



CNC Cross-Cut Systems

RAPID Series



CONTINUOUS HIGH-EFFICIENCY CNC CROSS-CUTTING

The RAPID Series cross-cut systems are designed for continuous heavy-duty operation. With this series PAUL offers profitable solutions for all industrial requirements in the field of high-performance

cross-cutting with maximum timber yield.

Unlike other high-speed CNC cross-cut systems, the PAUL RAPID features two saw blades working independently of each other. This

feature ensures more reliable waste disposal and thus an appreciable increase in the uptime and efficiency of the system.



HIGHLY EFFICIENT SAWING TECHNOLOGY

- 3 driven top and bottom feed rollers of 110 mm diameter for a powerful, yet smooth power transmission, even with warped workpieces and high feed speeds
- Heavy-duty gear drive unit
- 2 overhead saw blades - one of them exclusively for trailing end

cuts ensuring that even random length offcuts at the board end are cut without any interference

- Optimum waste disposal
- Extremely robust, basically technically conservative and transparent construction

- Outstanding cut-to-length accuracy
- Efficient dust extraction

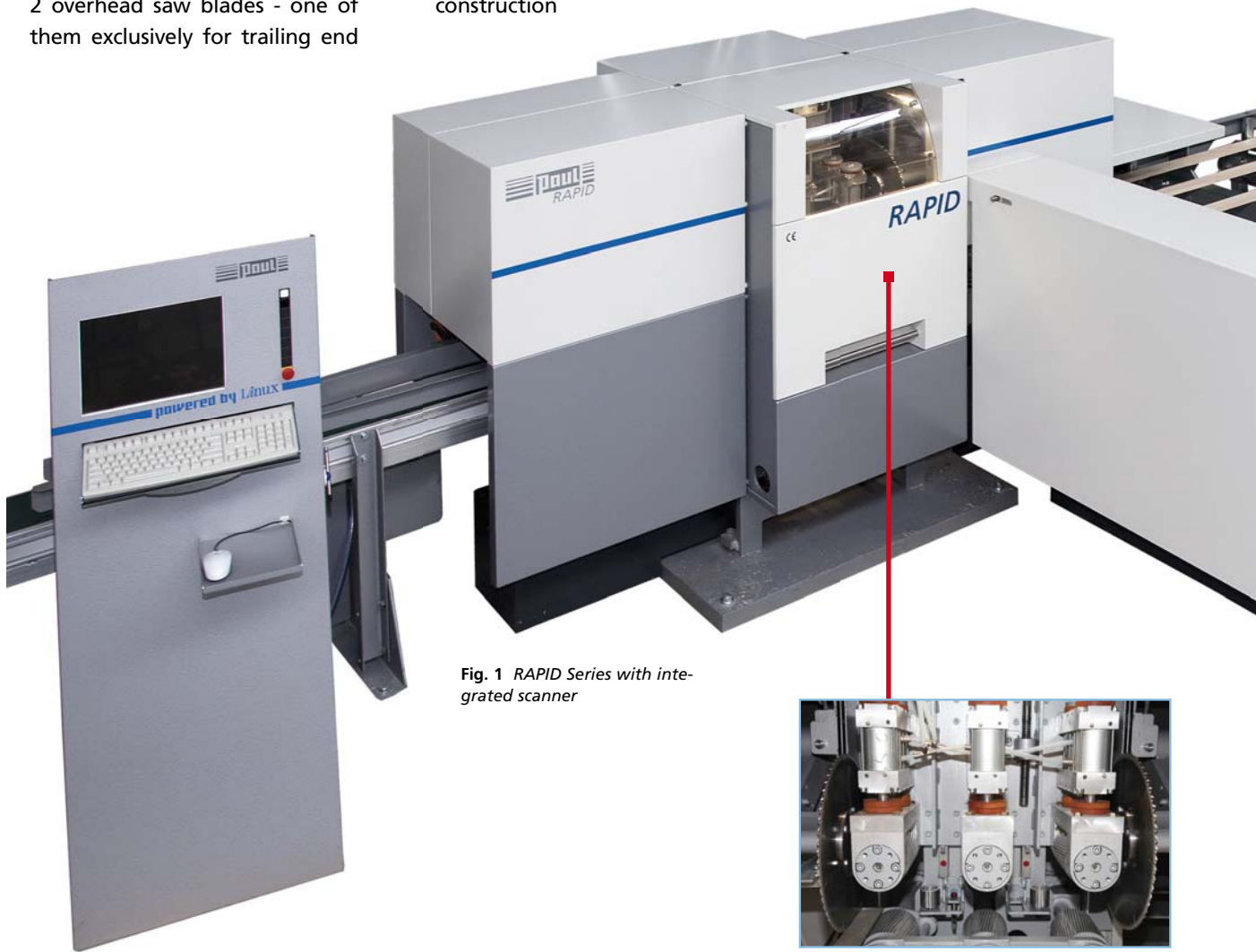


Fig. 1 RAPID Series with integrated scanner

Fig. 2 Saw blades with servo cutting stroke



POWERFUL FEED SYSTEM

The six (three top and three bottom) feed rollers with bearings on both sides, driven via a wear-resistant

low-backlash gear drive, provide a fast and precise transport of the workpieces as well as an outstanding

cut-to-length accuracy in continuous maximum-speed operation.



SCANNER TECHNOLOGY

PAUL works with all current and renowned scanner manufacturers and develops customized package solutions.

When processing difficult materials the operator can influence the scanner result by applying crayon lines.

This enables a fast, accurate and consistent surface inspection.

The newly designed measuring station is suitable for incorporation of any scanner brand. This guarantees correct guidance of even short timber lengths. Change-over times to varying timber thicknesses are minimal.

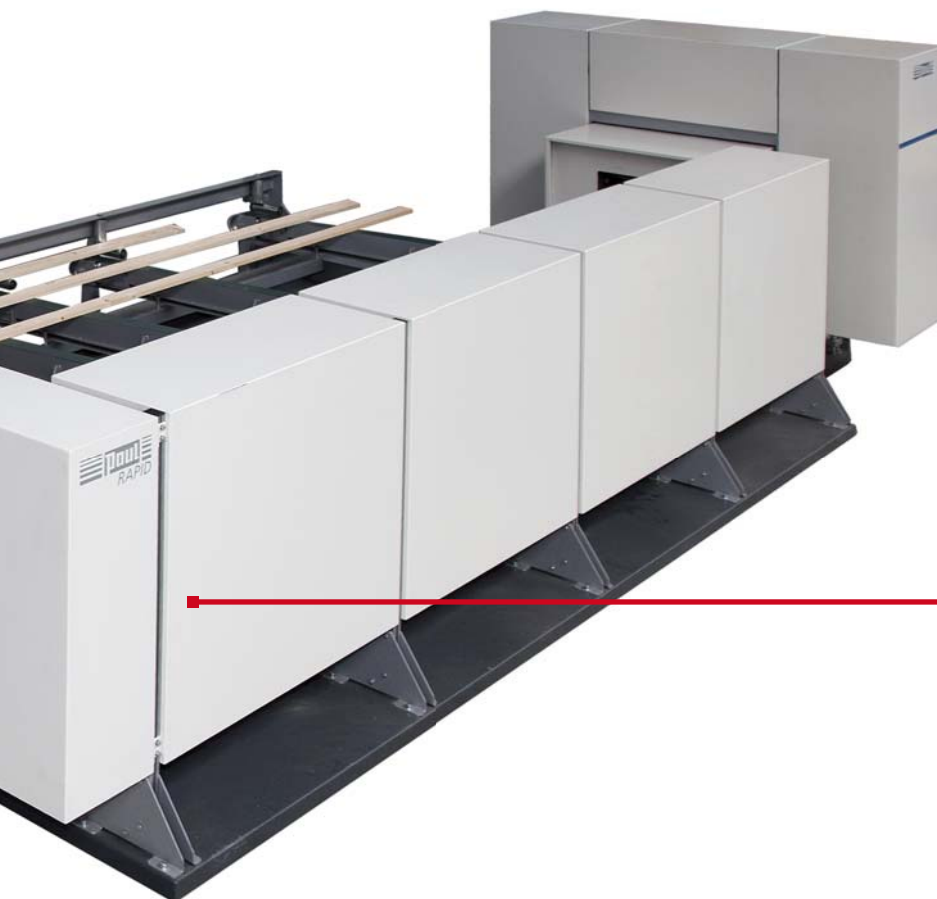


Fig. 3 Servo-controlled stop



PERFECTLY COORDINATED HANDLING COMPONENTS

The infeed and outfeed of the workpieces are precisely coordinated. The infeed cross transfer conveyor, following the measuring station, serves as buffer system for the continuous feeding of the cross-cut saw.

A new stop (patent applied) provides a smooth and accurate transfer to the buffer system, even at high speeds and varying workpiece dimensions.

After cutting, the workpieces are transferred to a high-capacity sorting system. A wide range of handling components turns the RAPID into a highly efficient complete system.

TECHNICAL OVERVIEW

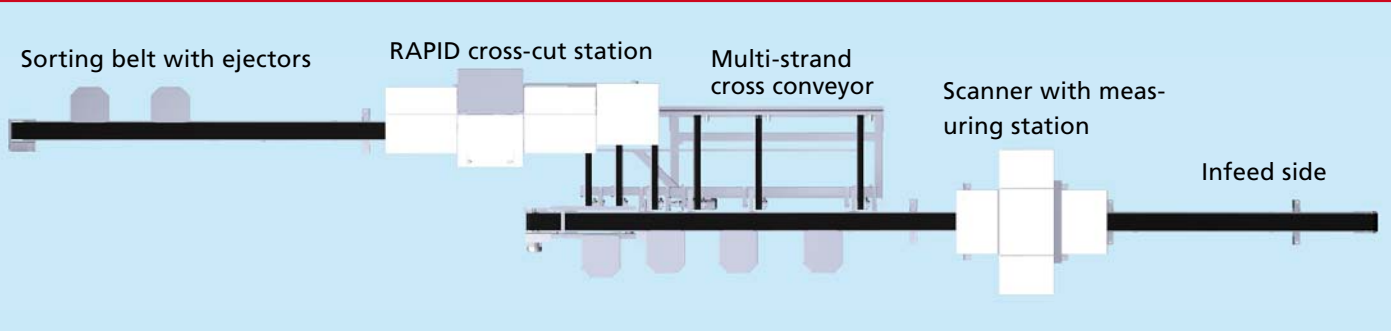


Fig. 4 Model RAPID with sorting conveyor

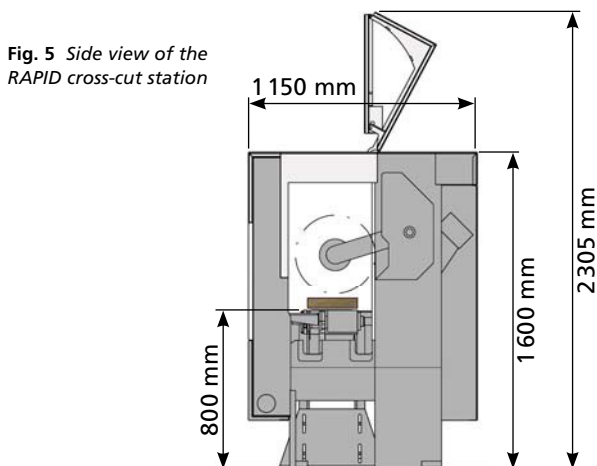


Fig. 5 Side view of the RAPID cross-cut station

TECHNICAL DATA / SPEED

Saw motor	kW	7.5
Number of saw blades		2
Saw blade Ø	mm	400 bzw. 550
Powered bottom rollers		3
Powered top rollers		3
Bottom roller Ø	mm	111.9
Top roller Ø	mm	110
Number of dust outlets		2
Dust outlet Ø	mm	160
Dust extraction requirement	m ³ /h	4300 ^{*)}
Min. infeed timber length	mm	800

*) at an air speed of 30 m/sec.

WORKPIECE CROSS SECTIONS

Model		Max. timber section	Min. timber cross section ^{*)}	Saw blade Ø
Rapid 25	mm	350x25	80x12	550
Rapid 50	mm	250x50	65x12	550
Rapid 75	mm	170x75	55x12	400
Rapid 80	mm	350x80	100x12	550
Rapid 130	mm	280x130	30x12	550
Rapid 140	mm	190x140	30x12	550

*) A minimum width of 30 mm is possible if the indicated maximum width is reduced accordingly.