



COMBI M II - 3



KS 35 - 6



POWER 70S - 10



POWER 100S - 14

# RANGE OF PALAX FIREWOOD PROCESSORS

## Common features

### Discharge conveyor

A common feature of all machines is the redesigned, 4,3 m long and 0,2 m wide foldable firewood conveyor. Except for the Combi M II model, the conveyors of all the machines are powered by a hydraulic motor that enables them to be swung by about 2,2 m to the side.

The conveyor of the large Power 100 model is 0,35 m wide. The swinging conveyor considerably increases productivity. For example, trailers can be filled up or two bag-stands used simply by swinging the conveyor.

The top and underside structures of the conveyor are completely open. This feature in practice eliminates all disturbances in operation and at the same time improves the safety. The conveyor now comes with two strong chains, plastic scrapers and automatic tightening of the chains. In the robust Palax Monster model, using two chains has proved to be a reliable and trouble-free construction under all operating conditions.

### Automatic tightening of the V-belts

The transmission of the tractor-powered models features automatic tightening of the V-belts between the angular gear and the blade shaft. The automatic tightening requires less servicing and consequently reduces strain on the transmission, thus increasing its service life.

### Palax Combi M II

The Palax Combi M, which has been in production for almost 30 years, represents the traditional line of firewood processors. The machine is an efficient and reliable basic unit. Equipped with

a hard-metal blade, it is well suited to general processing of all kinds of trees under 25 cm in diameter.

### Palax KS 35

The Palax KS 35 is a firewood processor equipped with a 15" chainsaw, in-feed conveyor and hydraulic transmission. This machine is an ideal choice for farm use where tree diameters vary greatly but do not exceed 35 cm.

### Palax Power 70 and 70s

The very efficient firewood processors in the Power 70 and 70s range are equipped with a 700 mm overhead hard-metal blade and an in-feed conveyor. The Palax Power 70 s is the most powerful option for processing trees under 25 cm in diameter.

### Palax Power 100 s

The machines in the robust Palax Power 100s range are equipped with a 1000 mm overhead hard-metal blade, a thrust force of 16 tons and fully hydraulic control. The machine is at its best when processing beech or oak. The maximum tree diameter allowed is 40 cm.

### Safety

Safety has always been the primary objective when designing Palax products. The Palax 600 Combi range was the first European firewood processor brand to gain CE approval.





**PALAX<sup>®</sup> 100S**  
*Power*

## PALAX POWER 100S

### Automatic high-speed valve

The Palax Power 100s is a firewood processor designed for professional use. It includes several unique proprietary features that make it the most efficient, productive and reliable machine of its size for processing big trees. The machine comes with an automatic high-speed valve for the splitting cylinder as standard.

As a rule, the work stroke is always performed at high speed. If the smaller splitting force induced by the high-speed function is great enough, the wood will split up. If the splitting force at high speed is not great enough, it will immediately be boosted, depending on the splitting cylinder size, by either 10 or 16 tons. As soon as the splitting of the wood starts and the force requirement is reduced, the high-speed operation will automatically resume. The high-speed motion brings added speed for small trees and added force for big trees.

### Optimising the stroke length increases the splitting speed

The Palax Optimi is the method for optimising the length of the splitting stroke by limiting the cylinder stroke in accordance with the length of the processed wood. A full stroke is used for processing 55 cm-long firewood. If the length of the processed wood is 30 cm, then the cylinder stroke is reduced to almost a half and thus the splitting speed is virtually doubled! As the length of the firewood

in general is between 25...33 cm, the processing is really efficient. The same machine can, however, also be used to process long firewood. Even though the cutting of short firewood using the hard-metal blade takes place quickly, the Palax Optimi method and the automatic high-speed valve enable a sufficiently fast splitting procedure to ensure that no bottleneck is created during the splitting phase.

### Automatic tightening of the V-belts

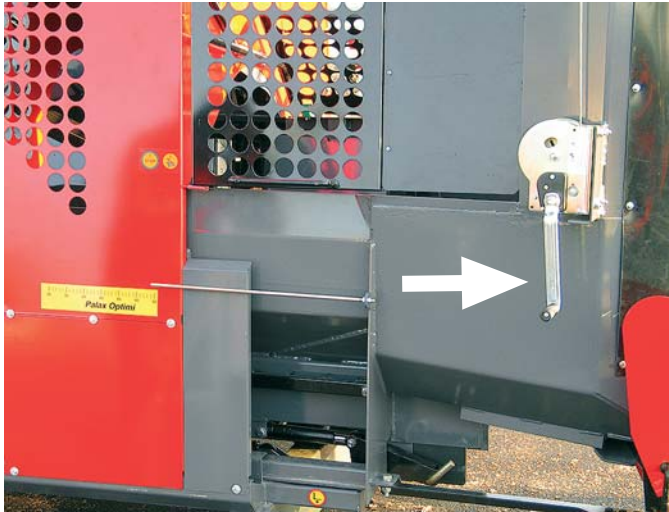
The transmission drive belts of the Palax Power 100 are equipped with automatic tightening.

Automatic tightening of the belts completely eliminates the need for repeated retightening of the belts or malfunctions due to slack or too-tight drive belts.

Keeping the belts at the correct tightness greatly extends the service life of the belts and the entire transmission.

### Long service intervals - increased productivity

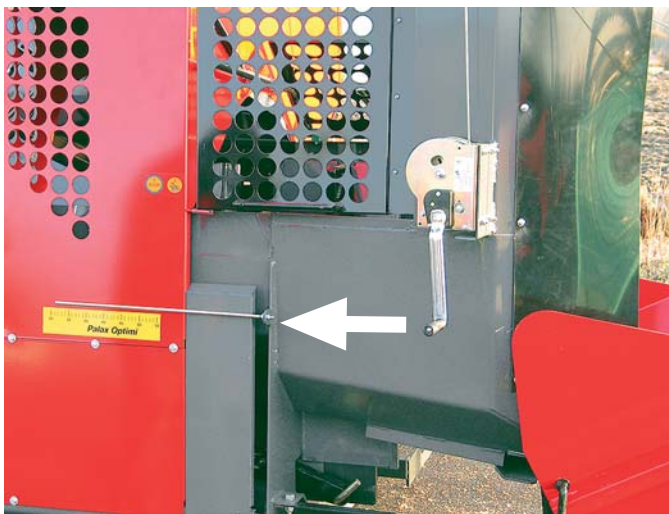
Lubed-for-life ball bearings in all the control levers make operation of the machine precise, reliable and long-lived and extend the service intervals.



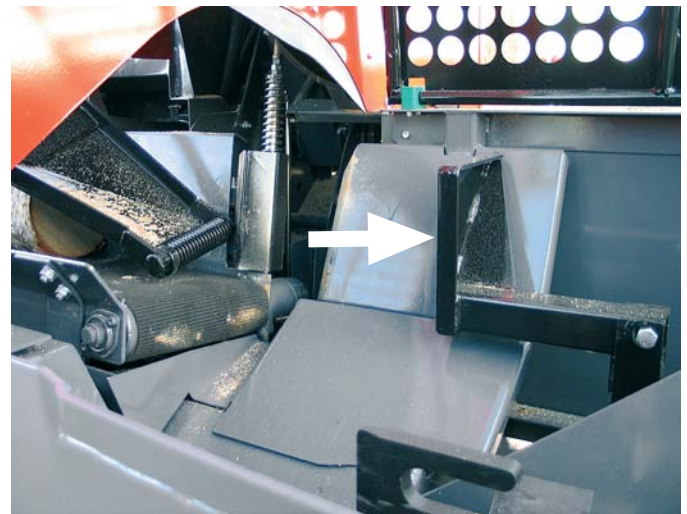
1. Splitting ram in the outer position - full cylinder stroke



2. The stroke length can be optimised for 25...55 cm long billets

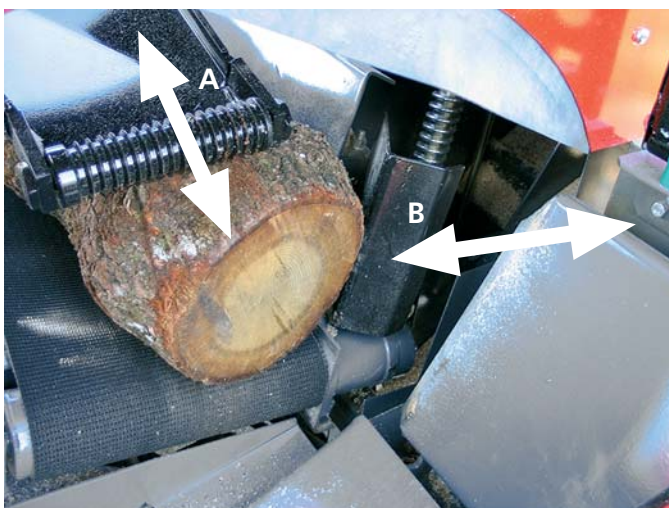


3. Splitting ram in the inner position - reduced cylinder stroke

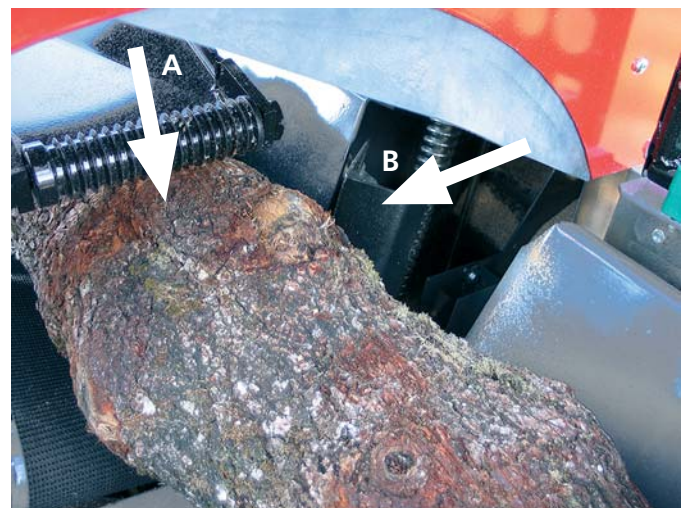


4. As the stroke length is adjusted, the log-stop will also be automatically repositioned.

### You have full control of the tree during all phases of cutting and splitting



1. The machine is equipped with a hydraulic clamp A and a moving log-stop B with hydraulic locking. During the in-feed operation, clamp A follows the contour of the log and log-stop B adapts exactly to the shape of the log.

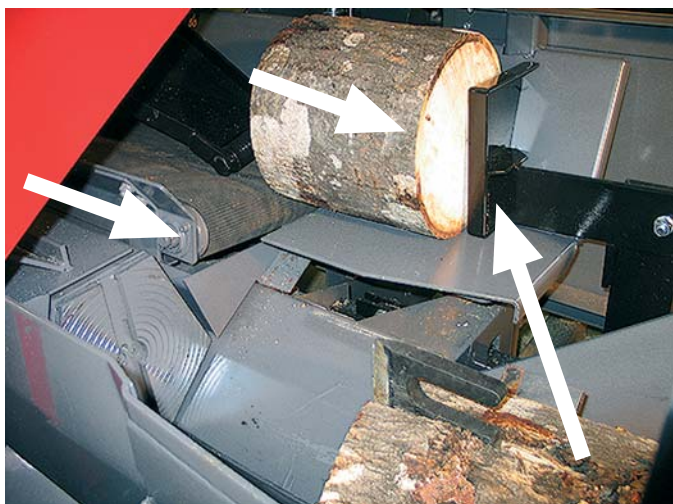


2. Before the log is cut, log-stop B is first locked in position and then clamp A locks the wood hydraulically against the deck. The cut-off phase follows the reliable clamping of the wood. Thanks to the featured log-stop and clamp, rough and crooked trees also remain in position during the sawing operation.

You have full control of the tree during all phases of cutting and splitting



1. The tree is fed against the log-stop. As the cutting operation starts, the wood is clamped against the deck, the log-stop gives way about 3 cm to the rear and the wood is cut off. This procedure ensures that logs shorter than 25 cm also roll properly into the chute.



2. Use the conveyor to transfer the last log onto the hydraulically rising tipping deck where it stays reliably and securely in position.



3. Lower the tipping deck with the hydraulics to make the log roll into the chute. Short logs will also roll into the chute in a more controlled, trouble-free way.

Good control over the wood



The small sharp grooves A at the end of the pusher keep a firm grip of the wood to prevent it from sliding to the side. The vertical slot B at the end of the pusher makes it possible to push the log all the way to the vertical blade. This means that any log possibly stuck to the splitting blades can never push the new log into an oblique position.

## OPTIONAL EXTRAS



*Hydraulic rear feed roller*

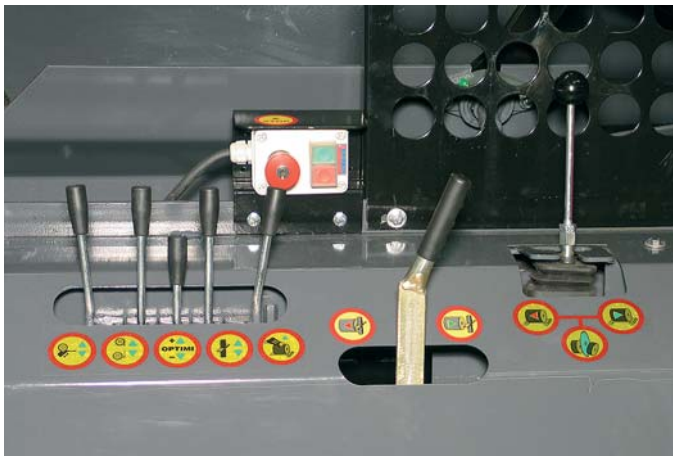


*The machine can be towed by tractor using the special transport platform*

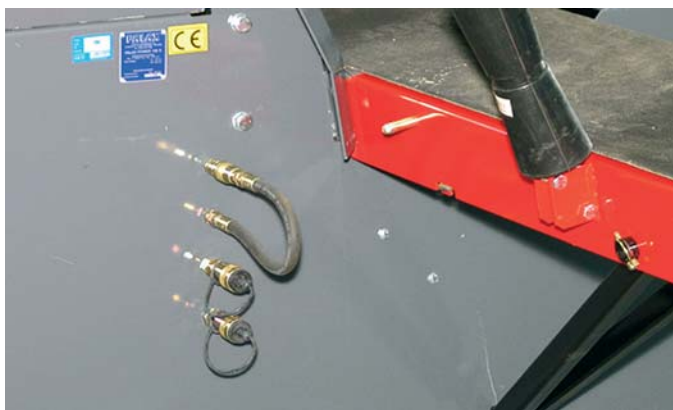
## Easy and fast start-up of the machine

No need to remove the platform for working. Open the quick-release platform and turn down the work platform. The height from the ground is about 20 cm. Open the quick-release lock and turn the light panel to the upright position. Drive the tractor to the rear of the machine and use the top-link for attachment. Connect the articulated shaft.

## Fully hydraulic control and operation



All the control levers are concentrated in logical groups conveniently placed within reach of the operator. As a standard feature, the machine is equipped with a valve e.g. for external stepped-operation log deck feeder. The in-feed conveyor and the crosscut blade can be controlled using the one joystick.



Quick-couplings for an external log-lifting deck and a log transfer conveyor are provided as standard. These are located at the side of the machine behind the in-feed conveyor.

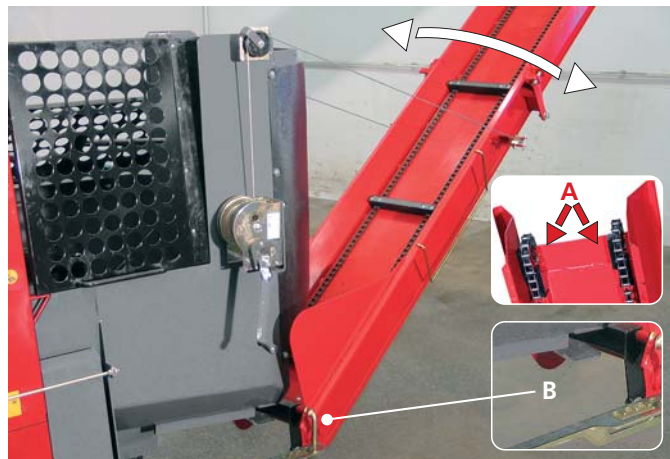
The pump group comprises 4 hydraulic pumps, which means there is a separate pump for each pressure and flow range. In addition, the external log deck has a pump of its own which enables operation of the log deck without slowing down or interfering with the machine's other operations. This also considerably improves the durability of the pumps and the temperature control.

## Several splitting blade patterns



Splitting blades of 2/4, 2/6, 2/8 and 12 ways are available. The bottom of the splitting chute is equipped with a grate for easy removal of debris. Splitting blades can quickly be changed thanks to their featured quick-release device.

## State-of-the-art discharge conveyor technology



A scraper-type discharge conveyor comprising a completely open underside, two chains, and polyethylene scrapers. The conveyor is driven by hydraulic motor and it works reliably in all kinds of operational and weather conditions. The automatic tightening device for the chains is located at the top end of the conveyor, point A. This means that operation of the conveyor is very reliable and servicing is kept to a minimum. The height of the conveyor can be adjusted using an easy-to-operate winch with an automatic brake. The conveyor is equipped with the quick-release B which makes it possible to swing the conveyor more than 2 metres to the side, thus enabling, for example, the filling of two bags.

## Hydraulic oil cooler, optional

In hot conditions, the oil temperature may rise too high. The machine is equipped for the use of an optional oil cooler. For the machine powered by a tractor the 12 V supply voltage for the cooler is taken from the 12 V light socket on the tractor and for the machine powered by electricity it is taken from the machine's own electric centre.

## Hydraulic oil heater, optional

As the electric motor strives to run at full speed right from the start, it takes a lot of effort to start up a large hydraulic system powered by electric motor under cold conditions. Both the hydraulic pumps and the whole system wear less if the oil is warmed up under cold conditions. The machine is equipped for the use of an optional electric heater. In the machine powered by electricity, the 220 V power supply for the heater can be taken from the electric centre of the machine. For a machine powered by a tractor the required voltage is taken from the mains connection.

# PALAX POWER 100S (P.T.O. DRIVEN)

## HYDRAULICS

Separate hydraulics

Hydraulic oil ISO VGA 32, (VGA 46 for hot conditions)	160 l / 42.3 G
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Recommended option, electric heating oil

Extra hydraulic circuit for log-lifting deck

Oil cooler 12V DC as option

Electric oil heater 300 W, 220 V AC, for temperature below -15°C / 5°F

Splitting cylinder 16 tons (kg) or 35 300 lbs

Work + return motion

Full force 16 tons (kg) / 35 300 lbs at 4.8 seconds

High speed 4.8 tons (kg) / 10 500 lbs at 3.2 seconds

Flow of hydraulic pump at 500 r.p.m.

Automatic high-speed valve

Fully hydraulic control of the machine

## TRANSMISSION AND CONTROL

Control levers with ball bearings

Angular gear of cast iron

Disengagement clutch of transmission, powered by tractor

Automatic tightening of the V-belts

## CUTTING AND SPLITTING

Hard-metal blade 1000 mm / 39.3 in

Automatic adjustable log-stop

Hydraulic log clamp

Splitting wedges in 2/4, 2/8 and 12 ways as an option

Splitting wedge 2/6 as standard

Quick-release of splitting wedge

Hydraulic height adjustment of splitting wedge

Multi-phase debris removal

## IN-FEED CONVEYOR

In-feed conveyor, belt 330 mm x 2500 mm or 13 in x 98.4 in

Hydraulic log-stop

Quick couplings for external feed conveyor

Automatic cleaning of drive and return wheels

## DISCHARGE CONVEYOR 350 mm x 4300 mm / 13.8 in x 169.3 in, SCRAPER 2 in HD POLYETHYLENE

Hydraulically-driven scraper conveyor with two chains

Lifting winch for conveyor

Folding and swinging conveyor

## MAX. SIZE OF TREE

Max. diameter of the tree	40 cm / 15.7 in
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Cutting length of the tree	25...55 cm / 9.8... 21.6 in
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## DIMENSIONS AND WEIGHT IN TRANSPORT POSITION

Length, all dimensions with and without transport platform	3200 / 500 mm or 10.5 / 16.4 ft
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Width	1750 / 2500 mm or 5.7 / 8.2 ft
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Height	2530 / 2730 mm or 8.3 / 9 ft
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Weight with conveyor	1780 / 2110 kg or 3920 / 4650 lbs
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## OTHER OPTIONAL EXTRAS

Sawdust aspirator

Transport platform, towed by tractor, tyre size 10.5/75 - 15.3

Articulated shaft, e.g. Bondoli 105

Log-lifting deck

## CE AND GS APPROVED

Approximate values for all specifications.

# Log-decks, high-output cleaners and bag-packing equipment



## Robust Palax Mega log-deck for big trees

Equipped with a step feeder and a hydraulic in-feed deck with chain-drive. The deck is equipped with four 4-meter long chain beams. The chains may be driven both forward and reverse. Capacity about 10...12 cubic metres.



## Palax Cleaner

High-output cleaner Palax Cleaner with efficient rotary debris removal cylinder. The cylinder can also be equipped with an extension conveyor for, for example, easy filling of bags. Powered by hydraulic motor or electric motor.

## Filling firewood bags is easy with Palax Packer and Motti bag-packing equipment



Put the firewood in the box, pull over the bag, turn around and bind. Place the bags onto the pallet. A EURO-pallet, = (0,8 m x 1,2 m) may take. 25 pcs of 35 l bags = about 0,88 stacked cubic metres of firewood. A FIN-pallet, (1 m x 1,2 m) takes 30 bags = about 1,05 stacked cubic metres.

## Light log-deck Palax Log

Light Palax Log log-decks for Combi M, KS 35 and Power 70 machines. The stand can also be equipped with a hydraulic feed roller which makes handling of long logs easier. Capacity about 4...6 cubic metres.



Palax Motti bag-packing stands are very handy for storing and retail sales. In bags the firewood dries out quickly. Storing of the bags is also easy as 2 bags can be stacked one on top of the other on a level surface. The bags make also good retail packages. The bags are made of UV-protected polypropylene so they endure the UV-radiation from the sun. The bags may be reused several times and they can be disposed of by burning.

