931.1
Effective and economic

Forestry Quality™

Maximum productivity and energy efficiency
The Komatsu 931.1 is a harvester with a capacity matched by no other in truly tough harvesting environments. And this unique level of productivity is now joined by minimal emissions and optimal fuel economy. The many advantages are now even greater in number. Here are a few of the highlights:

**Productivity**
The optimal combination of strength and flexibility for high productivity and profitability.

**Work environment**
Superb ergonomics, high productivity, and reliable operation make every shift easy and enjoyable.

**Crane geometry**
The easily maneuvered CRH 22 boom, the most powerful in its class on the market (220 kNm/162,300 lbf-ft), offers unique opportunities for exact head positioning even at the far end of its reach.
Newly developed engine
New powerful engine that minimizes emissions of NOx (nitrogen oxides) and reduces fuel consumption. The engine is also easy to service with its maintenance-free belt transmission.

Control and information system
Market-leading control system, MaxiXplorer, with specially customized software suite for optimal productivity and reporting.
PROVIDES A UNIQUELY GREEN AND FUEL EFFICIENT POWER ADVANTAGE

Stability
Cab and boom leveling and swing axle coupling for superior stability and ground contact.

Spacious and quiet
Spacious and exceptionally quiet cab thanks to the refined direct drive slew transmission. A new air filter makes for an even better operator environment.

Optimally green and fuel efficient
The new engine minimizes emissions of NOx (nitrogen oxides) and particulates by an impressive 85% and 97% respectively. What’s more, fuel consumption is down by 16%.

Even the first version of this harvester was a small revolution for really demanding harvesting assignments. With the introduction of the new Komatsu 931.1, we’re taking another giant step in the development process. Most of this development revolves around the completely new engine, which drastically reduces both emissions and fuel consumption.

If you take a closer look at our new SCR-based engine solution with E3-Power technology (Efficiency, Economy, Environment), the advantages are even

Sturdy designs throughout (chassis, hydraulics, mechanics...) for great reliability.
more astounding, such as: Emission levels that more than fulfill current emission legislation. Fuel consumption reduced by up to a full 16%. Optimized reliability and running costs thanks to a number of factors from control systems that ensure operation to longer service intervals and cleaner engine oil.

Along with this new energy and cost efficiency, naturally the new Komatsu 931.1 still delivers market-leading productivity. Much due, for example, to the boom, which with its powerful lifting force and sturdy construction can handle the largest heads with ease, year in and year out. Power that enables you to position the head more exactly too. Not to mention the almost unbelievable mobility and maneuverability, even in steep terrain.

And no matter how much you push this harvester, its reliability, ergonomics, and comfort remain unfazed. The reasons are many. There’s the soft-sealed couplings throughout the machine, the rear axle with its integrated hose routing, and the new openable grill. Then we have the spacious, full-circle slewing, and leveling cab, which is also the quietest on the market with its direct drive slew transmission. What’s more, you have the industry’s most powerful support system in the form of the MaxiXplorer control system. Choose the Komatsu 931.1 and you’ll fulfill the environmental, cost, and profitability demands of tomorrow already today.
TECHNICAL SPECIFICATIONS

WHEEL OPTIONS AND MACHINE WIDTH (A) WITH DIFFERENT TIRES

<table>
<thead>
<tr>
<th>Tire option</th>
<th>Width mm (feet inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6WD (front)</td>
<td>600/55 x 26.5 2 720 (8'11&quot;)</td>
</tr>
<tr>
<td></td>
<td>710/45 x 26.5 2 940 (9'8&quot;)</td>
</tr>
<tr>
<td>6WD (rear)</td>
<td>600/65 x 34 2 730 (8'11&quot;)</td>
</tr>
<tr>
<td></td>
<td>710/55 x 34 2 940 (9'8&quot;)</td>
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</tbody>
</table>

NOTE: Stated dimensions are nominal and may vary slightly.

WEIGHT

Curb weight: from 19,400 kg (42,770 lb)

ENGINE

74 – AWI. 6-cylinder, turbo with Commonrail. EU Stage III B and EPA Tier 4 Interim. DEF/SCR after-treatment (not applicable for all markets).

- Stroke volume: 7.4 l (452 cu in)
- Power, max.: 193 kW DIN (259 hp) at 1,700 rpm
- Torque: 1,070 Nm at 1,500 rpm
- Fuel tank: approx. 370 l (98 gal)

POWER TRANSMISSION/TRANSMISSION

Hydrostatic-mechanical, controlled by MaxiXplorer. Transfer gearbox with 2 positions. Disengageable front-wheel drive.

- Differential locks: Mechanical electro-hydraulic control.
- Driving speed: 0-25 km/h (0-15.5 mph)
- Traction force: 175 kN (39,342 lbf)

HYDRAULIC SYSTEM

Single-circuit load-sensing/high-low balanced constant pressure, variable piston pump.

- Flow: 313 l/min (91 gal) at 1,650 rpm
- System pressure: 280 bar (4,060 psi)
- Working pressure, boom: CRH 22: 270 bar (3,916 psi)
- Hydraulic oil tank: approx. 200 l (53 gal)

FRAME/AXLES


- Driving brake/Working brake: Multi-disc brakes in oil bath. Automatically engaged when working.


BOOM

Model: CRH 22
Reach: 10 m (32'10")
Lifting torque, gross: 225,3 kNm (164,700 lbf-ft)
Slewing torque, gross: 47,5 kNm (35,035 lbf-ft)
Head: 360.2/365.1/C144/370.2/S132

Model: CRH 22DT
Reach: 11 m (36'1")
Lifting torque, gross: 225,3 kNm (164,700 lbf-ft)
Slewing torque, gross: 47,5 kNm (35,035 lbf-ft)
Head: C93/S92
HEAD

<table>
<thead>
<tr>
<th>Komatsu S92</th>
<th>Komatsu C93</th>
<th>Komatsu 360.2</th>
<th>Komatsu 365.1</th>
<th>Komatsu S132</th>
<th>Komatsu 370.2</th>
<th>Komatsu C144</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight, from:</td>
<td>959 kg (2,114 lb)</td>
<td>970 kg (2,138 lb)</td>
<td>1,245 kg (2,745 lb)</td>
<td>1,235 kg (2,723 lb)</td>
<td>1,345 kg (2,965 lb)</td>
<td>1,470 kg (3,240 lb)</td>
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<tr>
<td>Felling/cutting diameter:</td>
<td>630 mm (24.8&quot;)</td>
<td>600 mm (23.6&quot;)</td>
<td>650 mm (25.6&quot;)</td>
<td>650 mm (25.6&quot;)</td>
<td>720 mm (28.3&quot;)</td>
<td>700 mm (27.6&quot;)</td>
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<tr>
<td>Feed speed:</td>
<td>0-4.1 m/s (0-13.5 ft/s)</td>
<td>0-5 m/s (0-16.4 ft/s)</td>
<td>0-5 m/s (0-16.4 ft/s)</td>
<td>0-5 m/s (0-16.4 ft/s)</td>
<td>0-4.2 m/s (0-13.8 ft/s)</td>
<td>0-5 m/s (0-16.4 ft/s)</td>
</tr>
<tr>
<td>Feed force, gross:</td>
<td>21.2 kN (4,766 lbf)</td>
<td>20.1 kN (4,519 lbf)</td>
<td>26-28.4 kN (5,845-6,385 lbf)</td>
<td>23.7-28.3 kN (5,328-6,362 lbf)</td>
<td>26.6-29.0 kN (5,980-6,520 lbf)</td>
<td>28.2-30.7 kN (6,340-6,902 lbf)</td>
</tr>
<tr>
<td>Opening, upper knives, max.:</td>
<td>536 mm (21.1&quot;)</td>
<td>600 mm (23.6&quot;)</td>
<td>640 mm (25.6&quot;)</td>
<td>625 mm (24.6&quot;)</td>
<td>641 mm (25.2&quot;)</td>
<td>640 mm (25.2&quot;)</td>
</tr>
<tr>
<td>Roller opening, max.:</td>
<td>519 mm (20.4&quot;)</td>
<td>550 mm (21.7&quot;)</td>
<td>550 mm (21.7&quot;)</td>
<td>650 mm (25.6&quot;)</td>
<td>625 mm (24.6&quot;)</td>
<td>600 mm (23.6&quot;)</td>
</tr>
<tr>
<td>Rotator:</td>
<td>Roller slewing with hydraulic motor</td>
<td></td>
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<tr>
<td>Control and info system:</td>
<td>MaxiXplorer/MaxiXplorer Head</td>
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STEERING

Hydraulic articulated joint.
Lever steering: Load-sensing (LS) proportional steering from boom controls/rocker.
Steering angle: +/- 40° Electric end limit damping.
Available options: Load-sensing proportional servo steering.

ELECTRICAL SYSTEM

Voltage | 24 V |
Battery capacity | 2 x 170 Ah |
Generator | 2 x 100 A |

LIGHTING

More than 30 lux in work area. Halogen cab, boom, and reversing lights.
Available options: Remote lighting, roof lighting, side lighting. As an alternative to halogen, lighting with LED technology is also available.

ERGONOMICS

Horizontal leveling: Longitudinal 20°/22° and lateral 16°
Rotation: ±180°
Available options: Boom damping.

CAB

Safety tested. Leveling. Thermal and acoustic insulation.
Safety: Conforms to ROPS ISO 8082, FOPS ISO 8083, and OPS ISO 8084.
Seat: Choice of ergonomically designed seat for individual adjustment of the seat cushion, back and lumbar support, arm rests, and control panels.
Windshields: 15-mm safety glass in both windshield and side windows for maximum safety.
Heating/ventilation: Fully automatic ACC, heating and cooling unit. Filtered air intake with allergen filter and pre-filter.
Noise level: As per ISO standard.
Vibrations: As per ISO standard.

CONTROL AND INFO SYSTEM:

MaxiXplorer is a CAN-based control system that you use to control all of the machine’s functions with the support of ergonomic hand controls and a user-friendly PC. The system has functions for setting crane functions, control of the transmission and diesel engine, and other machine settings. The system also features object management, integrated production and operational follow-up, troubleshooting and alarms.

PC

2 computer alternatives
Processor: MaxiPC X20/MaxiPC X30
Intel Atom 1.6 GHz
Intel Core 2.4 GHz
RAM: 2 GB
4 GB
Hard disk: 100 GB HDD
100 GB HDD
Screen: 12"
12"
USB ports (incl. screen): 10
10
Serial ports: 3
2
Operating system: Windows XP Pro/Windows XP Pro
Ex. of other equipment: A4 printer, GPS receiver. MaxiFleet-ready.

DOCUMENTATION

Printed operating and starting instructions. Operator’s Manual and Spare Parts Catalog on CD.

AVAILABLE OPTIONS

Sprinkler system. Semi-automatic water-based fire extinguishing. Conforms to RUS 127.
Hand-held extinguishers. 2 x 6 kg (13 lb) ABE-3.
Powder extinguishers.
Printed instruction manual (also electronic in Maxi).
Printed spare parts catalog (also electronic in Maxi).
Diesel heater 9.1 kW incl. timer and hydraulic oil heater.
Stump treatment equipment.
Biodegradable hydraulic oil.
Service ladders.
Toolbox with tools.
Platform at side of cab and ladder on left side of rear frame as standard (in EES countries in compliance with EU Directive 2006/42/EU).
Belt guard for flat belt as standard (in EES countries in compliance with EU Directive 2006/42/EU).

NOTES

Standard and extra equipment are market-dependent and vary between countries. The specification describes possible equipment, which is either standard or optional. Stated weights are based on standard equipment. Specifications and designs are subject to change without notice.
WHY CHOOSE A KOMATSU HARVESTER?

High productivity, low operating costs, innovative technology, superb operator environment – these are just some of the features that make Komatsu forestry machines some of the best in the world. Behind all this is a highly-focused strategy to continually build upon the advantages of owning a Komatsu harvester. A strategy based on the following principal ideas.

Ergonomics
Your forestry equipment and its mobile work environment is critical to an operator’s ability to maximize production without fatigue and is a key factor for success. This is an important reference point used in developing the unique ergonomic designs of Komatsu harvesters. Automatic leveling cabs, side mounted booms and large operator compartments work together to keep the harvesting head centered in the operator’s field of vision.

Economy
The ambition to maximize profitability is one of the most important forces driving the development of Komatsu harvesters. Each small improvement that increases productivity and reliability, reduces costs, or saves time is of interest. Tangible and quantifiable examples from today’s Komatsu harvesters include energy-efficient engines, highly efficient hydraulics, fast heads, and unsurpassed productivity.

Productivity
More work in less time – a comment we often hear from contractors who switch from competing brands to Komatsu. There are many reasons, large and small. The most important include extremely high-performance operator environments, great maneuverability, effective heads, powerful control and information systems, and large work areas from stationary positions.

Customer Support
Fast and competent service bears directly on forestry machine performance and economy. An extensive service network provides the Komatsu owner with a sense of security. Well-trained technicians provide additional assurance, as they are Komatsu experts. Another benefit is ProSelect, our special line of accessories and consumables. The range is based on a selection of items that are all of the highest quality and designed for both Komatsu and other brands of professional forest machinery.

Environment
Forests are an essential and fragile element of the global ecology. Consequently, every new Komatsu product, and all its component parts, is considered from both short-term and long-term environmental perspectives. This has resulted in real environmental improvements such as highly-effective exhaust emission control and low, evenly-distributed ground pressure in Komatsu harvesters. Environmental considerations also permeate our broad range of accessories and consumables, such as in our special, rapidly biodegradable oils.

Global Experience
Komatsu harvesters are found the world over. Consequently, they are designed to deliver optimum profitability regardless of conditions. The same fundamental concept is applied to our global service and dealer network that provides support to thousands of Komatsu owners on a daily basis.