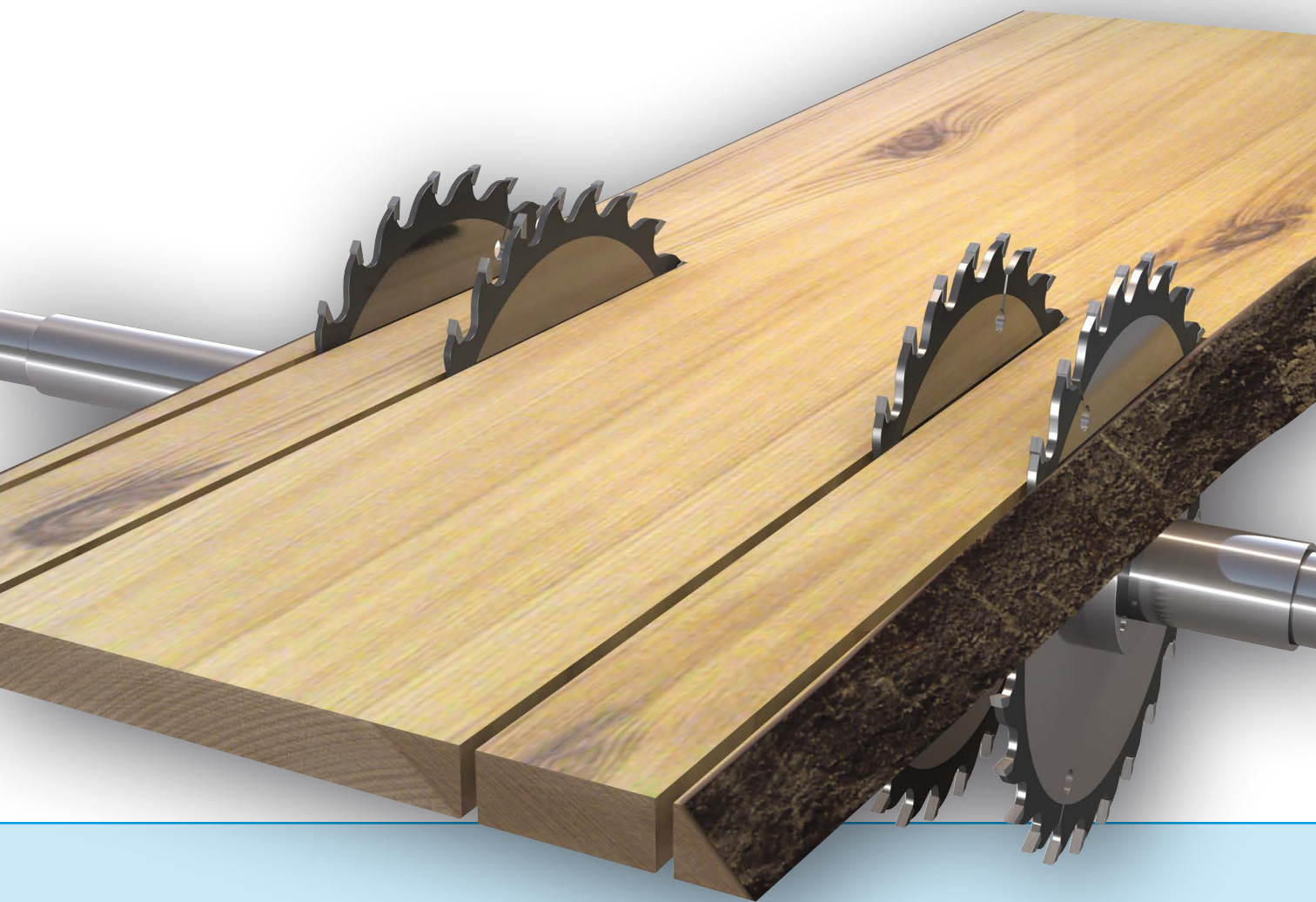
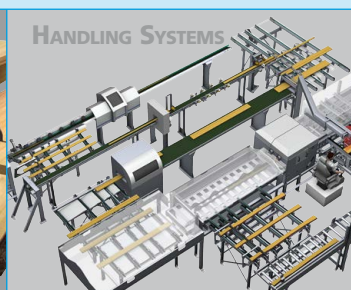
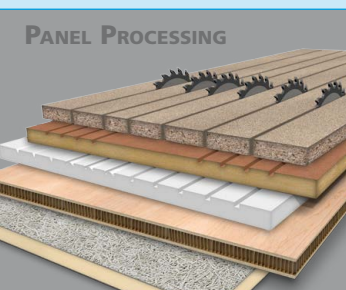


■ made  
■ in  
■ Germany

**Paul**  
Maschinenfabrik GmbH & Co. KG



# Circular Edgers/Ripsaws Series KME2/BM



## TECHNOLOGY AND TRADITION

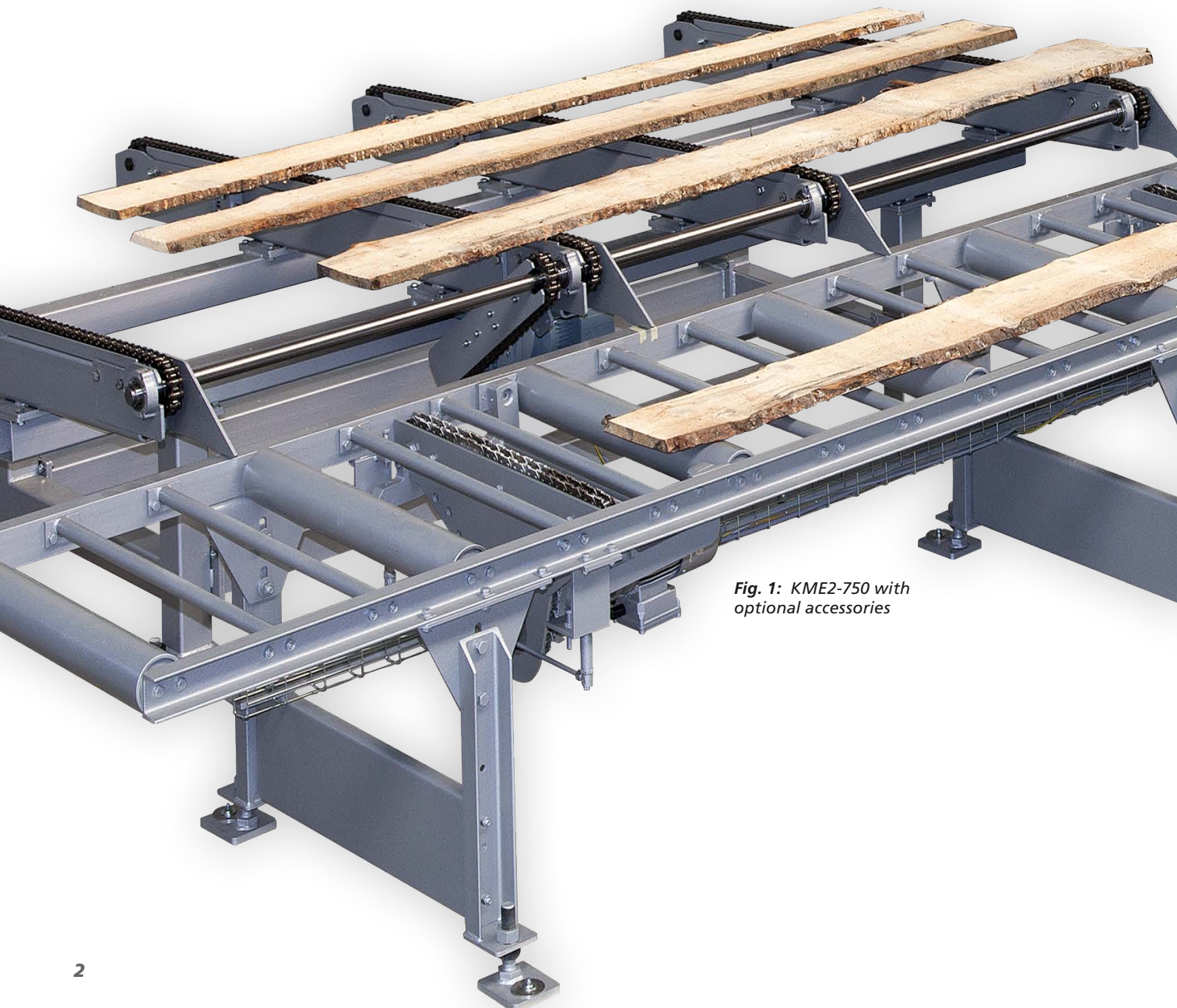
Edging is traditionally PAUL's trade. In 1948 the development of the first double edger marked the beginning of woodworking machinery production for the sawmilling and secondary wood processing industries.

Since the production of the model "KME2" in the early 50's, PAUL has established a reputation as a highly competent and efficient woodworking machinery manufacturer. Today over 8000 circular edgers made by PAUL are in use worldwide.

PAUL Maschinenfabrik has not only become a world market leader for edgers and rip saws, but also offers customized solutions for complete production systems to the solid wood processing and sawmilling industries.

The classic machines for the manual edging of boards and planks, as well as for multi-ripping, are the circular edgers of the KME2 and BM series.

In electric, hydraulic or servo-electric configurations, with up to four independently movable saw bushes, driving power up to 75 kW and continuously variable feed rate, they are in use in practically every sawmill.



*Fig. 1: KME2-750 with optional accessories*



Fig. 2: KME2-750, manually loaded, operating in a sawmill



# RIPPING PATTERNS

- Fixed saw bush
- Movable saw bush

The KME2/BM can be equipped with a fixed or a movable saw blade configuration with up to four independently moving saw bushes.

On the fixed saw configuration the saw blades can be spaced at virtually any intervals on a long saw bush by using spacer rings.

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. With an optional shifting device the fixed saw bush can be moved either out of the working area or inwards aligning a different saw on the fixed saw bush with the splitting wedge. The movable saw bush is positioned hydraulic, electric stepless or by a servomotor. Line lasers (option) are provided to indicate the saw blade positions on the workpiece.

In addition, the KME2/BM can be equipped with up to three movable single-saw bushes. The maximum saw bush spacings are mainly dependent on the usable saw bush clamping lengths and on the machine width.

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

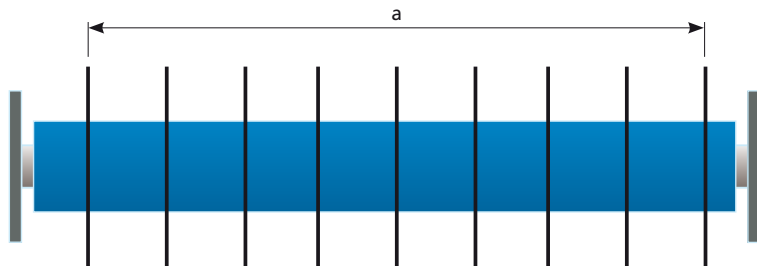


Fig. 3: Fixed saw configuration on a long saw bush

	KME2-750/BM	KME2-1000
Usable clamping length a (max.)	550 mm	810 mm

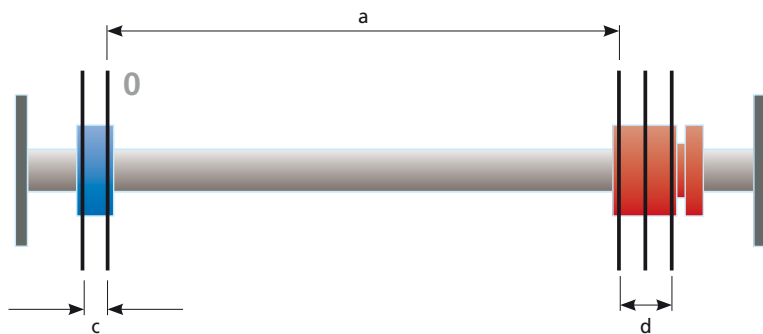


Fig. 4: Movable saw configuration with one fixed and one movable saw bush

	KME2-750/BM	KME2-1000
Moving range a	24 - 325 mm	24 - 581 mm
Usable clamping length c	60 mm	60 mm
Usable clamping length d	120 mm	120 mm

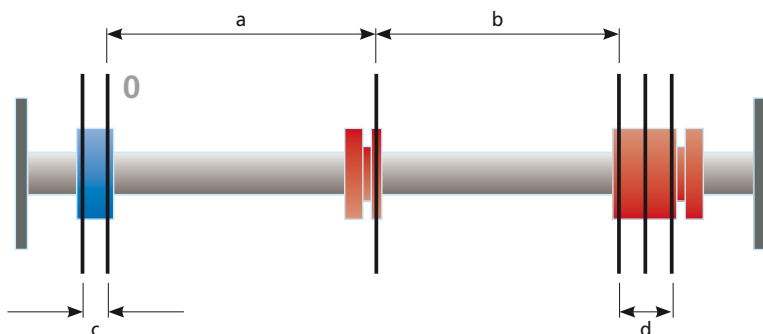


Fig. 5: Movable saw configuration with one fixed and two movable saw bushes

	KME2-750/BM	KME2-1000
Moving range a (option)	48 (38) - 296 mm	48 (38) - 552 mm
Moving range b	24 - 272 mm	24 - 528 mm
Usable clamping length c	60 mm	60 mm
Usable clamping length d	120 mm	120 mm



Fig. 6: Excellent cut finish on square timber ...



Fig. 7: ... and boards

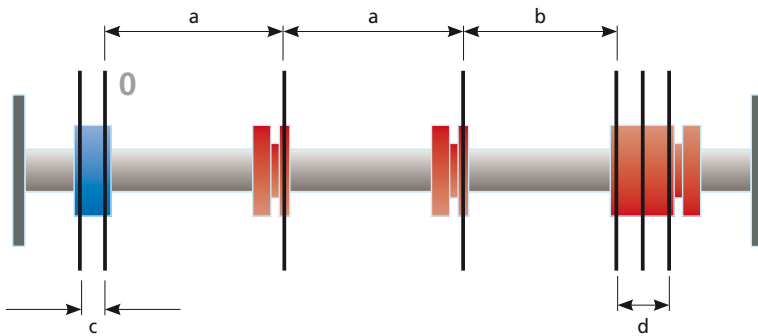


Fig. 8: Movable saw configuration with one fixed and three movable saw bushes

	KME2-750/BM	KME2-1000
Moving range a (option)	48 (38) - 243 mm	48 (38) - 499 mm
Moving range b	24 - 219 mm	24 - 475 mm
Usable clamping length c	60 mm	60 mm
Usable clamping length d	120 mm	120 mm

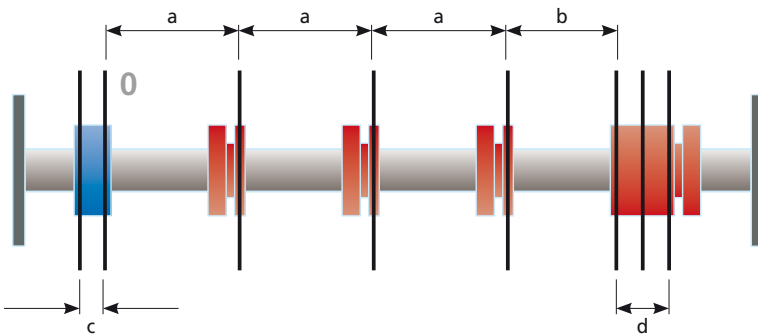


Fig. 9: Movable saw configuration with one fixed and four movable saw bushes

	KME2-750/BM	KME2-1000
Moving range a (option)	48 (38) - 190 mm	48 (38) - 446 mm
Moving range b	24 - 166 mm	24 - 422 mm
Usable clamping length c	60 mm	60 mm
Usable clamping length d	120 mm	120 mm

## THE KME2 IN DETAIL

### ▶ THE STRENGTHS OF THE KME2

- Cost-effective entry-level model
- Compact and modular design for customer-oriented requirements
- Robust, durable construction
- Simple tool change
- Hydraulic feed drive
- User-friendly control system
- All parts machined with utmost precision
- Rotating shafts running in encapsulated, dust-proof ball bearings
- Main shaft hard chrome-plated and carried in three bearings
- Proven thousands of times

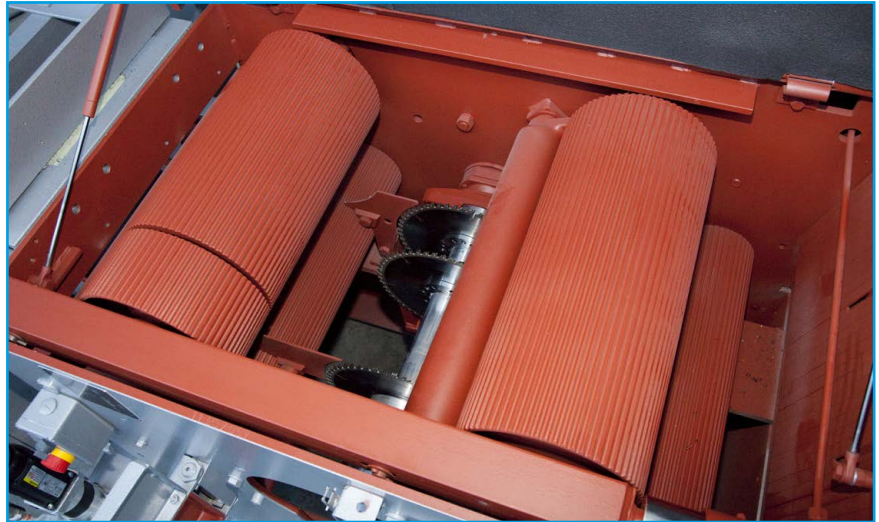


Fig. 10: Fluted feed rollers for improved grip



Fig. 11: Drive motors up to 75 kW driving the saw shaft via V-belts

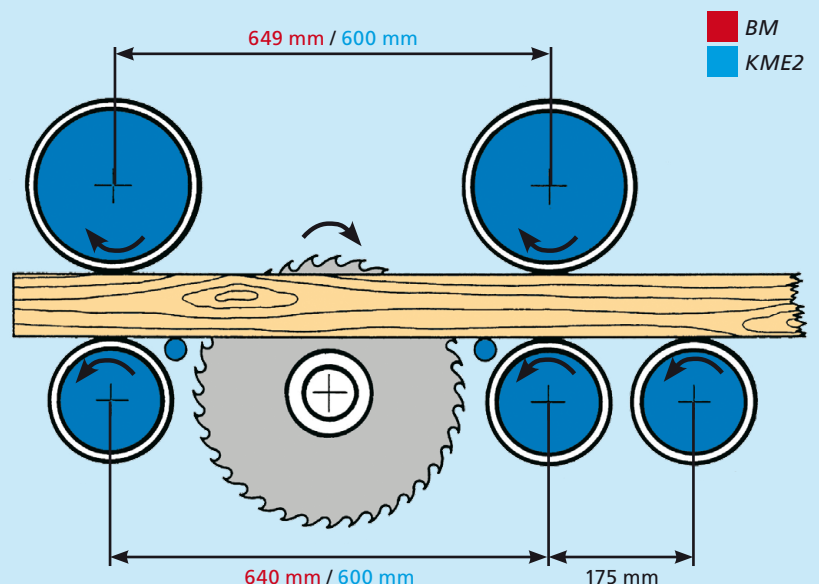
### ▶ THE FEED SYSTEM

Five powered feed rollers ensure correct timber feed and best production rates. All rollers are driven by means of a robust chain to ensure reliable and durable feed.

The feed speed is infinitely variable up to 90 m/min.

The fluted top rollers offer excellent grip on green timber.

Fig. 12: Feed roller configuration



# TECHNICAL DATA

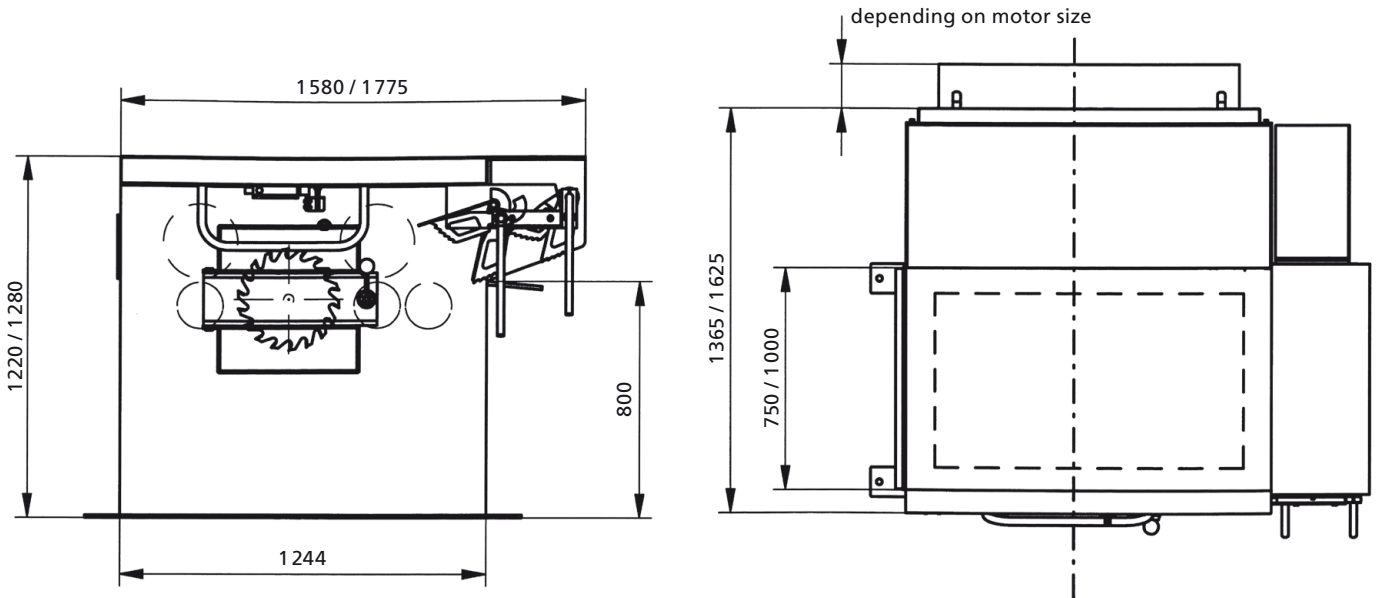


Fig. 13: Dimensions (mm) of a KME2/BM

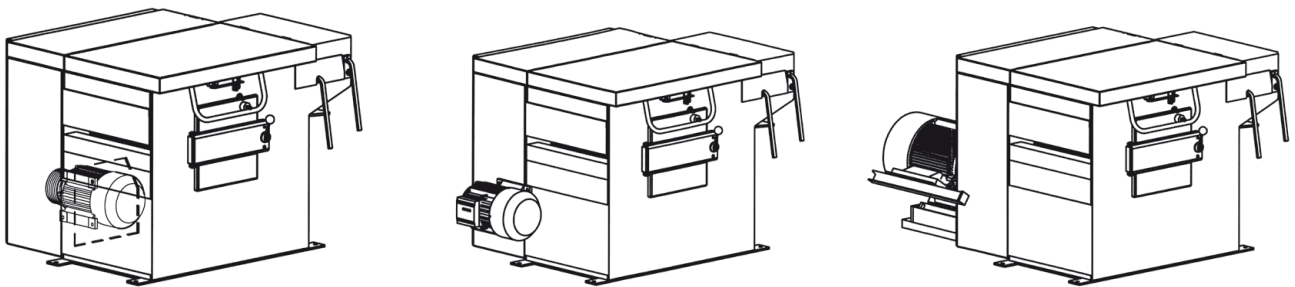


Fig. 14: The motor can be installed within the machine frame (left), on the outfeed end of the machine (middle) or on the drive side of the machine (right).

		KME2-750	KME2-1000	BM	
Cutting height	[mm]	125	125	160	
Opening width	[mm]	700	950	700	
Min. workpiece length	[mm]	800	800	1000	
Max. driving power	[kW]	75	75	75	
Feed speed (Standard) <sup>4,5</sup>	[m/min.]	10–90	10–90	10–90	
Powered feed rollers		5	5	5	
Speed saw shaft	[U/min.]	3300	3300	3000	
Sound pressure level <sup>1)</sup> at no-load/in operation	[dB(A)]	74/87	74/87	74/87	
Sound power level <sup>2)</sup> at no-load/in operation	[dB(A)]	95/108	95/108	95/108	
Max. saw blade diameter	[mm]	380	380	460	
Movable saw bushes, max.		4	4	4	
Movable splitting wedges, max.		2	2	2	
Dimensions	L	[mm]	1580	1580	1775
	W	[mm]	1365	1625	1365
	H	[mm]	1220	1220	1280
Weight <sup>3)</sup>	[kg]	1600	1900	1700	

1) at the workplace, depending on tool and cutting parameters  
 2) depending on tool and cutting parameters  
 3) without motor and moving saw bushes

4) Other versions on inquiry  
 5) With manual workpiece removal max. 50 m/min

## ACCESSORIES

### INFEED SIDE

- Movable and fixed line lasers for ease of workpiece alignment
- Roller conveyors in various designs to facilitate easy and rapid alignment and loading
- Pinch roller units
- Buffer chain conveyors
- Alignment chains
- Destacking systems



Fig. 15: Line lasers for ease of workpiece alignment



Fig. 16: Pinch roller unit

### OUTFEED SIDE

- Slab extractors
- Automatic offcut separators
- Sawdust shakers
- Pinch roller units
- Spiral roller conveyors
- Cross transfer conveyors
- Powered / idle roller conveyors
- Chain conveyors



Fig. 17: Sawdust shaker



Fig. 18: Slab extractor

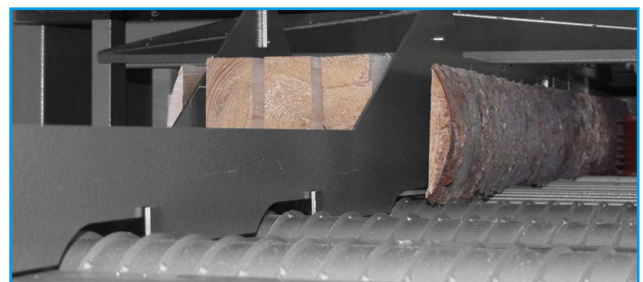


Fig. 19: Offcut separator with dividing plate



# OPERATION

## SAW BLADE AND TOP FEED ROLLER POSITIONING – A MATTER OF SECONDS

Version	Saw positioning	Top roller positioning	Operation
Fully hydraulic	hydraulic	hydraulic	actuating bar with 3 levers or electric lever switch (option)
Partial hydraulic	hydraulic	mechanical, with ball bearing handwheel	actuating bar with 3 levers or electric lever switch (option)
Electric, stepless	electric	hydraulic or mechanical, with ball bearing handwheel	<ul style="list-style-type: none"> <li>electric remote control with the aid of a foot or hand operated switch</li> <li>only for square edging, i.e. producing to random widths</li> </ul>
Electronic, servomotor driven (max. 2 saw positioning devices)	Positioning with <ul style="list-style-type: none"> <li>millimeter increments</li> <li>centimeter increments</li> <li>fixed widths</li> <li>preset ripping patterns</li> </ul>	hydraulic or mechanical, with ball bearing handwheel	MAXIRIP control



Fig. 20: Hydraulic saw positioning device



Fig. 21: Electric saw positioning device



Fig. 22: Servomotor driven saw positioning device

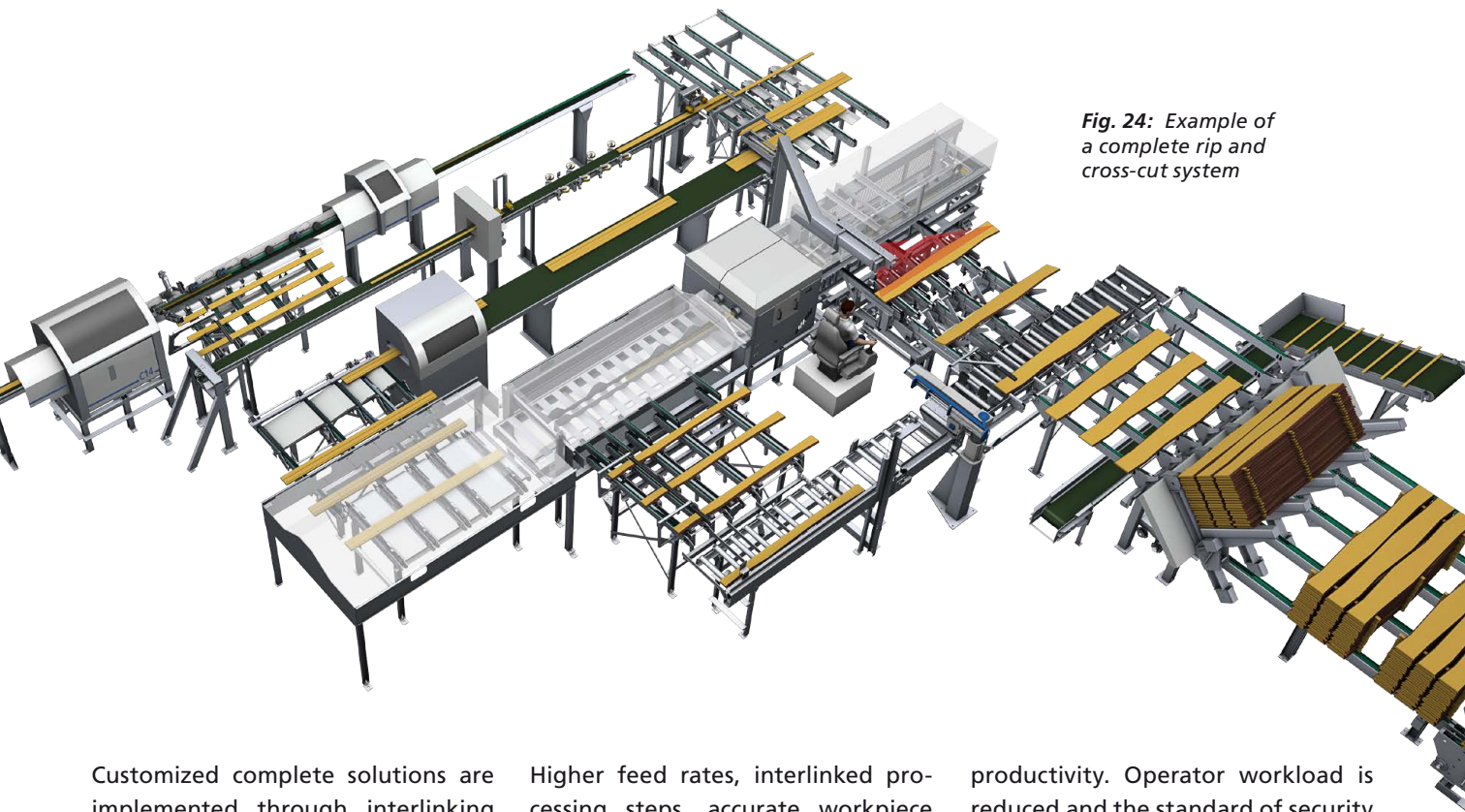
## CNC CONTROLS

MAXIRIP control for maximization and optimization of timber yield:

- Programming of ripping patterns
- Programming of fixed widths
- Programming of fixed set-ups on multi-saw bushes
- Diagnostic software
- Network capability
- Remote maintenance
- Robust casing for arduous sawmilling applications
- Operating terminal freely movable on a cantilever arm
- Other options



# CUSTOMIZED PACKAGE SOLUTIONS



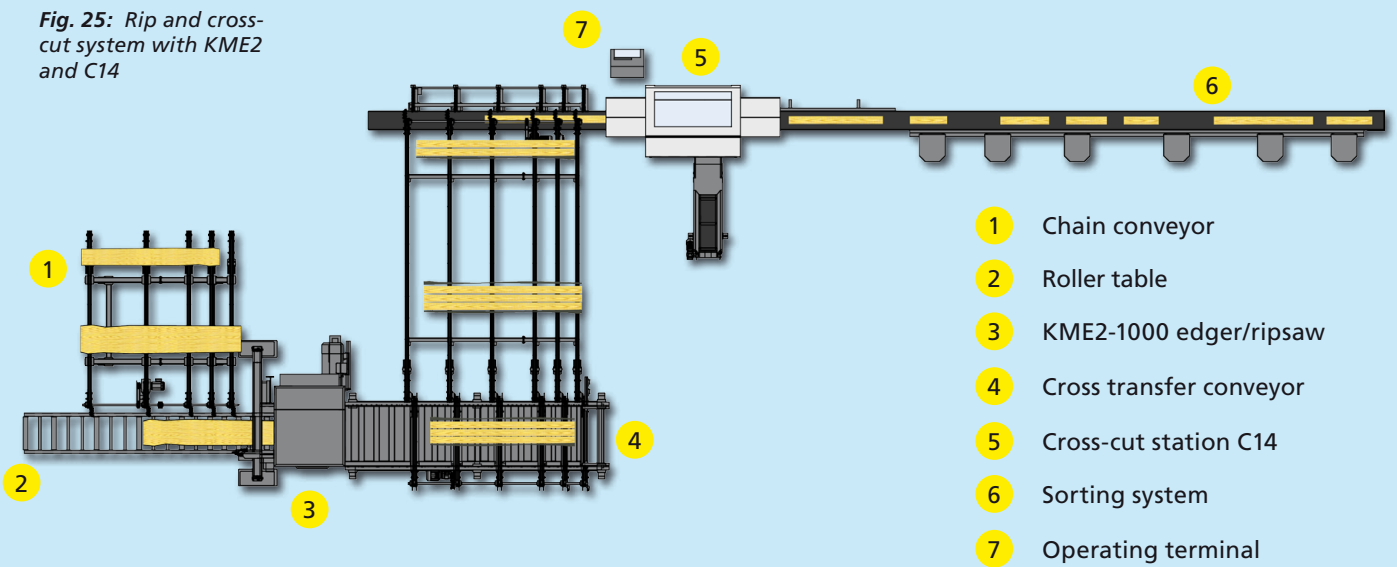
*Fig. 24: Example of a complete rip and cross-cut system*

Customized complete solutions are implemented through interlinking of rip saws, cross-cut systems and automated handling equipment.

Higher feed rates, interlinked processing steps, accurate workpiece guidance and automatic work flows lead to a significant improvement in

productivity. Operator workload is reduced and the standard of security increased appreciably.

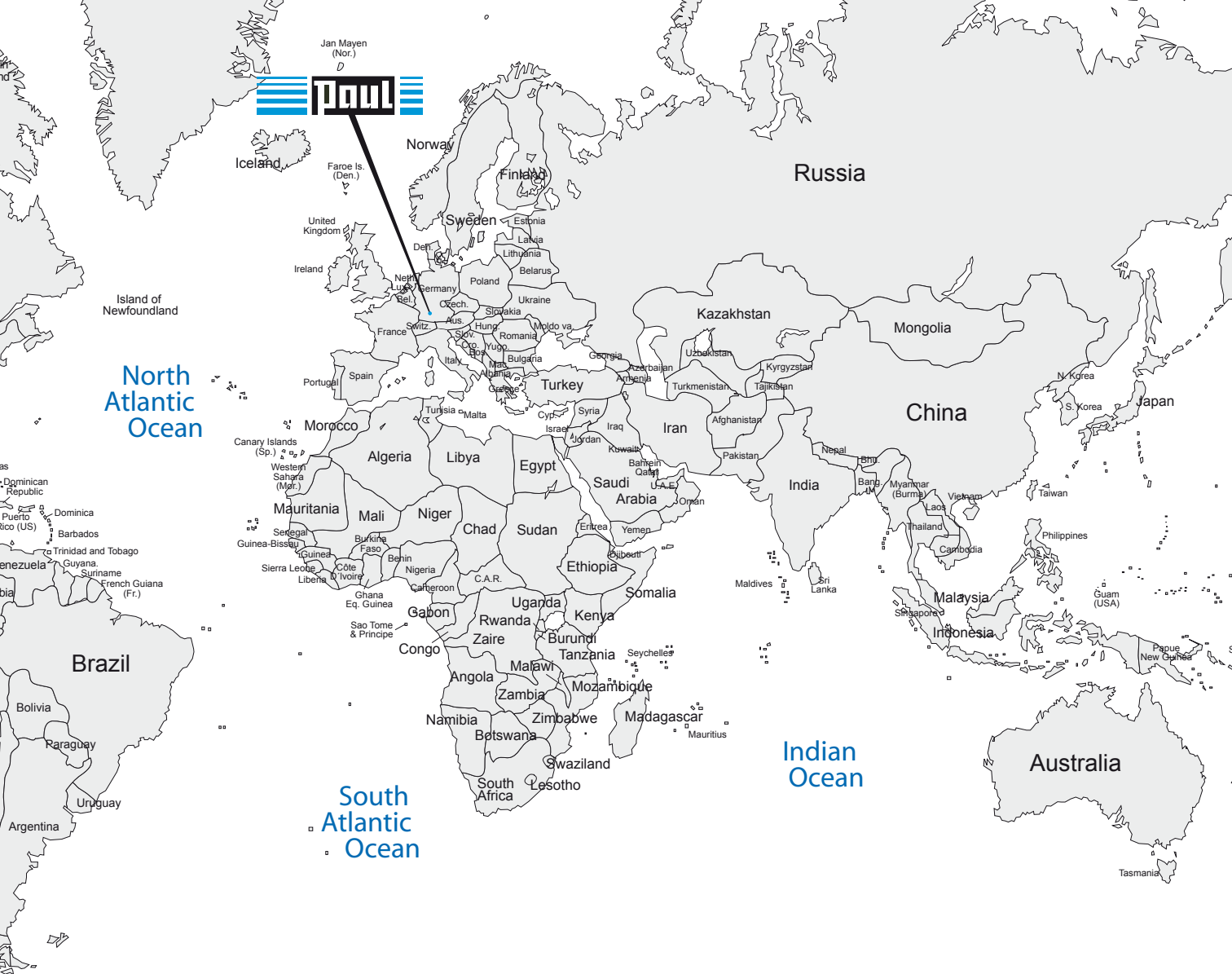
*Fig. 25: Rip and cross-cut system with KME2 and C14*



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