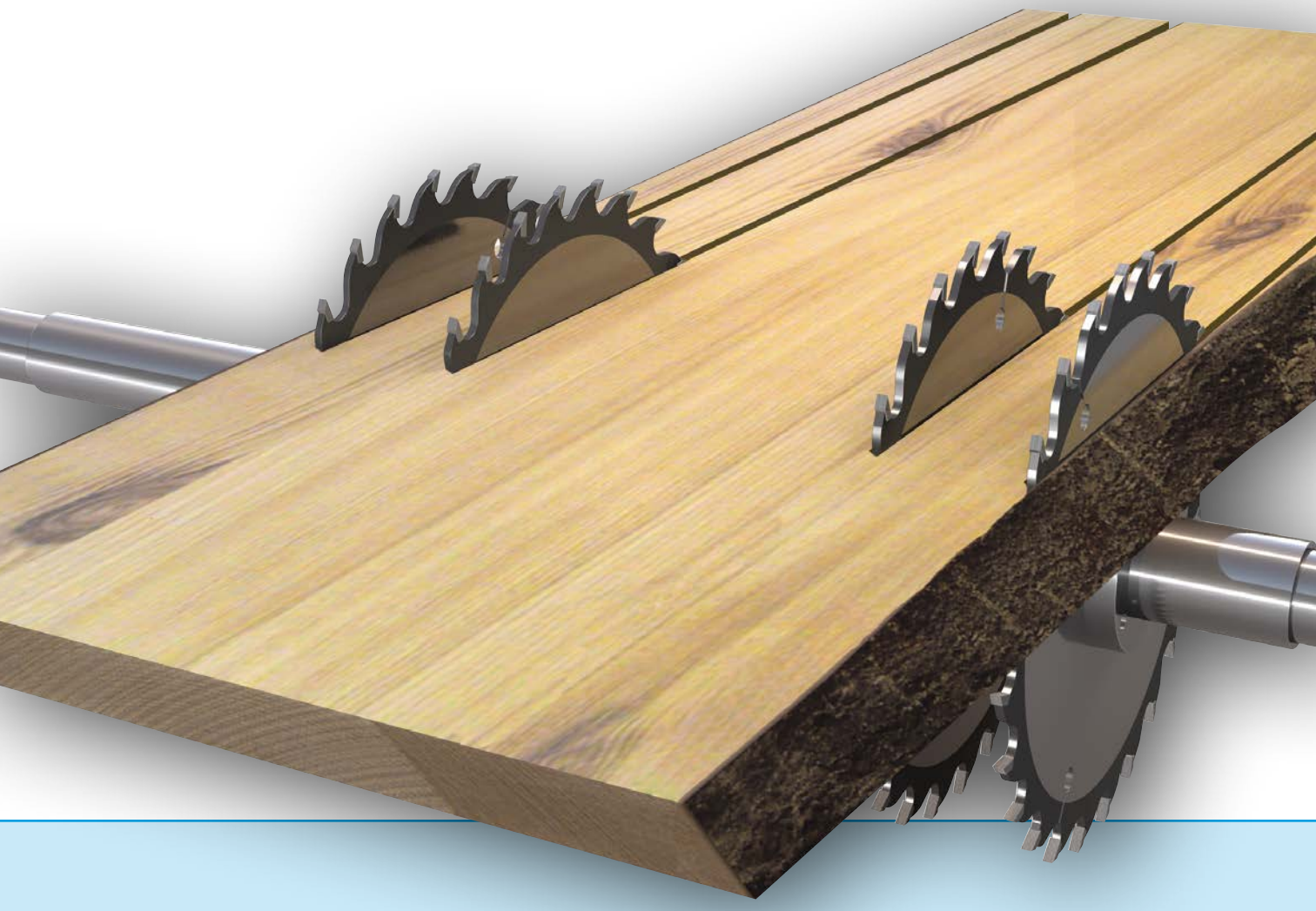
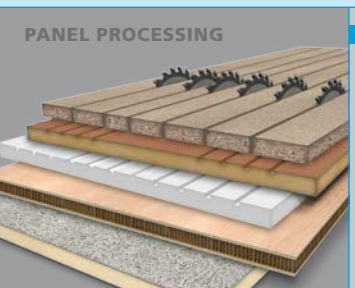
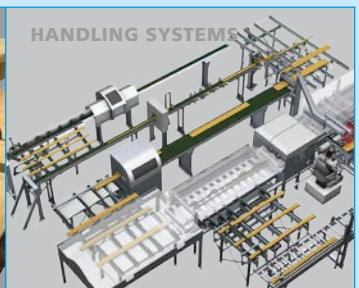
Paul
Maschinenfabrik GmbH & Co. KG



Circular Ripsaws
Series Q





„Q“ as in Quality

AN OPTIMIZED MACHINE TO MEET THE SPECIFIC DEMANDS OF DRIED HARDWOODS – TO ACHIEVE A COMBINATION OF BEST CUTTING QUALITY AND OUTSTANDING PERFORMANCE

Paul’s good reputation as a highly competent and efficient woodworking machinery manufacturer has its origin in the development and construction of the first double edger in 1948. Manifold experiences have since then been relied on to develop new machines and systems.

DEVELOPED FOR PROCESSING DRIED HARDWOODS

The Q series has been specifically developed for ripping dried hardwoods. Depending on the requirements concerned, these machines are available with a saw shaft rotating against the feed or with the feed as a climb-cutting version, combining the benefits of feed rollers (very robust, low-maintenance, cost-effective) and chain bed (highly accurate workpiece guidance).

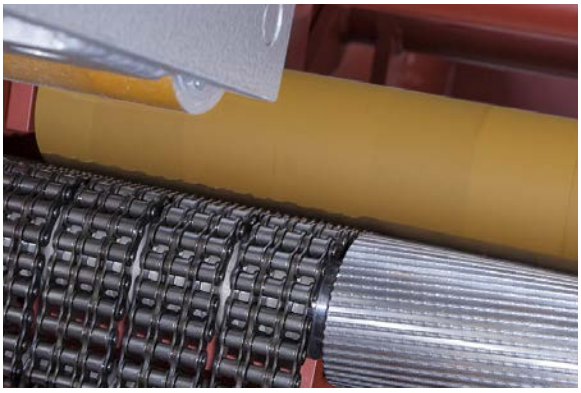


Fig. 1: *The feed system of the Q series, a combination of feed rollers and chain bed.*

INNOVATIVE FEED SYSTEM

The chain bed takes over the workpiece guidance ensuring optimum alignment with the zero line. A maximum of 18 feed rollers provide for accurate feed and best cutting quality. The products leaving the machine are ready for gluing. A specific optimization program increases both timber yield and productivity.

Drive motors of up to 90 kW provide the necessary power for processing workpieces of up to 100 mm in thickness and 750 mm in width. With up to four independently moving saw bushes the Q Series offers greatest flexibility.

- ready-for-gluing surfaces due to excellent cutting quality
- innovative feed system for optimum workpiece guidance
- optimization program for enhancing timber yield and productivity
- up to 4 adjustable saw bushes for greatest flexibility

Fig. 2: *Q-805, manually loaded, with laser guide light and four moving saw bushes.*

Fig. 3: *Machines of the Q series are in operation worldwide, proving their worth in the processing of dried hardwoods daily.*

INTELLIGENT SYSTEM SOLUTIONS

By combining a variety of automated handling components PAUL offers intelligent system solutions and complete production lines to the solid wood processing industry, turning the machines of the Q series into highly efficient multi-ripping systems for optimum timber recovery.

A Good Cut

OPTIMUM CUTTING QUALITY FOR READY-FOR-GLUING SURFACES, ENHANCED PRODUCTIVITY FOR EFFICIENT PROCESSING

Fig. 4: *Cutting quality achieved on a conventional rip saw.*

Fig. 5: *Glue-line cut achieved on a machine of the Q series.*

The Q series machines can be equipped with a fixed or a movable saw blade configuration.

FLEXIBILITY THROUGH A VARIABLE SAW BLADE NUMBER

On the movable saw configuration, the outer movable saw bush and the fixed (zero line) saw bush are fitted with a variable number of saw blades depending on the application and usable clamping length concerned. The fixed zero saw bush can be moved either out of the working area or inwards using an optional shifting device. The movable saw bush is positioned by a servomotor. Line lasers are provided to indicate the saw blade positions on the workpiece.

INDIVIDUAL ADJUSTMENT OF THE SAW BUSH CONFIGURATION

Up to four movable saw bushes can be installed. The maximum saw bush spacing mainly depends on the usable saw bush clamping length.

On the fixed saw configuration, the saw blades can be aligned on a long saw bush by using spacer rings.

SAW SHAFTS AND SAW BUSHES

The illustrations and tables shown are examples only. PAUL's team will be pleased to compile your individual saw bush configuration.

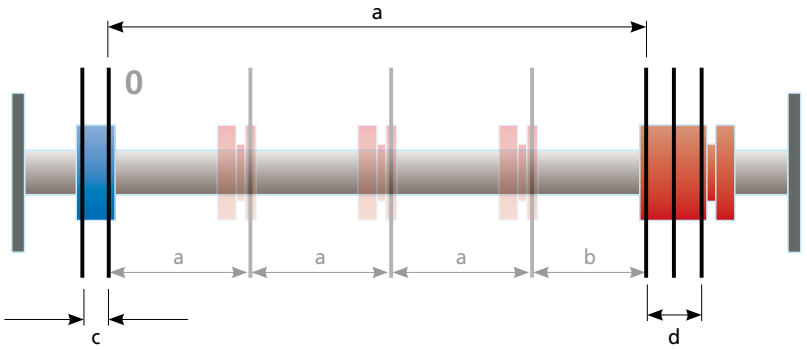
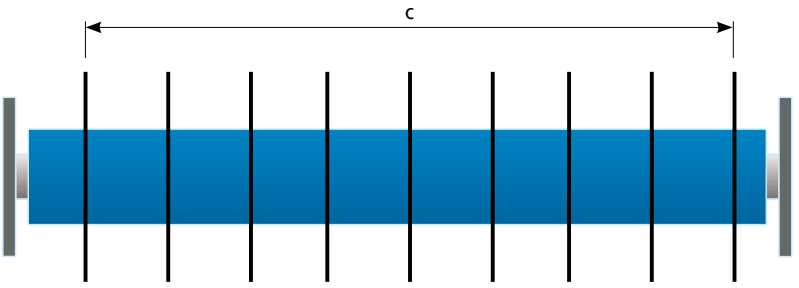


Fig. 6: *Movable saw configuration with one fixed and up to four movable saw bushes.*



fixed saw bush
movable saw bush

Fig. 7: *Fixed saw configuration on a long saw bush.*

	Q-805/Q-810	Q-805/Q-810	Q-805/Q-810	Q-805/Q-810	Q-805/Q-810
Moving saw bushes	**1**	**2**	**3**	**4**	**Fixed set-up**
Moving range a (option)	24 - 455 mm	48 (38) - 426 mm	48 (38) - 373 mm	48 (38) - 320 mm	-
Moving range b	-	24 - 402 mm	24 - 349 mm	24 - 296 mm	-
Usable clamping length c	60 mm	60 mm	60 mm	60 mm	550 mm
Usable clamping length d	120 mm	120 mm	120 mm	120 mm	-

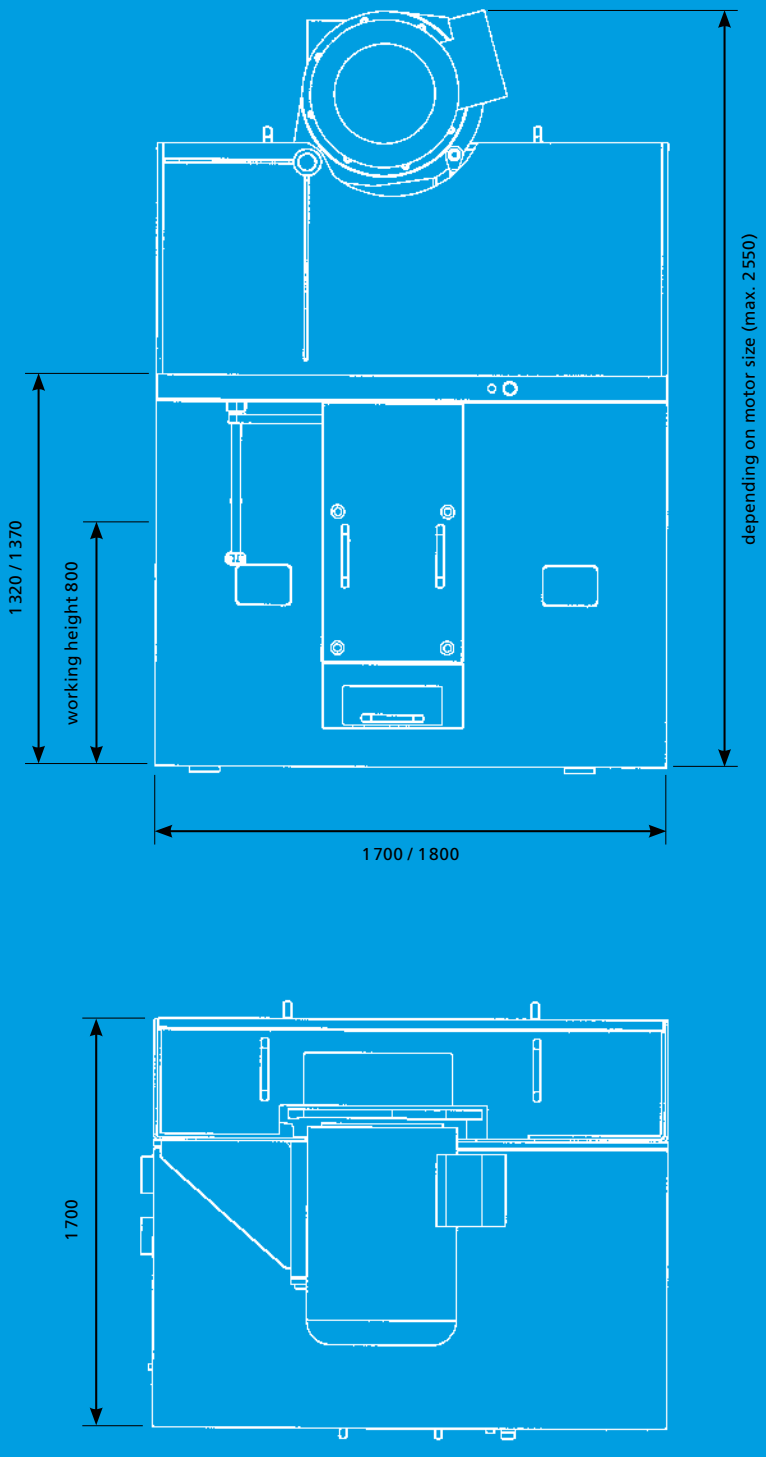


Fig. 8: *Machine dimensions (mm) of the Q series.*

Technical Data

			Q-805	Q-810
Cutting height		[mm]	15 - 50	15 - 100
Opening width max.		[mm]	750	750
Min. workpiece length		[mm]	500	600
Driving power		[kW]	15 - 90	15 - 90
Max. feed speed[1]		[m/min]	83	83
Max. number of powered feed rollers			18	18
Speed of saw shaft		[U/min]	4500	4500
Sound pressure level[2] at no load/in operation Sound power level[3] at no load/in operation		[dB(A)] [dB(A)]	72/77 93/96	72/77 93/96
Max. saw blade diameter		[mm]	250	350
Max. number of movable saw bushes			4	4
Dimensions	L W[4] H (with motor max.)	[mm] [mm] [mm]	1700 1700 1320 (2550)	1800 1700 1370 (2550)
Working height		[mm]	800	800
Weight[5]		[kg]	3000	3200

1) with manual workpiece removal max. 35 m/min
2) at the workplace, depending on tool and cutting parameters
3) depending on tool and cutting parameters
4) with moving saw blades
5) without motor or anti-kickback device, incl. four movable saw bushes

Accessories

INFEED SIDE

- controlled and fixed line lasers for an enhanced workpiece alignment
- belt conveyors/roller tables in various designs allow for an easy and fast alignment and loading
- infeed pinch roller units
- semi-automatic feeding systems
- buffer chain conveyors
- alignment chains
- destacking

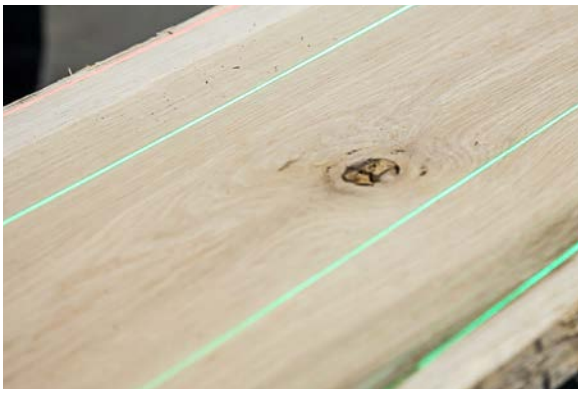


Fig. 9: *Line laser for an easy workpiece alignment and optimum workpiece segmentation.*

OUTFEED SIDE

- automatic offcut separators
- saw dust shakers
- outfeed pinch roller units
- spiral roller tables with ejection to the right or left side
- driven roller tables
- chain conveyors
- blow and suction devices

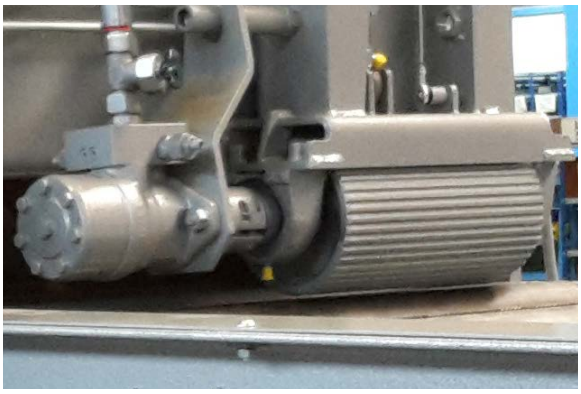


Fig. 10: *Infeed pinch roller unit.*

Fig. 11: *Automatic offcut separator.*

AUTOMATIC OFFCUT SEPARATOR

To allow for an optimum material flow, an automatic offcut separator was developed for the Q series, enhancing, yet again, the degree of automation of the multi-ripping system significantly. Here, the offcut separator separates the waste edgings from the good pieces fully automatically. When developing the system, the major aim was to achieve maximum process reliability in order to ensure highest possible system output with least possible area required.

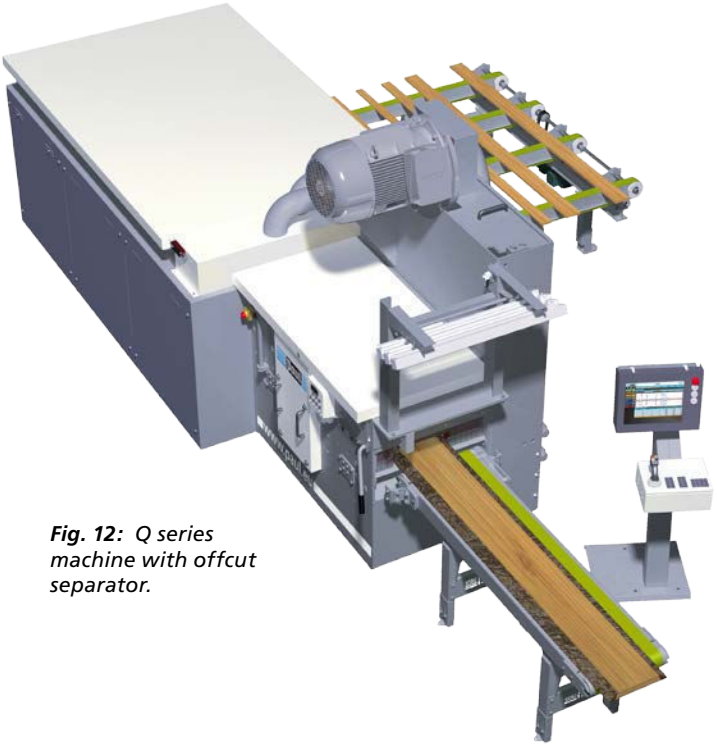


Fig. 12: *Q series machine with offcut separator.*

Fig. 13: *MAXIRIP control terminal with touch panel and joystick.*

CONTROL SYSTEMS

MAXIRIP and OPTIRIP for maximizing and optimizing the timber yield:

- cross section programming
- programming of fixed widths
- programming of saw set-up lists
- width optimization (in conjunction with width measuring)
- diagnostics software
- network compatibility
- remote maintenance
- yield statistics
- scanner connection (option)
- robust enclosure for being used in rough sawmill environments
- operator terminal freely positionable by means of a cantilever (option)
- other options

Components and Systems

SYSTEM SOLUTIONS

All system components can be used to construct high-performance, largely automated cutting systems. For this purpose, PAUL offers an impressive range of efficient and versatile machines for panel processing, long-lasting and robust machines for solid wood processing as well as high-quality und powerful cross-cut systems. In addition to the main components, customers will find an extensive range of accessories that allows for precisely matching the individual needs of the clients.

Increased feed speed, a concatenation of several individual steps, maximum process reliability and automated work flows result in a crucially enhanced level of productivity. Operator workload is thus reduced, while the standard of safety is significantly raised.

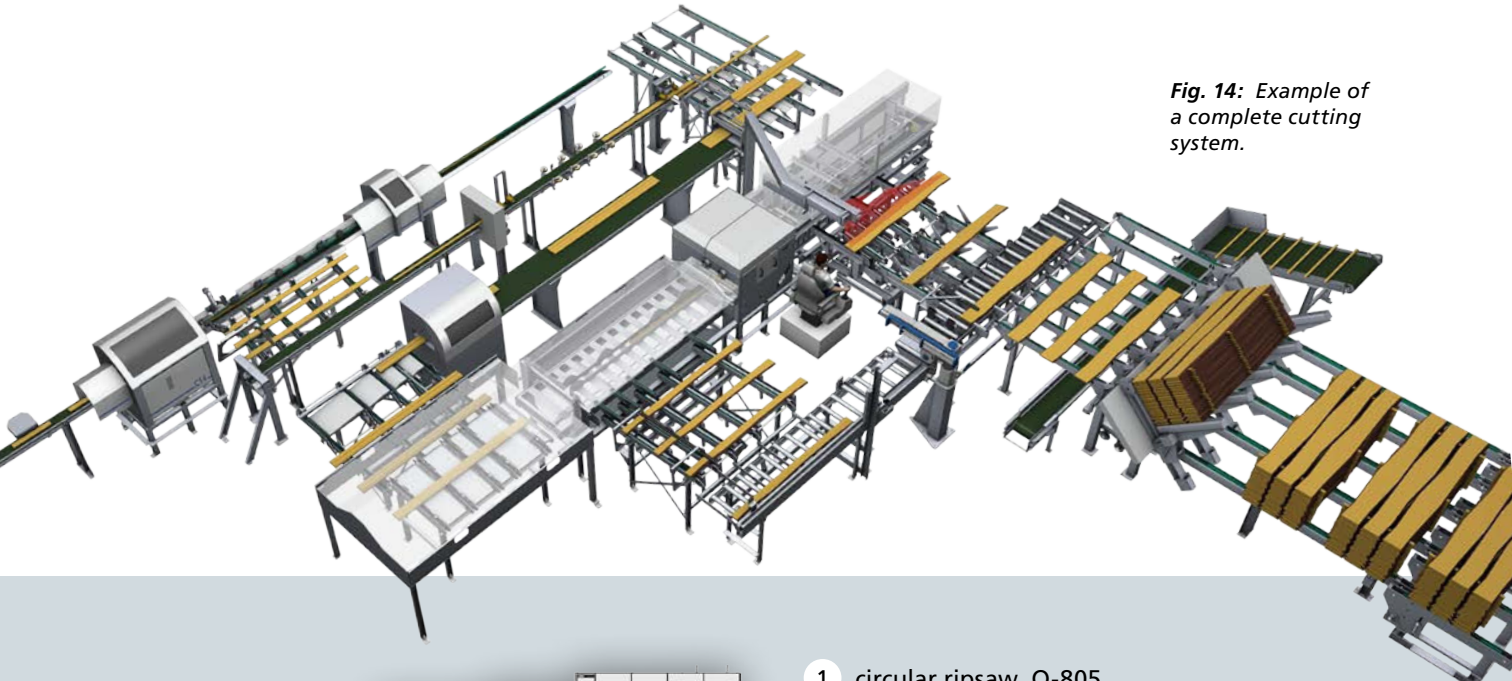
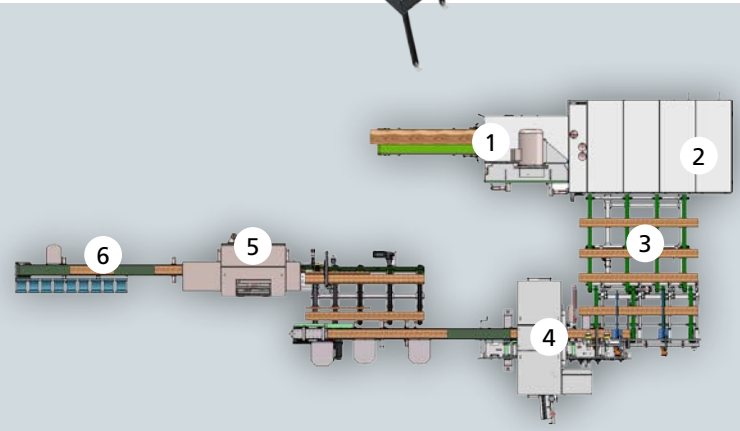


Fig. 14: *Example of a complete cutting system.*



1. circular ripsaw Q-805
2. offcut separator
3. cross conveyor belt
4. Paul Wood Scanning System
5. optimized cross-cut system C11
6. sorting conveyor

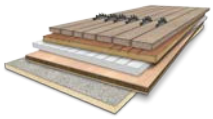
Strong Partner

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
- free phone support
- high quality and reliability
- operator convenience



PANEL PROCESSING

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

SOLID WOOD PROCESSING

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.

Paul
Maschinenfabrik GmbH & Co. KG

We are on site for you worldwide.
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