

KOMATSU

Komatsu 931 | 931XC



Productive and versatile harvester
– choose between 6WD and 8WD



The modern harvester has its origins in models that were designed back in the early 1980s. The 901 was launched in 1984, and at the time it was the world's first single-grapple harvester with a specially designed harvester chassis. Up until then, a modified forwarder chassis was often used. The 901 also saw the introduction of the stable Komatsu concept, which remains essentially the same today.



931 | 931XC

The Komatsu 931 is a powerful and agile harvester, developed to combine the agility of the 911 with the performance of the 941. Just like all Komatsu harvesters, it offers a comfortable work environment with a spacious cab, good visibility and ergonomic design.

The Komatsu 931XC is our first eight-wheeled harvester and is extremely popular. The unique design gives this harvester outstanding stability, low ground pressure and good off-road handling.

Your working day is what drives us

Tough challenges are part of your working day, whether in your forestry work or in meeting your profitability targets. This drives us to develop technical solutions that can help to make your work easier and more fruitful. And you can read about some of our innovations here.



A crane that makes its mark

Every Komatsu harvester is equipped with a parallel crane that makes your job easier and more productive; a crane developed specially for harvesters with movement geometry tailored to high-intensity work.

The proprietary design ensures a crane optimised for our harvesters, and we have invested a great deal of time in making it as fuel efficient as possible, which is good for your bottom line as well.

The Komatsu concept for relaxed operators

Komatsu developed its harvester concept back in 1984. Based on load-sensing stabilisation, tilt cylinders, a low centre of gravity and a number of other smart solutions, it ensures a stable machine even in steep terrain.

A stable machine allows you to feel safer in your work environment and more relaxed while working, which in turn helps you to maintain higher productivity and feel more energetic at the end of your shift.

Off-road manoeuvrability

One important prerequisite for productive harvesting is a machine that handles challenging terrain well. Komatsu harvesters have high ground clearance, thanks to the ingeniously designed portal bogie, Komatsu Comfort Bogie, which enables our machines to pass any obstacles in their path.

Moreover, every Komatsu harvester has an effective transmission that directs power to where it is needed while minimising fuel consumption. Strength when and where it is needed most.



Hydraulic power you can depend on

3PS stands for three-pump system, and this is an invention of which we are extremely proud. Its job is to ensure that you have the capacity to perform several operations at the same time with maximum hydraulic power – such as slewing the crane, feeding a log and manoeuvring the machine. And all the while, 3PS helps to lower your fuel consumption. It sounds almost too good to be true, but it is.

The secret lies in our dual-circuit system, Smart Loop Split, which enables the hydraulics for the crane and the head to be coupled together or operated separately, depending on what best suits the situation. Full power or low power – 3PS is hydraulic economy at its best.

An engine that gets the job done

Every Komatsu machine has a powerful engine that combines strength and high torque with low engine speeds, making it perfect for forestry work and helping to balance performance with low fuel consumption.

Each engine also has a sturdy build, designed to minimise maintenance and repair costs.



You can read more about our stable Komatsu concept at: www.komatsuforest.com

A cab to enjoy

The cab of a Komatsu harvester is designed with comfort in mind, ensuring job satisfaction as well as performance. Learn more about how the ergonomic and well-considered design of our harvester cabs can ease your working day.

A spacious cab with excellent visibility

The cab is spacious with large windows offering a good overview of the work area. The operator can also adjust the placement of the screen to maximise visibility.

The entire cab, together with the crane pillar, can be rotated 360 degrees for maximum working range. With the optional seat column, the seat can be rotated 180 degrees for greater convenience.

A comfortable work environment

The cab offers a quiet and comfortable work environment, leaving you feeling more energetic at the end of your shift. The driver's seat is ergonomically designed with good back support and many adjustment options to suit your preferences. The seat has a built-in heater and can also be equipped with ventilation. Moreover, the high-capacity air conditioning unit ensures that you have a comfortable indoor climate – regardless of the outdoor temperature.

Stay upright in our levelling cab

Komatsu harvesters are equipped with a levelling function that enables the operator to remain upright regardless of any lean of the machine caused by the terrain. Naturally, this makes your working day more comfortable, but it also benefits productivity. Since the crane is right next to the cab, it too remains in an upright position even in steep terrain. This means that no energy is used to compensate for any lean of the machine, allowing the crane to remain highly productive in demanding terrain.



Ergonomic joysticks, keypads and pedals

Most of a harvester operator's work is performed within the length of their forearm, which is why we ensure our joysticks, keypads and pedals are ergonomically designed. In addition to choosing between EME joysticks and mini joysticks, you can use the many individual settings to adjust the ergonomics to take as much load as possible off your hands and wrists. Quite simply, a Komatsu machine should be comfortable to operate.

Instead of an Orbitrol steering wheel, the harvester uses a convenient electric mini-steering wheel found on the operator's right-hand panel.



Komatsu comforts

The cab has an exclusive interior with surfaces that are easy to clean. There are many storage compartments and smart spaces – including a flat surface for food or a coffee cup. An optional mobile holder can be used to keep your phone safe, while Komatsu MediaZone makes it easy to connect your phone to listen to an audiobook or music.

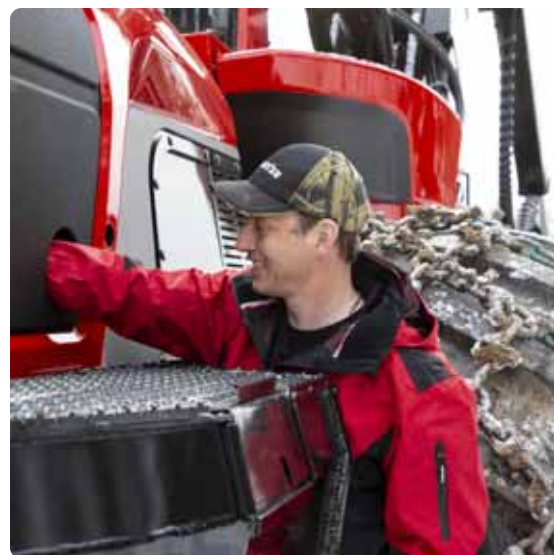
For an easier working day, you can both cool and heat your food box. Moreover, one of the harvester's storage compartments can be used to cool bottles, which is especially useful in hot climates.



Simple service

Servicing a Komatsu harvester is easy. To start with, all of the daily inspection points can be reached from ground level and without the need to open any hoods. Additionally, wherever possible we have grouped the maintenance and inspection points to make for faster and safer servicing.

For added convenience, you can read fluid levels from inside the cab, while automatic pressure calibration for the crane and the harvester head eliminate unnecessary tasks. We have also made it easier to top up the diesel and AdBlue®, and to change the oil and replace the filters.



For forestry today as well as tomorrow

As a machine manufacturer, we consider it important to strive to reduce our environmental impact, whether within production or in terms of machines with minimal forest impact. There are many challenges, but we are working hard to develop the solutions of the future, while continually identifying opportunities for improvement, right down to the smallest details.

Manufacturing with the environment in mind

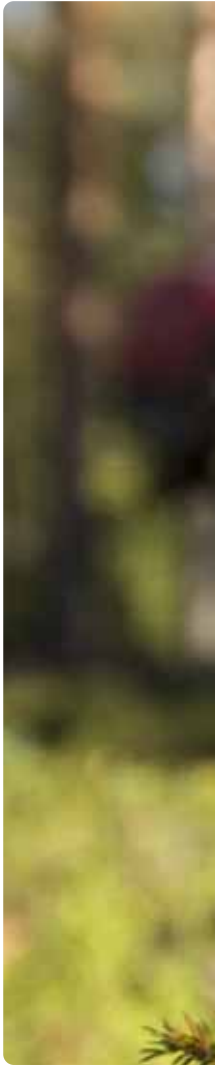
Autumn 2021 saw the start of manufacturing at our new factory. Since we have spent many years making our manufacturing more environmentally friendly, it was a given to keep climate impact in mind when building the plant. Atop its roof is a solar farm comprised of 7,000 solar panels, covering an area of almost 19,000 m² or 3½ football pitches. The factory has been built using modern techniques to reduce energy consumption, while geothermal energy provides most of the heating. We are proud of our new factory and the environmental progress it represents, and efforts to further reduce our environmental footprint will continue.

Low emissions in focus

When operating a Komatsu harvester, you can rest assured that it complies with strict NO_x and particulate matter emissions legislation. To minimise the environmental impact of our harvesters as much as possible, we are also thorough in our choice of components and consumables. For example, we use soft-sealing hydraulic couplings to minimise leakage and biodegradable oil for the engine. To further reduce emissions, you can choose to use HVO, a greener fuel compatible with all our engines.

Every litre of diesel saved counts

Our harvester design is continually refined to make our machines as fuel efficient as possible, while still being able to offer exceptional performance. This encompasses everything from the engine and the hydraulic system to effective cooling capacity to reduce the need to run the fan system. Our parallel cranes are another energy-efficient innovation, with a design that requires little force to extend and retract the parallel function.





Smarter ways of getting timber to the roadside

As an operator, you too have ample opportunities to make a difference with smart decisions. Our MaxiFleet technology can offer knowledge and insights to help you along the way, with smart map layers providing valuable information about ground and weather conditions as well as the location of the timber. All this makes it easier for you to plan your driving and to choose the best route for reducing both distances and ground damage.



[Read more about MaxiFleet > Forestry Solutions brochure](#)



Optimise your work environment

The harvester is your work environment, so we have developed a number of options to make your working day both comfortable and ergonomic, while helping you to maintain high productivity. All for the sake of your wellbeing – both today and after many years on the job.

Tailor your workplace

The cab of a Komatsu harvester has an ergonomic design with many added conveniences. We even have a wide range of extra equipment that enables you to tailor your workplace to suit your personal preferences. Optional extras include:

- Sequence control for both EME and mini joysticks
- Interior ceiling and floor lighting, reading lamp on flexible arm
- Radio with Bluetooth and hands-free support
- Sun shades
- MediaZone
- Torch
- Environment filter (3P class)
- Mobile holder
- Food box heater
- Cooler
- Touchscreen 12"
- Additional lights
- Automatic central lubrication
- Engine hood guard
- Diesel heater
- Electric engine heater
- Electric oil filler
- Electric diesel filler





Powerful lighting

Good lighting conditions are important if you are to do your job properly. And good lighting also leaves you feeling more energetic at the end of your shift. Our machines come equipped with powerful working lights as standard, although we offer a broad range of additional lights for even better lighting.



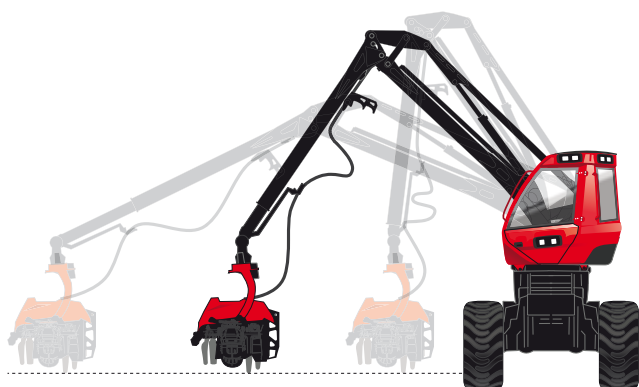
Remote-controlled central locking

Optional remote-controlled central locking is available for our machines. The remote control has a generous range and the lock button locks the cab door, the emergency exit, the storage boxes and the fuel cap. The remote control also has a function that activates the main power switch, logs in a specific operator and turns on the lights. In addition to this, the remote control can be used to control the diesel heater.



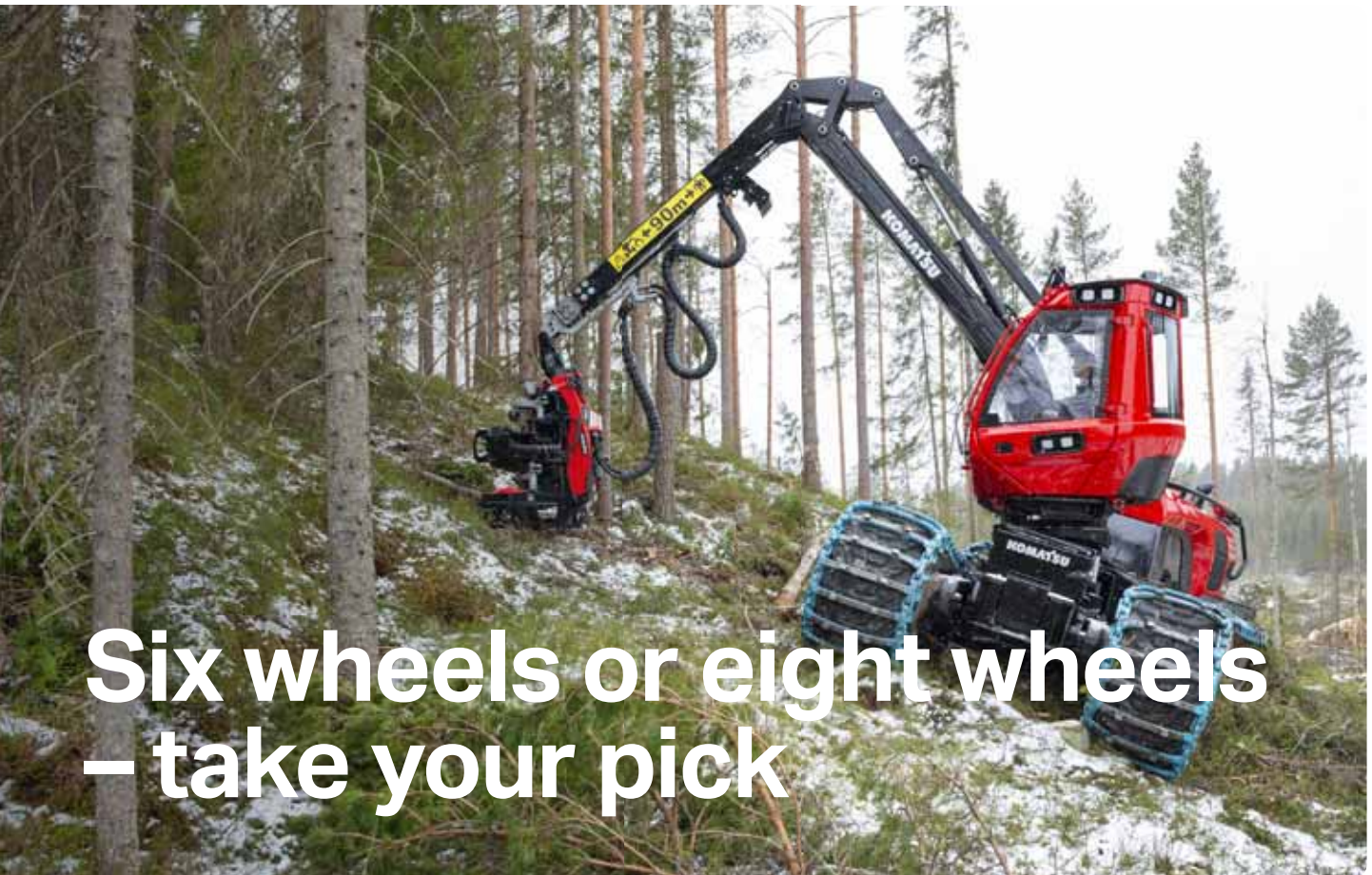
Keep your feet warm

The optional underfloor heating for the cab makes for a more pleasant and evenly heated work environment, even in winter. It also makes it easier to keep the floor clean and dry.



Smart Crane for harvesters

Smart Crane automates crane control, and a single joystick movement returns the crane from full reach all the way back to the machine. The crane's rapid response and precision make getting the head exactly where you want it a breeze, allowing the operator to work in a relaxed manner. A relaxed operator can maintain constantly high production throughout the day, while still feeling energised at the end of their shift. These are advantages that will be seen in both profitability and the operator's wellbeing!



When you choose a Komatsu harvester, you get a powerful machine with excellent stability – a machine you can depend on regardless of the assignment. On top of that, for some of our models, you can choose between six and eight wheels. Both options have their advantages, and here we aim to explain the differences.

An agile harvester well suited to thinning

A six-wheeled harvester has a lower total weight, which makes it easier to transport. It is also easier to manoeuvre in tight spaces, making it ideal as a thinning harvester. A six-wheeled harvester even has fewer moving components, simplifying maintenance and service.

A more stable harvester with low ground pressure

Our eight-wheeled concept combines a swing axle with a bogie, resulting in dual suspension systems for the rear axle. This innovative design gives the machine both a lower centre of gravity and more ground contact, making it particularly stable in terrain and good at climbing steep slopes. An eight-wheeled machine also has lower ground pressure, meaning less impact on soft ground.

Creating value together

The forestry industry supplies valuable materials that benefit us all. From construction components for homes and fences, through to packaging for parcels and the pages of our kids' bedtime story books, the materials even provide energy to heat our homes.

As a raw material, wood also plays an important role in the transition from fossil-based materials to more renewable alternatives. And it is your hard work that makes all this possible, so thank you!

We want to be a partner you can trust when creating these values. Komatsu has stood by your side for an entire century, offering unique quality, peace of mind, knowledge and support. Our way of working, from innovation to manufacturing, is distinguished by our partnership with you, our customers. Together, we create the solutions required to achieve a sustainable future for people, businesses and our planet.



The right head for every assignment

The choice of harvester model always begins with the type of forest in which you work. This determines the best choice of head, which in turn determines which harvester you need. We offer an extremely broad range of harvester heads, from those with a two- or four-wheel feed to specialist heads for harvesting eucalyptus. What's more, various options enable our heads to be adapted to different types of harvesting.



S class

The S class heads are renowned for their simple and proven design, which can handle the demands of working in the forest. They are especially productive in forests with crooked stems. The S heads are easy to service and maintain and are best described as reliable in all weathers. Some of the S heads also have options that make them ideal for debarking.



C class

The C class heads are characterised by high productivity coupled with low energy consumption, the result of the unique feed system in which the stem is held by the feed rollers. The C heads also have several innovative solutions that make them popular companions in the forest.



E class

The E class heads are our eucalyptus specialists. We have several highly appreciated stalwarts developed especially for efficient debarking and high productivity. The broad range of sizes and many options make it easy to find the right combination for your particular type of harvesting.





Five innovative reasons for choosing a Komatsu head

The Constant Cut saw unit ensures the correct chain speed throughout the cutting cycle without overspeeding. Available on C heads and most S heads.

Centralised lubrication points offer easy access. The head also gains a fixed service position for both lubrication and fluid top-ups, simplifying service. Available on C heads.

Flex Friction Control ensures that the stem is correctly positioned in the feed path. It offers low friction and effective feeding. Available on S heads.

The feed system on the C heads has a unique design in which the stem is held by the feed rollers, resulting in low energy consumption and enabling high measurement accuracy.

The Find End option ensures that felled trees are measured correctly, even when processing pre-felled trees.

Technical specifications



Dimensions (with 600 mm tyres)

	931	931XC
A Width	2,726 mm	2,776 mm
B Length, total	7,525 mm	8,015 mm
C Length, front axle to articulated joint	1,930 mm	1,930 mm
D Length, articulated joint to rear axle	1,800 mm	2,150 mm
E Transport height	3,950*/3,910** mm	3,975*/3,930** mm
F Ground clearance	685 mm	705 mm

NB: Stated dimensions are nominal and may vary depending on production tolerances and optional equipment.

* Dimensions up to roof, straight cab (with tyre compressions)

** Dimensions cab tilted back with tilted light bar (with tyre compressions)

Weight

Kerb weight 931/931XC, from 19,880 kg / 21,900 kg

Engine 931

	6-cylinder diesel engine with turbo and intercooler. Conforms to the requirements of EU Stage V (Europe), Tier 4F (North America), MAR-1 (Brazil) and Stage II (other countries)
Engine type	Stage V: 74 LFTN-D5, Tier 4F: 74 LFTN-D4, MAR-1: 74 CW3, Stage II: 74 LFEN-A2
Engine displacement	7.4 l
Power, max.	Stage V, Tier 4F and Stage II: 190 kW DIN at 1,850 rpm, MAR-1: 193 kW DIN at 1,900 rpm
Torque	Stage V, Tier 4F and Stage II: 1,130 Nm at 1,500 rpm, MAR-1: 1,000 Nm at 1,500 rpm
AdBlue® tank	42 l
Fuel tank	approx. 405 l

Engine 931XC

	6-cylinder diesel engine with turbo and intercooler. Conforms to the requirements of EU Stage V (Europe), Tier 4F (North America) and Stage II (other countries)
Engine type	Stage V: 74 LFTN-D5, Tier 4F: 74 LFTN-D4, Stage II: 74 LFEN-A2
Engine displacement	7.4 l
Power, max.	Stage V, Tier 4F and Stage II: 190 kW DIN at 1,850 rpm, MAR-1: 193 kW DIN at 1,900 rpm
Torque	Stage V, Tier 4F and Stage II: 1,130 Nm at 1,500 rpm, MAR-1: 1,000 Nm at 1,500 rpm
AdBlue® tank	42 l
Fuel tank	approx. 480 l

Power transmission/transmission

	Hydrostatic-mechanical, controlled via MaxiXT. Transfer gearbox with two positions. Disengageable front-wheel drive.
Differential locks	Front and rear axles. Mechanical electro-hydraulic control.
Driving speed 931/931XC	0–approx. 21 km/h / 0–approx. 20 km/h
Tractive force 931/931XC	189 kN / 200 kN

Hydraulic system

	Dual-circuit load-sensing system with variable piston pumps.
Flow	528 l/min at 1,600 rpm
System pressure	280 bar
Hydraulic oil tank	approx. 220 l
Other	Pressure filter for hydrostatic circuit. Return oil filter for hydrostat and working hydraulics. Hydraulic oil level alarm.

Frame/Axles

Front axle	Geared bogie of "hi clearance" type with portal gears housed in the rims. Differential with mechanical differential lock.
Rear axle 931	Swing axle with hub reduction. Differential with mechanical differential lock. Hydraulic stabiliser.
Rear axle 931XC	Suspended geared bogie of "hi clearance" type with portal gears housed in the rims. Differential with mechanical differential lock. Hydraulic stabiliser.
Wheel size	931 front: 600-710/26,5" 931 rear: 600-710/34" 931XC front/rear: 600-800/26,5"

Brake system

	Fully hydraulic multi-disc brakes. Brake pressure accumulators charged via automatic hydraulic accumulator charging valve.
Driving brake	Four multi-disc brakes in oil bath acting on front and rear axles.
Working brake	Same as driving brake. Automatically engaged when working.
Parking brake	Spring-action brake with electro-hydraulic control. Emergency brake.
Braking performance	Conforms to ISO 11169 and VVFS 2003:27.

Crane

	230H
Reach	8.7/10/11 m
Lifting torque, gross	230 kNm
Slewing torque, gross 931	47.5 kNm
931XC	54 kNm
Head	931 S92/C93/C124/S132/C144 931XC S92/C93/C124/S132/C144/S162E

Steering

	Hydraulic articulated steering with two dual-acting hydraulic cylinders.
Joystick steering	Load-sensing (LS) proportional steering from crane controls/rocker switch.
Electric steering panel.	Finger-controlled mini steering wheel on right-hand panel.
Steering angle	±40°
Examples of other equipment	Electrical limit damping





Heads

	Komatsu S92	Komatsu C93	Komatsu C124	Komatsu S132	Komatsu C144
Weight, from	994 kg	995 kg	1,210 kg	1,380 kg	1,407 kg
Felling/cutting diameter	615/715 mm	600 mm	650 mm	710 mm	750 mm*
Feed speed	0-5 m/s	0-5 m/s	0-5 m/s	0-5 m/s	0-5/0-6.5 m/s**
Feed force, gross	26.2 kN	22.5/28.4 kN**	23.7/28.3 kN**	21.0/26.1/28.7 kN**	23.8/29.6 kN**
Front knives, max. opening	535 mm	610 mm	625 mm	641 mm	650 mm
Feed rollers, max. opening	530 mm	550 mm	670 mm	625 mm	750 mm

Electrical system

Voltage	24 V
Battery capacity	2 x 180 Ah
Alternator	2 x 100 A

Lighting

Working lights	13 lights on cab, 2 lights on crane, 3 lights on crane base, all halogen, and 2 lights on engine hood grille, LED
Service lighting	LED lights in service compartments
Examples of other equipment	Working lights (LED). 9 lights on cab, 2 lights on crane, 3 lights on crane base and 2 lights on engine hood grille. Variations of extra working lights (LED). 2 roof-mounted lights on cab (halogen)

Ergonomics

	Levelling for good posture. Cab coupled to swing axle. Crane and cab on horizontal, rotating platform. Hydraulic stabilisation when manoeuvring.
Horizontal levelling	Longitudinal 22°/20° and lateral 16°
Rotation	±180°
Examples of other equipment	Autolev – fully automatic cab and crane levelling. Crane damping. Cab suspension. Slewing damping.



Komatsu S162E (931XC)

1,735 kg
615 mm*
0-5.9 m/s
20.8 kN**
632 mm
563 mm

*depends on saw bar **depends on engine

Cab

	Tested in accordance with applicable requirements. Thermal and acoustic insulation.
Seat	Several alternative seat options. Ergonomic design with headrest, armrests, hand controllers and lap belt. Depending on seat selection, different options are available for individual adjustment of the seat cushion, backrest and lumbar support. Also available as a rotating seat.
Windows	Polycarbonate windows throughout.
Heating/ventilation	Combined heating and cooling unit or climate control. Filtered intake air via allergy filter.
Noise level	As per ISO standard
Vibrations	As per ISO standard
Other	Manual tilt. Windscreen wipers and washers on windscreen.
Examples of other equipment	Swivel seat. Smart radio/DAB radio. MediaZone. Electrically controlled platform under cab.

MaxiXT control and information system

- Fully integrated machine control system, CAN-based with head, crane, engine and transmission intelligence for optimum performance and fuel consumption. Eco-driving function.
- Effective head control system. Features include multi-tree handling, sequence control, anti-slip function, bar rescue, automatic tilt at tree end, diameter-dependent clamping pressure and more.
- Value-optimised or length-optimised bucking with high timber value optimisation.
- Easy-to-use operator interface. High-performance PC with Windows operating system, SSD hard drive, touchscreen selection and data backup function. Antivirus software.
- Comfort Controls. Ergonomic joysticks of various types with extensive functionality.

Examples of other equipment

- Sprinkler system. Fully automatic water-based fire extinguishing. Conforms to SBF 127.
- Hand-held dry powder fire extinguishers 2 x 6 kg (ABE-3), fitted externally.
- Hand-held dry powder fire extinguisher 2 kg (F2GM), fitted in cab.
- Hand-held dry powder fire extinguishers 2 x 9 kg, fitted externally.
- Diesel heater 931/931XC 9.1 kW / 9 kW incl. timer and hydraulic oil heater.
- Stump treatment equipment.
- Biodegradable hydraulic oil.
- Service ladders.
- Toolbox with tools.
- Tracks, chains.
- Reversing camera as standard (in EEA countries in compliance with applicable EU Directive).
- Platform at side of cab and ladder on left side of rear frame as standard (in EEA countries in compliance with applicable EU Directive).
- Central lubrication.
- Electric diesel filling.

Notes

The specifications describe possible equipment, not which equipment is standard or optional. Standard and extra equipment vary between countries. Your dealer has an up-to-date list of what is included. Weights are based on the equipment specified in the basic specification. Specifications and designs are subject to alteration without prior notice.



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