

Cross-Cut Saws



MODEL OVERVIEW AND TECHNICAL DATA

Model	Cutting diagram	Dimensions	Type	Dust extraction			
				Top outlet		Bottom outlet	
				Ø mm	Air capacity m³/h	Ø mm	Air capacity m³/h
15			AP	125	900-1300	125	900-1300
			AO	125	900-1300	125	900-1300
15			AOB	125	900-1300	125	900-1300
17			AP	125	900-1300	125	900-1300
			AO	125	900-1300	125	900-1300
27			AP	125	900-1300	160	1450-2200
			AO	125	900-1300	160	1450-2200
16			AO	125	900-1300	2x 160	2900-4400
27			AO/1000	125	900-1300	2x 160	2900-4400
35			AO	125	900-1300	160	1450-2200

1) When cutting small timber sections and with automatic stroke limit device, a considerably higher number of cut can be made.

Saw motor kW (HP) - Options										Cutting force	Cuts ¹⁾ Max. number of full stroke cuts/min	Air consumption per stroke at 6 bar	Saw blade	Weight	Operation		Working height (table height)	
Speed of saw blade n = 2900 rpm					n = 1450 rpm										approx. kg	Foot switch		2-handed control
(5) 3.7	(6) 4.4	(8) 5.9	(9) 6.6	(10) 7.5	(15) 11	(10) 7.5	(15) 11	(17.5) 13	(20) 15									
•	•	•	•							1600	25	8	500	415	•	•	800	
•	•	•	•							2500	30	–	500	415	•	•	800	
	•	•	•							2500	25	–	500	410	•	•	800	
•	•	•	•							1000	35	4.5	500	360	•	•	800	
•	•	•	•							2500	40	–	500	360	•	•	800	
						•	•			2500	30	16	800	420	•	•	800 ²⁾	
						•	•			2500	30	–	800	420	•	•	800 ²⁾	
				•	•					2500	19	–	600	710	•	•	800 ²⁾	
							•	•		2500	16	–	800	710	•	•	800 ²⁾	
Saw motor: 15 kW (20 HP) n = 1450 rpm Saw shaft: n = 1120 rpm										3000	12	–	1000	650	•	•	800 ³⁾	

²⁾ 50 mm base or pit required

³⁾ 250 mm base or pit required

MODEL SELECTION

The selection of a suitable machine depends on several criteria, such as size and nature of the timber to be cut, availability of compressed air on site, type of operation, and on other optional accessories required (see optional features, page 7 + 8).

Hydraulic Cross-Cut Saws

The hydraulic cross-cut saws, type AO and AOB, are distinguished by their large cutting force and precise adjustability of the saw lifting speed.

Thanks to these properties they are ideally suitable for cutting both hard and delicate timbers.

Reliable also in winter

The design of the hydraulic system is extra heavy-duty so that its reliability is ensured even at extremely low temperatures: The small amount of oil warms up very quickly after switching on and is then constantly in circulation.

Pneumatic Cross-Cut Saws

Models 15, 17 and 27 are also available with pneumatic operation (type AP). For factories that have a ready supply of compressed air these models are an economical alternative.

The motor efficiency of the pneumatic machines is approx. 0.5 kW higher than on the hydraulic machines since no hydraulic pump is required.

The air consumption required for the individual machines is indicated in the model chart.

Due to their lower cutting force, the pneumatic models are particularly recommended for softwood.

Bevelled Machine Edge

Models 15, 17 and 27 are provided, as standard, with a bevelled edge at the machine outfeed side so that trim cuts and waste pieces will slide down immediately after cutting.

These models are also available with a straight outfeed edge (option).

For all models

All machines are equipped with an automatic guard and clamping device.

As standard, the cross-cut saws are delivered in right-hand design (Fig. 1). On request all machines, except for models 16AO, 27AO/1000 and 35AO, are also available in left-hand design.

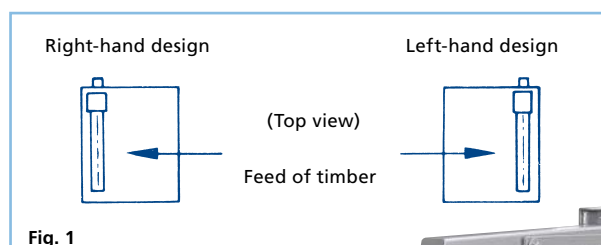


Fig. 1

▶ Model 15 (AP, AO, AOB)

There are good reasons why this is the best selling model: It has been specifically designed for the average sawmill and timber processing factory. Model 15 machines are operating in joinery companies, sawmills, and furniture factories, and are also used by case manufacturers, in packaging departments and for pre-cross-cutting in solid wood processing lines. They are versatile in use, robust, reliable, available in hydraulic or pneumatic design and with a cutting

range which fully covers most applications.



Fig. 2 Model 15AO

MODEL OVERVIEW



Fig. 3 Model 15AOB with automatically retracting guard plate between 2-handed control and cutting area



▶ Model 17 and Model 27

On these models the saw blade comes up almost vertically. The saw blade lifting time is therefore shorter than on other models. So, where a particularly high cutting speed is to be achieved, these models are an ideal solution.

To further accelerate the cutting cycle, we offer an automatic stroke limit device which is exactly adjustable to the timber thickness. On reaching the required cutting height the saw blade immediately returns to its initial position.



Fig. 4 Model 17

MODEL OVERVIEW

▶ Model 27

When using a saw blade of 800 mm diameter, a pit of approx. 50 mm in depth will be required in the area of the saw blade or alternatively the machine must be raised up accordingly.



Fig. 5 Model 27AO

▶ Model 16 and Model 27AO/1000

It is not only from their outward appearance that these two heavy-duty models are very similar. They both have a large cutting range and are fitted with high-powered motors (7.5 or 11 kW on model 16AO and 11 or 13 kW on the 27AO/1000). As a result they are particularly suitable for cutting heavy and wide timber. The by far largest cutting range is provided by model 27AO/1000. Compared to model 16 it will cut still wider and thicker material and also several boards one upon the other or/and side by side.

The design of the machine table allows the following combination possibilities:

Infeed side:

As standard, smooth flat steel plate or 5 ball bearing rollers for an extra charge

Outfeed side:

As standard, straight or bevelled for an extra charge

When using a saw blade of 800 mm diameter, a pit of approx. 50 mm in depth will be required in the area of the saw blade or alternatively the machine must be raised up accordingly.



Fig. 6 Model 16 and 27AO/1000



Model 35

This model has been designed for cutting extremely heavy timber, such as large squares, round timber and wide/thick planks.

The large cutting range is achieved by a saw blade of 1000 mm dia. This means that a pit has to be provided below the machine into which the saw blade can enter when it arrives at its lowest position. As an alternative to the pit the machine can be raised up on a 250 mm high base.



Fig. 7 Model 35AO



Operation and Accessories

Two-handed control

It complies with all the requirements in terms of safety and operational comfort. The saw blade will only come up if both buttons are pressed at the same time. Apart from the guard plate between two-handed control and cutting area there are therefore no extra wire-mesh guards etc. required.

The two-handed push-button control is normally fitted to the open side of the guard and clamping device. However, if the cross-cut saw is to be incorporated into the infeed table of an edger, it is recommended to fit the two-handed control to the enclosed, i.e. clamping hood bracket side.



Fig. 8 Two-handed control

Foot switch

(Foot-operated valve)

Sawing can also be initiated by means of a foot switch (Fig. 10). In this case the danger area around the saw blade must be protected by a suitable wire-mesh guard. A foot switch is particularly recommended where two machines are to be operated at the same time.

Special stop

For cutting pallet blocks we can supply a special mechanical stop. Together with a machine with a bevelled edge and a narrow guard this allows very fast cutting.



Fig. 9 Special stop

Automatically retracting guard plate (see Fig. 3)

In the rest position the guard plate between two-handed control and cutting area is retracted ensuring ease of access for positioning the workpiece.

As soon as the operator actuates cutting, the guard plate will come up automatically and only retract when the cutting operation is completed and the saw blade has disappeared in the machine.

OPERATION AND ACCESSORIES

Wire-mesh guard

The use of a wire-mesh guard to prevent accidents (Fig. 10) is always required where it must be expected that the operating staff and/or other persons may reach into the danger area during cutting.

This is particularly the case

- if cutting is actuated by means of a foot pedal
- if the two-handed control is not fitted directly by the cutting point (e.g. for the simultane-

ous operation of two cross-cut saws)

- if cutting is initiated automatically.



Fig. 10 Model 15AOB with wire-mesh guard

Foot switch

Optional equipment

All models can be extended and completed by various optional accessories.

- Mechanical or pneumatic stops, electronic moving length stop system, hand-wheel adjusted stop and digital display or joystick-operated moving stop (PAUL-Info B 100.07/21)
- Roller tables (PAUL-Info B 100.07/23)
- Belt conveyors (PAUL-Info B 100.07/24)

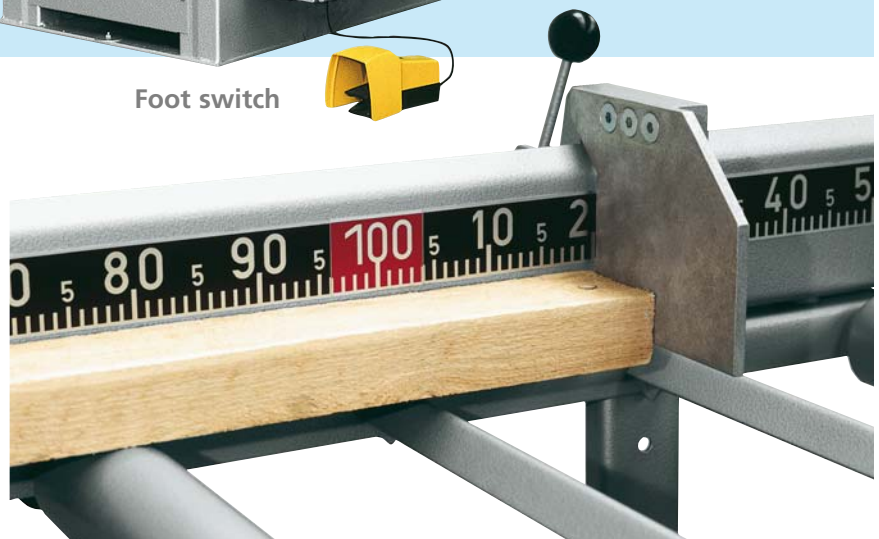


Fig. 11 Pneumatic stop

Important!

These cross-cut saws only comply with the EC regulations if they are supplied with

- CE safety equipment
- an infeed and outfeed roller table of at least 0.9 m each

The 'CE' mark and 'EC Conformity Certificate' can be provided subsequently if it is documented to us by photos or other documents that the 'complete cross-cut line' corresponds to the EC regulations.