



# Circular Edgers/Ripsaws Series KME3



# **PROVEN TECHNOLOGY**

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. Since then PAUL has continually enhanced its experience in the field of circular edgers and multirip saws.

Drive motors up to 90 kW provide the KME3 with the necessary power to process workpieces up to 160 mm in thickness and 950 mm in width. With up to four independently moving saw bushes and two independently moving splitting wedges the KME3 ensures greatest flexibility. Manually, semi or fully automatically loaded, the KME3 meets almost all customer requirements. Combined with an AB920 it turns into an automatic edging and multiripping system for maximum yield optimization.

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Fig. 1: KME3-1016, manually loaded, with slab extractor and offcut separator

By integrating further handling components PAUL offers intelligent system solutions and complete production lines to the solid wood processing and sawmilling industries.





## **RIPPING PATTERNS**

Fixed saw bush Movable saw bush

The KME3 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 by a servomotor. Line lasers (option) are provided to indicate the saw blade positions on the workpiece.

In addition, the KME3 can be equipped with up to 3 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.

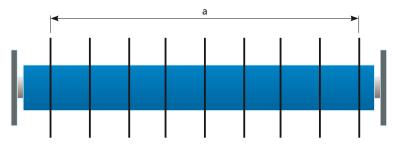


Fig. 3: Fixed saw configuration on a long saw bush

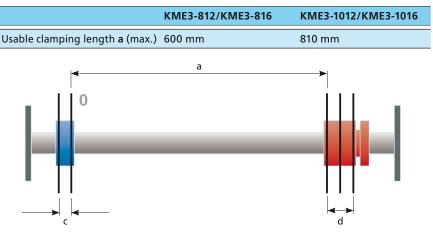


Fig. 4: Movable saw configuration with one fixed and one movable saw bush

	KME3-812/KME3-816	KME3-1012/KME3-1016	
Moving range <b>a</b>	24 - 455 mm	24 - 605 mm	
Usable clamping length <b>c</b>	60 mm	60 mm	
Usable clamping length <b>d</b>	120 mm	120 mm	

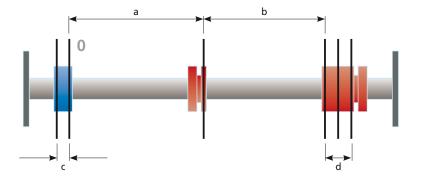


Fig. 5: Movable saw configuration with one fixed and two movable saw bushes

	KME3-812/KME3-816	KME3-1012/KME3-1016	
Moving range <b>a</b> (option)	48 (38) - 426 mm	48 (38) - 576 mm	
Moving range <b>b</b>	24 - 402 mm	24 - 552 mm	
Usable clamping length <b>c</b>	60 mm	60 mm	
Usable clamping length <b>d</b>	120 mm	120 mm	





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

Fig. 7: ... and boards

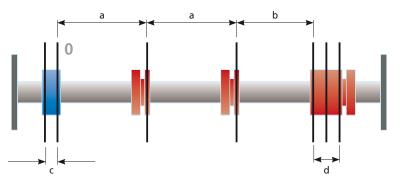


Fig. 8: Movable saw configuration with one fixed and three movable saw bushes

	KME3-812/KME3-816	KME3-1012/KME3-1016	
Moving range <b>a</b> (option)	48 (38) - 373 mm	48 (38) - 523 mm	
Moving range <b>b</b>	24 - 349 mm	24 - 499 mm	
Usable clamping length <b>c</b>	60 mm	60 mm	
Usable clamping length <b>d</b>	120 mm	120 mm	

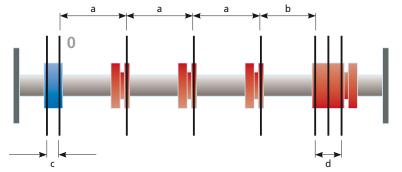


Fig. 9: Movable saw configuration with one fixed and four movable saw bushes

	KME3-812/KME3-816	KME3-1012/KME3-1016	
Moving range <b>a</b> (option)	48 (38) - 320 mm	48 (38) - 470 mm	
Moving range <b>b</b>	24 - 296 mm	24 - 446 mm	
Usable clamping length <b>c</b>	60 mm	60 mm	
Usable clamping length <b>d</b>	120 mm	120 mm	

# THE KME3 IN DETAIL

#### THE STRENGTHS OF THE KME3

- Compact and modular design for customer-oriented requirements
- Overall dimensions similar to KME2, exchange possible
- Robust, durable construction
- Use of greasable bearings
- Simple tool change

- Hydraulically adjustable top roller pressure
- Hydraulic feed drive with reverse gear
- Stepper-motor actuated line lasers for maximum operating convenience
- User-friendly, LINUX-based control system with graphic user interface

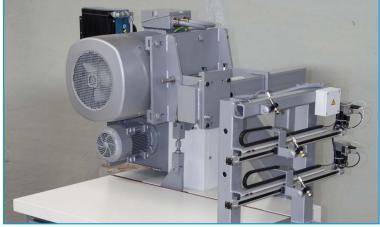


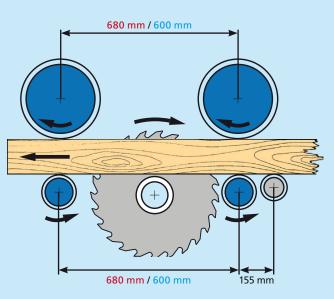
Fig. 10: Extremely compact design with overhead drive unit



Fig. 12: Line lasers indicating the saw blade positions

#### Fig. 11: Feed roller configuration



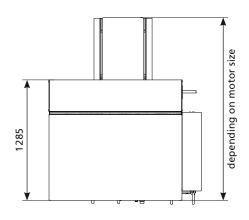




*Fig. 13: KME3* with opened machine hood and opened front bearing cover



# **TECHNICAL DATA**



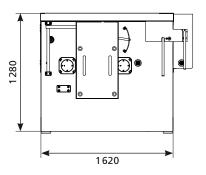


Fig. 14: Dimensions (mm) of a KME3-812 with motor at the rear, right-hand design

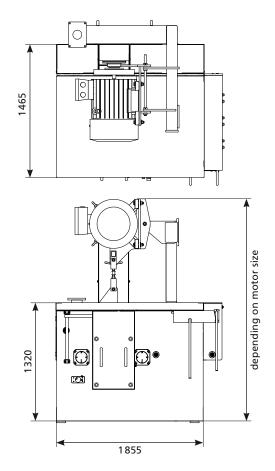


Fig. 15: Dimensions (mm) of a KME3-1016 with overhead motor, right-hand design

		KME3-812	KME3-1012	KME3-816	KME3-1016
Cutting height	[mm]	15–125	15–125	15–160	15–160
Opening width	[mm]	750	950	750	950
Min. workpiece length	[mm]	900	900	1 0 5 0	1050
Driving power	[kW]	15–90	15–90	15–90	15–90
Max. feed speed (standard) <sup>4,5</sup>	[m/min.]	10–75	10–75	10–75	10–75
Powered feed rollers		4	4	4	4
Speed of saw shaft	[U/min.]	3300	3 3 0 0	3 300	3 3 0 0
Sound pressure level <sup>1)</sup> at no-load/in operation Sound power level <sup>2)</sup> at no-load/in operation		72/95 91/106	72/95 91/106	72/95 91/106	72/95 91/106
Max. saw blade diameter	[mm]	380	380	460	460
Movable saw bushes, max.		4	4	4	4
Movable splitting wedges, max.		2	2	2	2
Dimensions L W H	[mm] [mm] [mm]	1620 1285 1280	1 620 1 465 1 280	1 855 1 285 1 320	1 855 1 465 1 320
Weight <sup>3)</sup>	[kg]	2480	3 100	2 5 5 0	3200

At the workplace, depending on tool and cutting parameters 1)

Depending on tool and cutting parameters

4) Other versions on inquiry

With manual workpiece removal max. 50 m/min 5)

2) 3) Without motor or hydraulic unit, incl. 4 moving saw bushes

# ACCESSORIES

#### INFEED SIDE

- Controlled 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
- Semi and fully automatic feeding systems
- Buffer chain conveyors
- Alignment chains
- Destacking systems

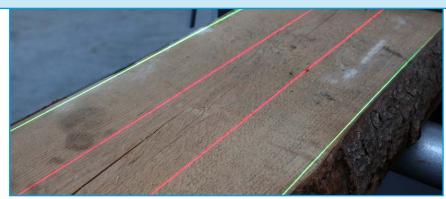


Fig. 16: Line lasers for ease of workpiece alignment



Fig. 17: AB920 fully automatic infeed system



Fig. 18: Convenient alignment table, manually loaded



Fig. 19: Infeed pinch roller unit



#### OUTFEED SIDE

- Slab extractors
- Automatic offcut separators
- Sawdust shakers
- Pinch roller units
- Spiral roller conveyors ejecting to the right or left
- Powered roller conveyors
- Chain conveyors





Fig. 21: Slab extractor



Fig. 22: Offcut separator

### CONTROLS

MAXIRIP and OPTIRIP controls for maximization and optimization of timber yield:

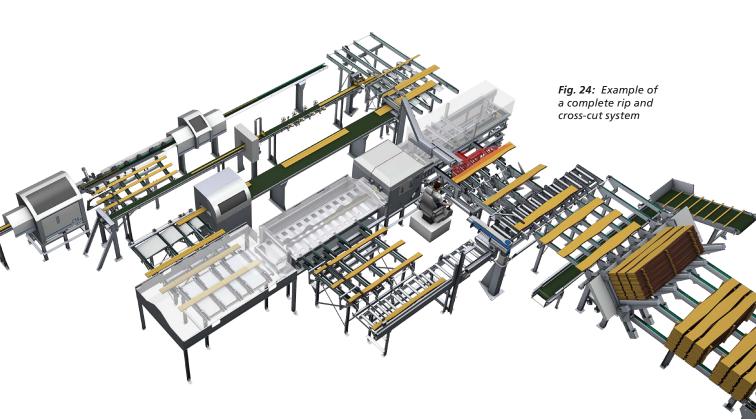
- Programming of ripping patterns
- Programming of fixed widths
- Programming of fixed set-ups on multi-saw bushes
- Width optimization (in conjunction with width measurement)
- Diagnostic software
- Network capability
- Remote maintenance
- Yield statistics
- Scanner connection (option)
- Robust casing for arduous sawmilling applications
- Operating terminal freely movable on a cantilever arm
- Other options



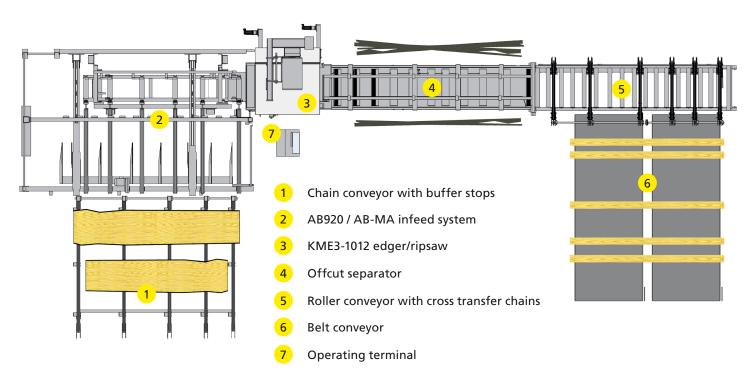


*Fig. 23:* MAXIRIP operating terminal with touch panel and joystick

# CUSTOMIZED PACKAGE SOLUTIONS

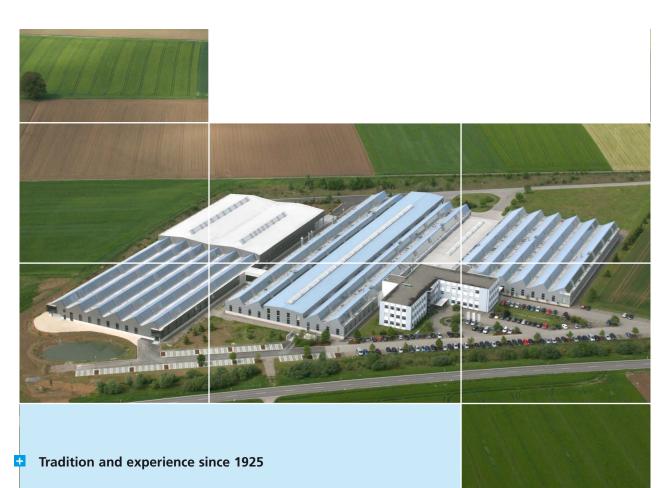


Customized complete solutions are implemented through interlinking of rip saws, cross-cut systems and automated handling equipment. Higher feed rates, interlinked processing steps, accurate workpiece guidance and automatic work flows lead to a significant improvement in productivity. Operator workload is reduced and the standard of security increased appreciably.





# YOUR RELIABLE PARTNER



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- Worldwide service and free telephone support
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- Worldwide cooperation
- Worldwide references
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- **Consistent return on investment for years**
- High level of in-house production and high availability of spare parts
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