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A logger's best friend

PONSSE harvester heads 05/07 1. ENG

## HARVESTER HEADS



# FIRM GRIP. MILLIMETRE PRECISION.

## **BROAD RANGE OF MODELS**

The Ponsse harvester head collection covers the harvesting needs from fuel wood harvesting all the way to heavy-duty regeneration cutting. In addition to productivity and measurement accuracy, durability and long service life are also typical for all our models.

The harvester head must endure continuous, extreme stress and at the same time must be productive and accurate. This guarantees work productivity, quality and profitability. Based on years of experience, Ponsse has developed in collaboration with the users the mar-

ket's best quality harvester head collection.

A powerful, easy-to-use and firm solution for all harvesting can be found in the Ponsse harvester head collection.

## **PONSSE H53 – Efficient felling**

The PONSSE H53 is a multipurpose harvester head suitable for trunks under 50 cm in diameter. It works best for thinning and clear-cutting of small trees. The H53 is a real powerful harvester head in proportion to its weight and size, which also handles troublesome curved trunks. The feed force is sufficient and three feed rollers guarantee a strong grip on the trunk. The hydraulic connection of the feed rollers guarantees a non-slip grip and also extends the service life of the feed motors.

With its five delimiting knives, the H53 cleanly delimits the trunks without removing the bark. The front knives are designed and placed to delimit small trunks particularly well. The rear knives, on the other hand, are designed for delimiting heavy trunks starting all the way from the butt end.

## **PONSSE H60 – Reliable medium-size harvester head series**

The PONSSE H60 series is a reliable mid-size harvester head for both regeneration cutting and thinning. The H60's ratio of capacity to weight is unbeatable; the feed force is as high as 24 kN and the feed speed is 5 m/s. These features guarantee efficient work even on trunks up to 65 cm in diameter. Despite its large capacity, the harvester head is light and narrow and does not needlessly damage the remaining trees.

The **PONSSE H60 and H60e** harvester heads are equipped with bogie-style roller assemblies that conform to the shape of the trees and can be fitted with either paired rollers or chain tracks. The grip of the feed rollers is extremely firm and efficient. The wide and firm grip of the track feed minimises trunk surface damage. The H60/H60e is narrow also when opened so that thinning work is carried out easily and smoothly without damaging trees.

The **PONSSE H60e** is based on the conventional H60 harvester head, the difference being the rear delimiting knife, which allows the handling of larger trunks.

## **PONSSE H60bw – Feed force!**

The very powerful H60bw harvester head has large feed rollers already familiar from the H73. The large rollers of the H60bw work best on thick-barked and twisted trunks; thick branches will not stop trunk feeding either. The H60bw feed roller frames can also be fitted on the H60 and H60e models.

## **PONSSE H73e – Heavy-duty tool**

The PONSSE H73e heavy-duty tool is an extremely versatile multipurpose harvester head. It is at its best when handling heavy trunks but also manages thinning easily. The capacity of the H73e in proportion to its weight is excellent. It also handles large trunks with unbelievable efficiency – the feed force is ample and three feed rollers guarantee a strong grip on the trunk. A mechanical hydraulic locking connection using four traction motors enables spin-free and uninterrupted feeding in demanding conditions as well.

### The new generation PONSSE harvester heads

The PONSSE H7 and H8 represent the state-of-the-art technology of harvester heads. The distinctiveness of these is the superior performance and reliability, as well as easy control and service operations. The unique grip geometry of PONSSE harvester heads have been further improved with the H7 and H8 harvester heads. Thus, the reliable grip of H7 and H8 harvester heads on trunks is mainly based on roller traction. The grip pressure of delimiting knives and feed rollers are adjusted freely according to the size of the trunk, which guarantees minimal friction between the trunk and harvester head during feeding. Due to the superior feed force and minimal resistive feed friction, the practical feed force and speed of H7 and H8 harvester heads are unsurpassed. This guarantees unbeatable efficiency and productivity.

Thanks to the control functions of its front and rear delimiting blades and feed rollers, the PONSSE H7 and H8 harvester heads operate outstandingly. The controlled feed acceleration and deceleration reduce feed damage and pressure peaks, and increase efficiency. The manual feed speed can be freely adjusted using the rocker switch button on the handle, which makes it easier to handle timber both in normal and demanding conditions. Thanks to the short frame structure in its size category, the PONSSE H8 harvester head makes it very easy to handle curved trees as well.

### Productive and easy to use

With automatic self-adjusting and adaptive feed to the sawing window of the PONSSE H7 and H8 harvester heads, the cutting precision improves and the wood is always fed at maximum speed straight to the correct length. This speeds up

harvesting significantly. It also ensures excellent sawing efficiency. The easy-to-use automatic features control the saw motion according to the tree diameter and blade position, and guarantee fast cutting. While it increases sawing efficiency, it also increases the service life of the blade and the chain. Saw control calibration is achieved simply by the push of a button. The tilt force and speed are based on its superb geometry. The motion is exceptionally smooth and soft, reducing the amount of strain directed at the harvester head. The tilt also allows you to use the floating function.

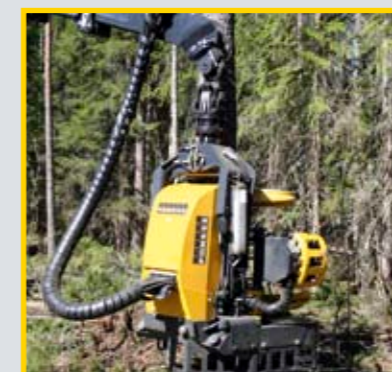
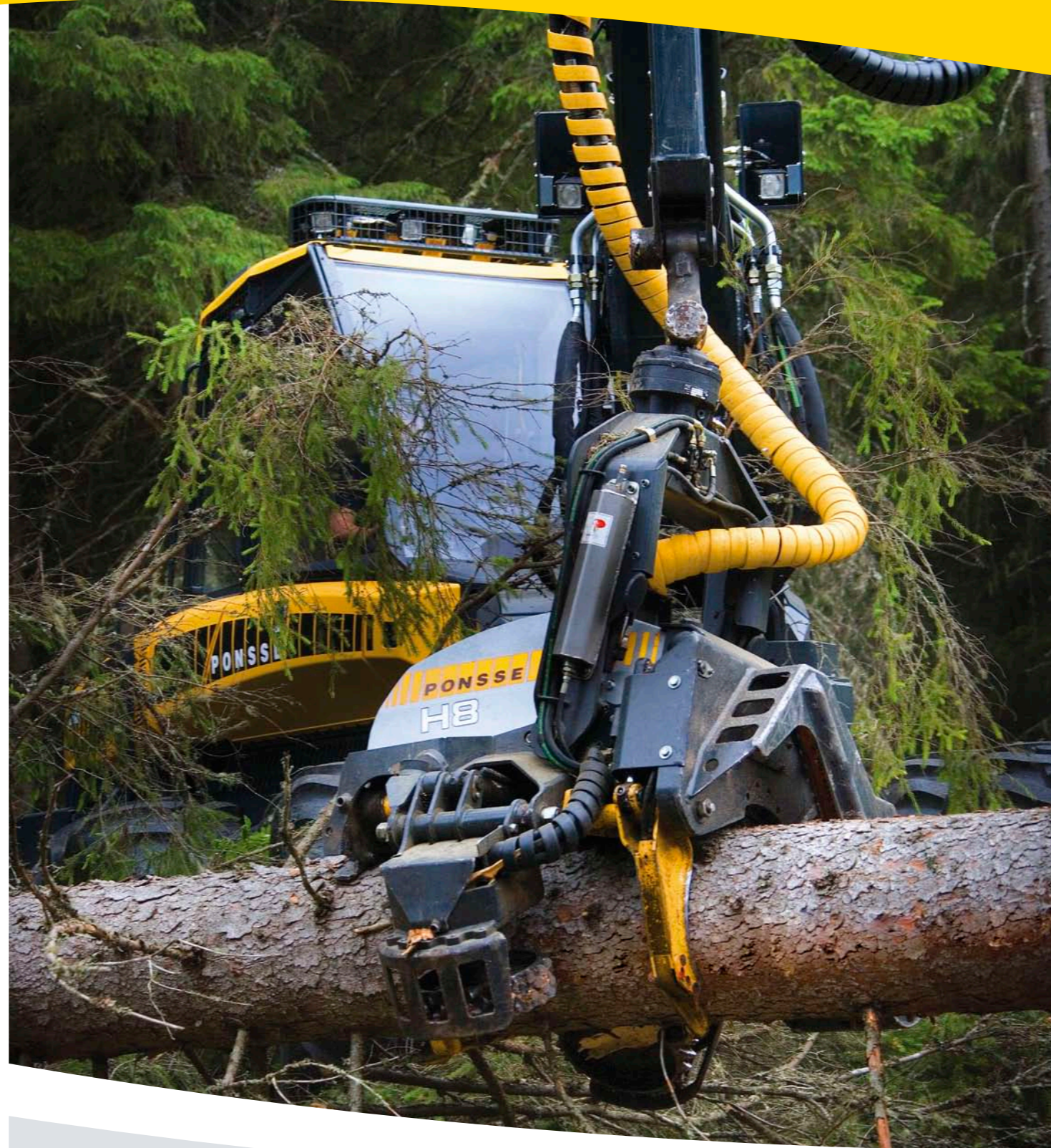
### PONSSE H7 – New powerful package

The PONSSE H7 harvester head is based on the same excellent noted performance of the H8. The roller assembly geometry's large trunk load-bearing capacity, the smooth grip adjustment of the delimiting knives and feed rollers, as well as the locking connection of the non-slip grip feed motors make the H7 an unbeatable powerful harvester head for larger thinning stands and regeneration cutting.

Due to its amazing feed force and speed, the PONSSE H7 harvester head is a superior productive machine for softwood and its efficiency is unparalleled for hardwood. The short and durable structure and large feed rollers and excellent delimiting capacity of the harvester head, as well as the low grip friction of the knives, are features that guarantee high productivity in difficult hardwood forests.

### PONSSE H8 – Superior powerful feed and fast delimiting

The PONSSE H8 harvester head provides enough feed power to handle larger trees. The feed roller opening is 40



to 740 mm (1½ to 29 in) and its excellent grip geometry makes the handling of large trunks easy.

### PONSSE EH25 energy wood harvesting head

The PONSSE EH25 is a guillotine-style bundle handling harvesting head especially designed for harvesting energy wood. The EH25 energy wood grapple, which is suited for different base machines, brings a variety of alternatives for flexible wood harvesting. The EH25 is high and stable in the cutting position, allowing it to also transfer wood bundles in the vertical position. In the loading position, the centre of gravity of the grapple is near the hanger, which enables stable and accurate loading movements.

The EH25 is a bundle handling grapple which can simultaneously collect several trunks, up to a maximum diameter of 25 cm per trunk. With the help of the grapple's powerful tilt operation it is possible to lift the collected bundle into the vertical position, which facilitates work in confined and difficult conditions, as well as preventing harvest damage to the residual tree stand. The tilt inclination can be freely adjusted so that sloped trunks can also be easily handled.

As a result of its ingenious tilt geometry the EH25 also has good loading features. Due to its light weight and low structure it also operates almost like a normal loading grapple. The operating logic of the EH25 is based on the automatic co-ordination of the collecting jaw, grab bucket and guillotine knife. A number of automated functions have been developed to facilitate the operator's work.

# TECHNICAL

# SPECIFICATIONS

## H53



Weight in working condition (incl. rotator and hanger)..... 850 kg (1873.9 lb)  
 Length..... 1330 mm (52.4 in)  
 Width..... 1180 mm (46.5 in)  
 Height without rotator..... 1150 mm (45.3 in)  
 Power consumption 70 - 90 kW (93.9 - 120.7 hp)  
 Operating pressure..... 20 - 24 MPa (2900.1 - 3480.9 PSI)  
 Oil flow requirement..... 200 - 250 l/min (52.8 - 66 US gpm)

Saw unit:  
 Hydraulic chain saw  
 Power..... 45 kW (60.3 hp)  
 Saw bar length..... 640 mm (25.2 in)  
 Chain speed..... 40 m/s (131.2 ft/s)  
 Chain..... 0.404 "  
 Cutting diameter, one pass..... 520 mm (20.5 in)

Feeding unit:  
 Feed system 3 spike rollers or rubber-cushioned rollers  
 Largest opening..... 500 mm (19.7 in)  
 Feed force..... 18 kN (4046.6 lbf)  
 Feed speed..... 0 - 5 m/s (0 - 16.4 ft/s)

Delimiting unit:  
 One stationary and four hydraulically movable knives.  
 Largest opening..... 550 mm (21.7 in)  
 Separately controlled delimiting knives and feed rollers.  
 Measuring and control automation: PONSSE Opti4G

## H60, H60e



Weight in working condition (incl. rotator and hanger) depending on equipment..... 880 - 900 kg (1940.1 - 1984.2 lb)  
 Length..... 1420 mm (55.9 in)  
 Width..... 1100 mm (43.3 in)  
 Height without rotator..... 1400 mm (55.1 in)  
 Power consumption... 70 - 90 kW (93.9 - 120.7 hp)  
 Operating pressure..... 20 - 24 MPa (2900.1 - 3480.9 PSI)  
 Oil flow requirement..... 240 - 300 l/min (63.4 - 79.3 US gpm)

Saw unit:  
 Hydraulic chain saw  
 Power..... 45 kW (60.3 hp)  
 Saw bar length..... 640/750 mm (25.2/29.5 in)  
 Chain speed..... 40 m/s (131.2 ft/s)  
 Chain..... 0.404 "  
 Cutting diameter  
 In one pass..... 520/640 mm (20.5/25.2 in)

Feeding unit:  
 Feed system 2 bogie roller assemblies equipped with spike rollers or chain rollers  
 Largest opening..... 600 mm (23.6 in)  
 Feed force..... 24 kN (5395.4 lbf)  
 Feed speed..... 0 - 5 m/s (0 - 16.4 ft/s)

Delimiting unit:  
 H60: 2 - 4 hydraulically movable knives, one stationary  
 H60e: 3 - 5 hydraulically movable knives, one stationary  
 Largest opening (front knives)..... 650 mm (25.6 in)  
 Separately controlled delimiting knives and feed rollers.  
 Measuring and control automation: PONSSE Opti4G

## H60bw



Dimensions  
 Weight in working condition (incl. rotator and hanger) 950 - 980 kg (2094.4 - 2160.5 lb)  
 Length..... 1420 mm (55.9 in)  
 Width..... 1530 mm (60.2 in)  
 Height without rotator..... 1420 mm (55.9 in)  
 Power  
 Power consumption... 70 - 90 kW (93.9 - 120.7 hp)  
 Operating pressure..... 20 - 24 MPa (2900.1 - 3480.9 PSI)  
 Oil flow requirement..... 240 - 300 l/min (63.4 - 79.3 US gpm)

Saw unit:  
 Hydraulic chain saw  
 Power..... 45 kW (60.3 hp)  
 Saw bar length..... 750 mm (29.5 in)  
 Chain speed..... 40 m/s (131.2 ft/s)  
 Chain..... 0.404 "  
 Cutting diameter, one pass..... 640 mm (25.2 in)

Feeding unit:  
 Feed system 2 spike, ribbed or padded rollers  
 Gross feed force..... 24 kN / 18 kN (5395.4 lbf / 4046.6 lbf)

Largest opening..... 600 mm (23.6 in)  
 Feed speed..... 0 - 5 m/s / 0 - 6 m/s (0 - 16.4 ft/s / 0 - 19.7 ft/s)

Delimiting unit  
 3 - 5 hydraulically movable knives, one stationary  
 Largest opening (front knives)..... 650 mm (25.6 in)  
 Separately controlled delimiting knives and feed rollers.  
 Measuring and control automation: PONSSE Opti4G

## H73e



Weight in working condition (incl. rotator and hanger)..... 1100 - 1150 kg (2425.1 - 2535.3 lb)  
 Length..... 1515 mm (59.6 in)  
 Width..... 1440 mm (56.7 in)  
 Height without rotator..... 1640 mm (64.6 in)  
 Power consumption..... 90 kW (120.7 hp)  
 Operating pressure..... 20 - 24 MPa (2900.1 - 3480.9 PSI)  
 Oil flow requirement..... 240 - 300 l/min (63.4 - 79.3 US gpm)

Saw unit:  
 Hydraulic chain saw  
 Power..... 45 kW (60.3 hp)  
 Saw bar length..... 750 - 825 mm (29.5 - 32.5 in)  
 Chain speed..... 40 m/s (131.2 ft/s)  
 Chain..... 0.404 in  
 Cutting diameter  
 In one pass..... 640 / 720 mm (25.2 / 28.3 in)

Feeding unit:  
 Feed system 3 spike rollers or rubber-cushioned rollers  
 Largest opening..... 670 mm (26.4 in)  
 Feed force..... 26 kN (5845 lbf)  
 Feed speed..... 0 - 5 m/s (0 - 16.4 ft/s)

Delimiting unit:  
 One stationary and four hydraulically movable knives.  
 Largest opening..... 700 mm (27.6 in)  
 Separately controlled delimiting knives and feed rollers.  
 Measuring and control automation: PONSSE Opti4G

## H7



Weight in working condition (incl. rotator and hanger)..... 1200 - 1280 kg (2645.5 - 2821.9 lb)  
 Length..... 1500 mm (59.1 in)  
 Width..... 1540 mm (60.6 in)  
 Height without rotator..... 1680 mm (66.1 in)  
 Power consumption..... 130 kW (174.3 kW)  
 Operating pressure..... 28 MPa (4061.1 PSI)  
 Oil flow requirement..... 300 l/min (79.3 US gpm)

Saw unit:  
 Hydraulic chain saw  
 Power..... 45 kW (60.3 hp)  
 Saw bar length..... 750 - 820 mm (29.5 - 32.3 in)  
 Chain speed..... 40 m/s (131.2 ft/s)  
 Chain..... 0.404 in  
 Cutting diameter  
 In one pass..... 640 / 720 mm (25.2 / 28.3 in)

Feeding unit:  
 Feed system 3 feed rollers or rubber-cushioned rollers  
 Largest opening..... 650 mm (25.6 in)  
 Feed force..... 30 kN (6744.2 lbf)  
 Feed speed..... 0 - 5 m/s (0 - 16.4 ft/s)

Delimiting unit:  
 One stationary and four hydraulically movable knives.  
 Largest opening..... 750 mm (29.5 in)  
 Separately controlled delimiting knives and feed rollers.  
 Measuring and control automation: PONSSE Opti4G

## H8



Weight in working condition (incl. rotator and hanger)..... 1300 kg (286.6 lbs)  
 Length..... 1500 mm (59.1 in)  
 Width..... 1650 mm (65 in)  
 Height without rotator..... 1680 mm (66.1 in)  
 Power consumption..... 130 kW (174.3 kW)  
 Operating pressure..... 28 MPa (4061.1 PSI)  
 Oil flow requirement..... 300 l/min (79.3 US gpm)

Saw unit:  
 Hydraulic chain saw  
 Power..... 45 kW (60.3 hp)  
 Saw bar length..... 750 - 820 mm (29.5 - 32.3 in)  
 Chain speed..... 40 m/s (131.2 ft/s)  
 Chain..... 0.404 in  
 Cutting diameter  
 In one pass..... 640 / 720 mm (25.2 / 28.3 in)

Feeding unit:  
 Feed system 3 feed rollers or rubber-cushioned rollers  
 Largest opening..... 740 mm (29.1 in)  
 Feed force..... 36 kN (8093.1 lbf)  
 Feed speed..... 0 - 5 m/s (0 - 16.4 ft/s)

Delimiting unit:  
 One stationary and four hydraulically movable knives.  
 Largest opening..... 780 mm (30.7 in)  
 Separately controlled delimiting knives and feed rollers.  
 Measuring and control automation: PONSSE Opti4G

## EH25



Weight..... 510 kg (1124.4 lb)  
 Length..... 870 mm (34.3 in)  
 Width..... 1390 mm (54.7 in)  
 Height  
 Trunk in vertical position (from rotator pin to bottom plate) 1960 mm (77.2 in)  
 Trunk in horizontal position (from rotator pin to bottom plate) 1210 mm (47.6 in)  
 Grab bucket opening..... 1300 mm (51.2 in)  
 Min. crane power consumption..... 50 kW (67.1 hp)  
 Operating pressure..... 20 - 25 MPa (2900.8 - 3625.9 PSI)  
 Oil flow requirement..... 60 - 120 l/min (15.9 - 31.7 US gpm)  
 Rotator..... Indexator AV12S

Several trunks can be collected at one time

- Cutting diameter 250 mm (9.8 in) in one pass (when cutting from many sides, 300 mm [11.8 in])
- Good loading properties
- Cutting device does not damage the residual stand, the knife is behind the trunk
- Strong tilt, also easily lifts large bundles to vertical position
- Possible to install a scale
- No damper link needed
- Can be installed on forwarder, harvester or harwarder
- Simple control system, easy installation on many different machines
- Specially designed for harvesting fuel wood
- Patent Pending