

PONSSE



BEAVER

HARVESTER



ECONOMIC EFFICIENCY

In spite of its small size, the PONSSE Beaver has the characteristic PONSSE forest machine attitude; a real powerpack, it can handle many different harvesting jobs, from the densest improvement thinning to the heaviest final felling.

The greatest hydraulic capacity and the strongest crane in its size class combines with the stability provided by its low rigid frame

to form a total package that is not outshone, even by its larger companions.

The Beaver's chassis structure, based on an extremely short wheelbase and free-floating portal axle, is an extremely agile all-terrain solution for the demanding conditions of first thinnings. Its ground pressure

is evenly distributed, and, thanks to its strong, extendable crane, the residual timber stand sustains minimal damage. The Beaver's technology is based on simple, powerful solutions, many of which have been directly adapted from the larger class-size harvester. It has indeed




proven itself an extremely dependable partner that produces results tirelessly, day in, day out.

At the heart of every PONSSE forest machine lies the OptiControl system. OptiControl integrates all parts connected to controlling the

machine, such as the crane, drive transmission, diesel engine and measuring devices into one easily-manageable entity. OptiControl is based on a technology developed by Ponsse, the cornerstones of which are reliability and ease of use.

PONSSE's cab is the scene of the newest forest machine technology. It is a working environment for professionals who appreciate perfect comfort, safety and ergonomics.



PONSSE C2 sliding boom crane – durability and speed in harvesting. The C2 crane is delivered with an external or built-in hydraulic hose set. The crane boom head also allows the use of a multi-plate swing damper at the top of the hanger. This makes handling the harvester head quicker and more controlled. The C2 crane has a reach of 10 meters, and its lifting capacity is 200 kNm. The picture shows a PONSSE Beaver equipped with the new PONSSE C33 parallel crane. Thanks to its wide turning radius and a reach of up to 11 metres, the PONSSE C33 is particularly well suited for thinning. The powerful PONSSE C33 sliding boom crane has lifting capacity of 190kNm.

Due to its excellent working hydraulics the Beaver can handle even those big trunks. The Beaver's 11,6 cu.in. (190 cm³) / 235 bar single circuit hydraulics is controlled by PONSSE OptiControl system. Due to the advanced control system and electrically regulated working pump, the features of the single circuit hydraulics can be utilized to their full extent. The Beaver's cooling/filtering circulation 26 gpm (100 l/min) is directed via a front cooler, equipped with a thermostat valve, which ensures the correct oil temperature independent of the outside temperature.

The 87-gallon (330 litres) fuel tank together with the low fuel consumption of the Mercedes-Benz engine make it easy to time the fuel filling stops with the other pauses.

The crane stand can be tilted hydraulically. It ensures efficient working on uneven and sloping terrain.

All PONSSE harvester heads are suitable both for forest thinnings and final fellings. In relation to their weight the H53e and the H60bw team up well with the Beaver.

The Beaver's dimensioning has been designed to suit the requirements of thinning operations. The six-wheeled configuration of the machine makes the Beaver very agile. In spite of its smaller size and agility, the Beaver is also quite well suited to final felling.

PONSSE Opti4G is a new generation information processing system for harvesters. As a Windows / PC based application, it is efficient and easy to use. The trunk shape calculating prognosis algorithm, together with the efficient optimization calculation, produces visible results.

It is possible to equip a PONSSE forest machine with up to 30 working lights. New lighting technology, light construction without using perspex, creates a fantastic lighting power and an optimal light field.

Beaver has a completely new design cab which provides more space and better working visibility. The cab construction is extremely servicefriendly. Spaciousness and good controls ergonomics have a positive effect on the working speed and decreases stress on the driver. Ball-end levers provide a new kind of handiness and ease of use.

The Beaver harvester's power source is the Mercedes-Benz OM904LA diesel engine which starts a new era in the fuel economy and emission levels of forest machines. The turbocharger and a sophisticated air-to-air inter-cooling technology produce top performance (175 hp/129 kW). The electronic control system of the water cooled, 4-cylinder engine produces optimal torque within each area of working speed 498 ft. lb. (675 Nm) /1200 - 1600 rpm. Due to cylinder specific direct fuel injection, the fuel burns extremely clean. The engine complies with the Euromot 3A, EPA3 and Tier3 emission limits.

The spacious tool box can be withdrawn.

Easy to open side pontoons and side bumpers contain spacious storage rooms. The door side pontoons serve well as a storage space, e.g. for spare hoses.

Thanks to the OptiControl connected hydrostatic drive transmission system, optimal drive efficiency is obtained at all engine speeds.

Thanks to the free-floating portal front axle, the ground clear-ance of Beaver is high, yet without adding to the total height of the machine. A low center of gravity, stiff frame joint and the pivot axle, which is steplessly lockable by hydraulic cylinders, make the Beaver a steady machine.



OPTI

INFORMATION SYSTEM

- The most user-friendly measuring instrument system on the market; e.g. a new shortcut menu
- 8 tree species, 16 assortments, 16 quality levels
- 10 drivers – each with their own settings
- Versatile handling display – including night display
- Extremely easy to use EasyControl tree handling logic
- Real-time monitoring of harvesting results from versatile reports – the monitoring of logging volumes as well as work time and efficiency have been combined
- Rapid updates
- Easy to adjust according to the needs of the contractor, the driver, logging organisation or time
- Printouts in the desired language
- E-mail
- Communicates directly and easily with other information systems
- Always supports the newest Stanford forest standard
- Clear and easy-to-use fault diagnostics



SUPERIOR INTELLIGENCE



Ponsse's triangular measurement system takes into account also the possible oval shape of the trunk. The diameter is measured by the millimeter.

The Opti4G is the new generation information processing system for harvesters. It helps the driver to cut the trunks exactly to the right dimensions and thus improves significantly the productivity and degree of cultivation of forest harvesting.

The trunk specific data recorded by the Opti4G is very easy as it is based on the normal Windows operating system and on a PC computer. The high calculation efficiency and the vast memory capacity of the computer ensure a fast optimizing process and, on the other hand, the exact recognition of the trunk

shape produces an exact prognosis and log division. The trunk specific data recorded by the Opti4G can be reviewed and used, even years later – a good basis for the development of a quality system.

Windows operating system enables the use of versatile data transfer and map application systems during harvesting. By means of a satellite locationing system, using electrical stand maps, the driver can see on the clear color screen, the location of his machine, the stand borders, and the areas left outside harvesting area.

TECHNICAL SPECIFICATIONS

DIMENSIONS

Length:	278 in. (7 070 mm)
Width:	104 - 112 in. (2 640 - 2 840 mm)
Transport height:	max. 152 in. (3700/3800 mm) (C2/C33)
Ground clearance:	25 in. (640 mm)
Net weight:	30 644 lbs (14 900 kg), depends on equipment

ENGINE

Type:	MB OM904LA
Power:	175 hp (129 kW)
Torque:	498 lb-ft. (675 Nm) /1 200-1 600 rpm
Tractive force:	29,224 lbf (130 kN)
Drive speed:	Gear 1 = 0 - 5 mph (0 - 8 km/h) Gear 2 = 0 - 15,5 mph (0 - 25 km/h)
Fuel tank capacity:	87 gal. (330 l)

TRANSMISSION

	Hydrostatic-mechanical power transmission
	2 speed ranges forward and backward
	Electronic drive automatics, OptiControl
	Rear drive release
Differential lock:	Mechanical on both axles

AXLES

Front:	Pivoting axle with portal reduction and differential gear lock
Rear:	Bogie axle with planetary gears and differential gear lock

TIRES

Front:	600 - 26,5, 700 - 26,5 or 710-26,5
Rear:	600 - 26,5, 700 - 26,5 or 710-26,5

WORKING HYDRAULICS

	OptiControl Separate filtering and cooling circuits
Working pump:	11,6 cu. in. (190 cm ³)
Hydraulic oil tank volume:	53 gal. (200 l)

BRAKES

Drive brake:	Hydraulic multi-disc brakes, front and rear
Parking brake:	Spring loaded
Working brake:	Acts on front and rear brakes

ELECTRICAL SYSTEM

Voltage:	24 V
Batteries:	2 x 180 Ah
Alternator:	2 x 80 A
Working lights:	max. 30 x 70 W

CAB

	Tilting safety cab which complies with all the required safety standards
Windows:	Polycarbonate
Seat:	Bege 9000 SE seat with head support Air conditioner

CRANE

Type:	PONSSE C2	PONSSE C33
Reach:	32,8 ft. (10 m)	31,2, 33,8, 36,1 ft. (9,5, 10,3, 11 m)
Lifting moment:	147,512 lb-ft. (200 kNm)	140,136 lb-ft. (190 kNm)
Swivel moment:	28,027 lb-ft (38 kNm)	28,027 ft-lb (38 kNm)
Turning angle:	280°	280°
Stand tilting angle:	30°	30°

HARVESTER HEAD

	PONSSE H53e	
	PONSSE H60e	PONSSE H60bw

STANDARD EQUIPMENT

	PONSSE OptiControl system
	PONSSE Opti measuring device
	PONSSE ball-end handles
	Pressure gauge
	Auxiliary heater
	Seat heater
	Radio/CD player
	2 pcs of fire extinguishers
	Hydraulic tank vacuum pump
	Hydraulic steps

OPTIONAL EQUIPMENT A.O.

	Measuring calipers PONSSE Caliper+
	Fire extinguishing system
	Color marking system
	Chain tensioner
	Aircompressor
	Balanced bogies
	Tracks and chains
	Stump treatment equipment
	Fuel filling pump
	Odometer
	Data transfer (E-mail)
	Cabin UV protection
	Xenon lights

In addition to the versatile range of standard accessories included in PONSSE Beaver, a wide list of other accessories is available. Ask your closest dealer for more information.

The manufacturer reserves the right to make technical changes and improvements.



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PONSSE

A logger's best friend