



ALWAYS AHEAD



SP 761 LF

-compact, heavy duty & versatile

Maximized production through low friction

LF stands for the low friction that occurs between the trunk and the harvester head in the LF series.

LF minimizes the friction between the trunk and the harvester head during feeding which maximizes the performance and production of the harvester head. The low friction also minimizes fibre damage, harvester head wear as well as fuel consumption on the carrier.

Besides low friction the LF series harvester heads are also known for their high capacity / weight ratio as well as their compact and nimble design that makes them very easy to maneuver in dense stands.

LF consists of four smart systems and solutions all contributing to minimized friction and maximized production.



LF - Low friction

1. Proportionally angled feed rollers

The feed roller suspension provides more angle and carry force the larger the tree size. Thanks to this design the knife pressure can be kept very low also when harvesting large size timber. This results in lower friction and a faster and more productive harvester head.



2. Proportional pressure

The proportional pressure ensures that the harvester head automatically is working with the perfect pressure in relation to the tree size being processed at the time. This results in high-speed feeding, low wear on the harvester head as well as low fuel consumption on the carrier. The proportional pressure can be optimized for different species and conditions for minimum fibre damage and maximum productivity.



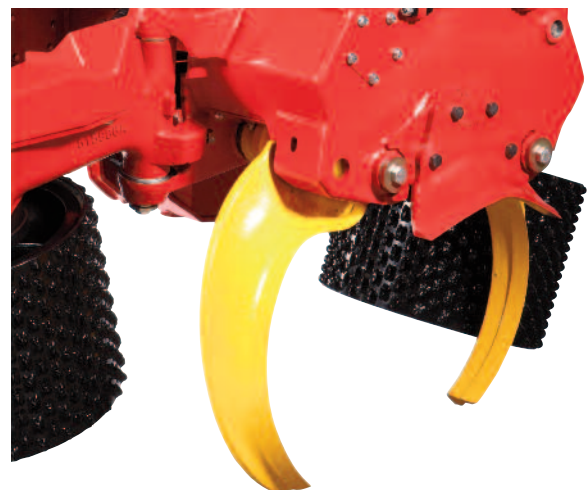
3. LogHold

This SP patent ensures that the proportional pressure of the delimbing knives can be reduced to an absolute minimum without risk of dropping the tree. If LogHold detects that the trunk is about to fall out of the harvester head it reacts instantly by regulating the pressures of the harvester head to such a level that the tree is back to the optimum position again. LogHold is easily set up in the computer system and can be optimized for different species and conditions for minimum fibre damage and maximum productivity.

LogHold is integrated in the SP harvester head software and does not need any additional sensors or encoders.

4. Knife edges

The delimbing knives are cast in high strength steel and equipped with long and perfectly designed cutting edges. The design of the long cutting edges ensures that the limbs are smoothly cut and not broken off. This minimizes the friction during feeding and gives a perfect delimbing result.



SP 761 LF

The SP 761 LF is a compact and heavy duty, high performance harvester head. It is designed according to SP's Low Friction principle for minimum friction and maximum speed and productivity. The high capacity in combination with the compact, protected and heavy duty design makes the SP 761 LF able to handle a variety of different demanding harvesting applications with great performance. Regardless if the task at hand is harvesting of large diameter soft wood, crooked and limby hardwood or dense mixed wood stands, you can count on the SP 761 LF to get the job done. Equipped with the optional processing knives and topping saw the SP 761 LF becomes a dedicated processing head with great performance processing decked wood out of a pile. The SP 761 LF is well suited for working on both larger wheel based harvesters as well as tracked harvesters and excavator carriers. The SP 761 LF truly is compact, heavy duty & versatile. The SP 761 LF reaches top performance in stands with a diameter of 25 to 50 cm (10 - 20") bhd, but is thanks to the LF principle also capable of efficiently working with larger tree sizes.



Thanks to the patented LogHold system in combination with perfect delimbing characteristics, great measuring accuracy and extraordinary power, the SP 761 LF produces perfect quality logs while maintaining both speed and productivity.



The powerful and fully automatic saw unit SuperCut 100 in combination with SP's QuickCut system ensures fast and efficient cutting.



Thanks to a very neat and protected hose routing and placement of components, the SP 761 LF offers unrivaled reliability and maximizes uptime.

SP 761 LF



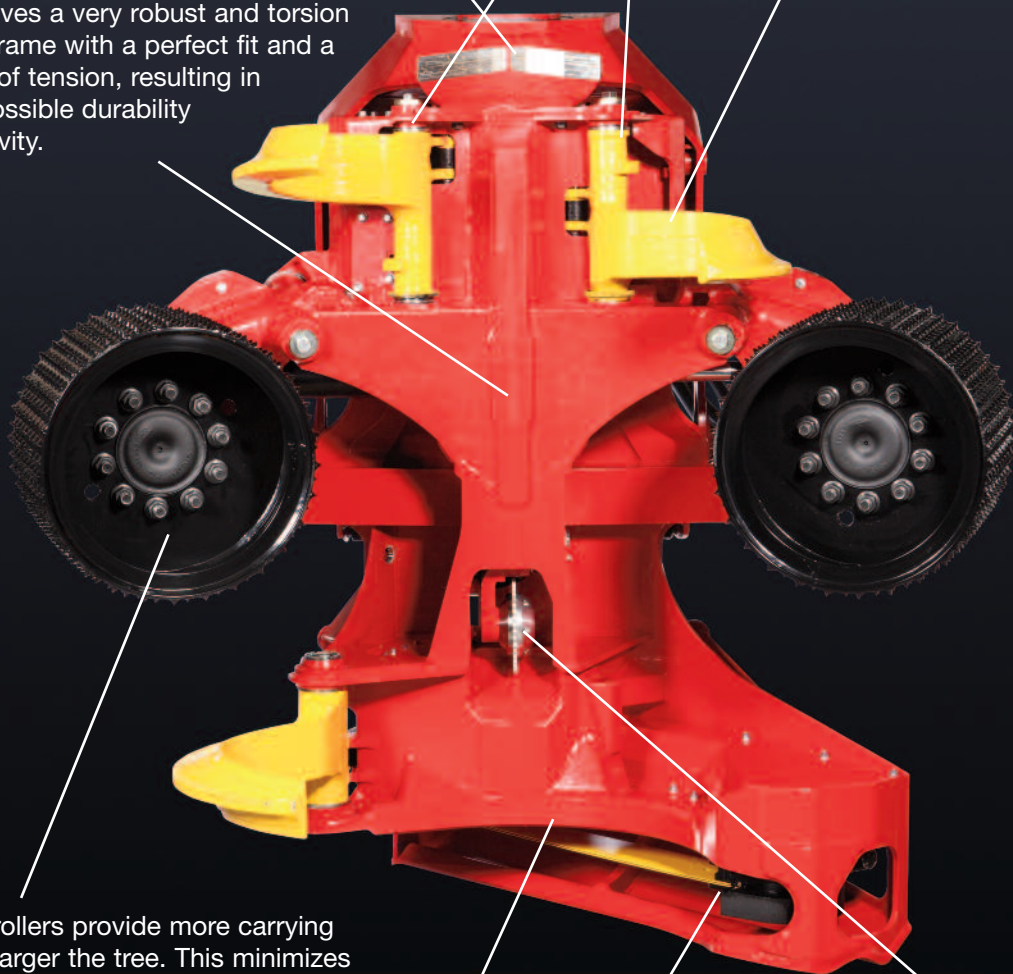
SP 761 LF - Details

Fixed top knife, cast in high strength steel for highest durability and longevity.

The SP 761 LF is equipped with expander pins throughout the head for maximized strength, longevity and minimum need for maintenance.

Thanks to the unique frame design with cast center piece, the number of different frame plates has been minimized. Together with the fact that the complete frame is machined after welding gives a very robust and torsion resistant frame with a perfect fit and a minimum of tension, resulting in highest possible durability and longevity.

The three heavy duty wrap around knives are cast in high strength steel for highest durability and longevity.



The feed rollers provide more carrying force the larger the tree. This minimizes the friction and results in faster and more productive harvester head.

The length measuring unit is controlled by a hydraulic cylinder. In combination with the large movement of the measuring unit out from the frame this ensures perfect measuring results also on crooked and bumpy stems. The length measuring wheel is equipped with a heavy duty bearing for highest durability and longevity.

The fixed knife integrated in the saw box helps with the delimbing of the lower part of the tree when positioning the head for the felling.

The cutting device is the robust and fully automatic Hultdins Supercut 100 with integrated chain lubrication and hydraulic tensioning of the chain. 32 cc saw motor in combination with QuickCut ensures a fast and efficient cutting.

SP 761 LF - Detaljer

Extremely robust and torsion resistant tilt frame. Dampers on both tilt up and down minimizes vibrations and wear. Protection plate for hoses and adapters inside tilt frame.

Tilt cylinders are placed inside the tilt frame and adapters and hoses are placed behind the cylinders for optimum protection and longevity.

The hydraulic valve bank is the very reliable Parker L90/K220. The valve bank has very high hydraulic efficiency which minimizes energy losses and the build up of heat in the hydraulic system. Together with the patented system LogHold and the proportional pressure system this makes the SP 761 LF a very fast, productive and fuel efficient harvester head.

Robust valve cover with hinges for fast and easy maintenance. The tight fit prevents packing of snow, dirt and debris.

The SP 761 LF offers hose routing that is both well protected and easily maintained. The feed motor hoses are placed on top of the motor arm and completely protected by robust covers for longest possible life time and a minimum of down time.

The diameter measuring is linked to the upper knives for optimal accuracy. The encoders are mounted in completely sealed off steel housings placed inside the frame for best protection and longevity.

Feed motors are Poclain piston motors known for their high reliability and good starting torque. Different feed motor sizes are available for optimization of different operations and carriers.

The delimbing knives are equipped with long and perfectly designed cutting edges. This ensures that the limbs are smoothly cut and not broken off. This minimizes the friction during the feeding and gives a perfect delimbing result.

SP 761 LF



Technical data and recommendations

Hydraulics

Min. pump capacity
Max. working pressure

Metric

250 l/min
30 MPa

Imperial

66 gpm
4350 psi

Feeding

Proportional and self regulating clamping pressure of the feed rollers according to tree size Individual settings for different species for optimum performance.

Feed motors	627 - 1248 cc	41.9 - 76.2 cui
Max feed roller opening	700 mm	28"
Feed speed	0-6 m/s	0-20 ft/s
Max feed force	45 kN	10116 lbf
Proportional pressure	Yes	Yes

Felling / Cutting

The SuperCut 100 is a very robust and powerful saw unit with integrated chain lubrication and automatic hydraulic tensioning of the chain. Together with SP's QuickCut this ensures an optimized cutting time and a minimized risk of cutting cracks.

Cutting diameter	800 mm	32"
Chain speed	40 m/s	131 ft/s
Saw motor	32 cc	1.9 cui
Saw unit	SUPERCUT 100	SUPERCUT 100
QuickCut	Yes	Yes

Top saw (option)

Cutting diameter	380 mm	15.2"
Chain speed	40 m/s	131 ft/s
Saw motor	20 CC	1.22 cui
Saw unit	JPS	JPS

Delimbing

Proportional and self regulating pressure on delimbing knives according to tree size. Individual settings for different species for optimum performance.

Movable knives	3	3
Fixed knives	2	2
Delimbing dia. tip to tip	510 mm	20.4"
Delimbing dia. incl. lower knife	550 mm	22"
Minimum delimbing diameter	40 mm	1.4"
Proportional pressure	Yes	Yes
LogHold	Yes	Yes

Weight & dimensions

In spite of its large timber handling capacity the SP 761 LF has a minimum width of only 1400mm which makes it suitable for more than just large diameter cuttings.

Width closed	1340 mm	52.8"
Width open	1950 mm	76.8"
Height	1880 mm	74"
Height with top saw	2050 mm	80.7"
Weight	1710 kg	3770 lbs
Weight with top saw	1870 kg	4123 lbs

Recommendations

The SP 761 LF can be installed on large wheel based forestry machines, excavators in the 20-30 ton range as well as medium to large purpose built tracked harvesters.

Optimum tree size d _{hb} *:	25-50 cm	10-20"
Max. rec. tree size d _{bh} *:	55 cm	22"

* Diameter breast height, measured 1.3 m up from the ground.

SP 761 LF

SP 761 LF - Optional equipment

The SP 761 LF has a very high level of standard equipment. However a number of different options are available for being able to optimize the harvester head for different applications, requirements, carriers and conditions. The below list contains the most common options. For more information please contact your nearest SP dealer.

Color marking SUPERMARK

This equipment is used for making the forwarding easier when the qualities/lengths are very similar to each other and difficult to spot with eye sight. As the saw bar cuts through the stem SUPERMARK sprays a color on the cutting area, marking it with a specific color corresponding to the particular length/quality. By combining the two colors it is possible to mark up to 3 different qualities



Colour tanks on tilt frame



Marking unit in saw box

Top saw

The top saw is a very useful option in many applications, for example when harvesting heavy limbed hardwood, storm timber with broken tops or when topping trees in a full tree length operation. The top saw unit on the SP 761 LF is integrated in the frame making it very compact and robust.



Processing knives

The processing knives have a special design with extended and rounded tips, ensuring a fast and efficient picking of logs when for example processing decked wood out of a pile.

Hydraulic motors

In order to optimize the SP 761 LF for different carriers, species and conditions there are several different motor sizes to choose from. Do you need maximum speed, torque or a good mix?

Feed rollers

In order to optimize the SP 761 LF for different species and conditions there are various types of feed rollers available to choose from.



Eucalyptus



Finnskog



Mense
aggressive



Mense
standard



Moipu



Skeleton

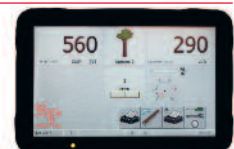
Find end sensor

Makes operations in pre felled woods easier and more productive. With the find end sensor the harvester head reverses down to the root end of the stem, stops and sets the length to zero, all with the press of one button.



Complete measuring system

The SP 761 LF can be supplied with one of the following three complete versions of the measuring system Dasa5. For a detailed description on the Dasa5 systems please see separate brochure.



Preparation for measuring systems

The SP 761 LF can be supplied prepared for machines equipped with any of the following measuring systems:
Dasa4 - Dasa5 - Valmet MAXI - JohnDeere Timbermatic 300/3000/H09 - Dasa Forester

Other options

Rotators - Swing dampers - Joysticks - Parts kits



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2015-03