Tier 4 Final Engine

HORSEPOWER
Gross: 672 kW 900 HP @ 2050 rpm
Net: 671 kW 899 HP @ 2050 rpm

OPERATING WEIGHT
256,618 lb
116400 kg

BUCKET CAPACITY
15.0 – 19.0 yd³
11.5 – 14.5 m³
DESIGNED FOR INCREASED PRODUCTIVITY AND OPERATOR COMFORT

With the addition of a Modulation Clutch, Throttle Lock, and Closed-Center, Load Sensing Hydraulic System (CLSS), the WA900-8 can load more trucks per shift. A re-engineered operators cab with improved access, visibility, and features to enhance productivity keeps operators comfortable throughout long shifts.

HORSEPOWER
Gross: 672 kW 900 HP @ 2050 rpm
Net: 671 kW 899 HP @ 2050 rpm

OPERATING WEIGHT
256,618 lb
116400 kg

BUCKET CAPACITY
15.0 – 19.0 yd³
11.5 – 14.5 m³
New Productivity and Efficiency Features

- Variable Traction Control System optimizes rim pull for various ground conditions, minimizing tire slippage and reducing maintenance costs
- Modulation Clutch gives operators precise control of rim pull, allows for fast work equipment speeds and a smooth approach when loading trucks
- A new Closed-Center, Load Sensing Hydraulic System (CLSS) keeps hydraulic oil cool, work equipment speed quick, and reduces fuel consumption
- Throttle Lock improves cycle times by maintaining high work-equipment performance and saves fuel with auto-deceleration
- Komatsu SmartLoader Logic helps reduce fuel consumption without compromising production
- All new Komatsu bucket design, with modified profile to maximize bucket fill factor and increase productivity

New Operator’s Environment

- Large, ROPS/FOPS certified operator’s cab with trainer seat provides a full view of the working area
- 45 degree power staircase (optional) and 45 degree walkways on left and right side of machine for convenient access to the cab
- Catwalks and guardrails on the counterweight and in front of the cab allow for easy maintenance
- Work equipment shock reduction control (4 settings – off, low, middle, high)
- Higher capacity air suspension seat (heated and ventilated)
- LED external and internal lighting
- Anchored tie off points (ISO 14567) located around the machine provide technicians locations to attach service lanyards
- Electronically Controlled Suspension System (ECSS) provides a smooth ride for better travel performance, reducing operator fatigue and material spillage during operation

Reliability and Durability

- Increased overhaul intervals on transmission and axles reduce the Total Cost of Ownership (TCO)
- New loader linkage design with increased arm plate width for structural durability in the most challenging digging applications
- Standard brake cooling and redesigned wet, multi-disk service brakes extend service intervals and require fewer service hours to complete planned maintenance
- Standard engine pre-lubrication system ensures full lubrication upon startup to minimize unnecessary engine wear

New Machine Technology

- Large 7” LCD color machine monitoring panel with integrated load meter
- Advanced machine monitoring system with onboard diagnostics, no laptop required
- KomVision with radar obstacle detection provides a bird’s eye view utilizing a 6-camera system and dedicated display (optional)
- KOMTRAX Plus, for near-real time remote diagnostics of machine health and performance
- Energy saving operation and ecology guidance provides operator with recommendations to improve operational efficiency and fuel economy
- Automatic Dig, Semi-auto approach, and Semi-auto dump features automate work equipment control throughout a v-cycle to reduce operator fatigue while maintaining high levels of productivity

NOTE: All comparisons are to the prior model, unless otherwise stated.
NEW ENGINE TECHNOLOGIES

Komatsu’s New Emission Regulation-compliant Engine
Komatsu provides a powerful and economical U.S. EPA Tier 4 Final compliant engine with the latest emission control technologies and fuel saving features.

Heavy-Duty Aftertreatment System
The Komatsu Diesel Particulate Filters (KDPFs) capture more than 90% of Particulate Matter (PM). The KDPFs include a special oxidation catalyst to facilitate decomposition of most PM without operator action and no need to interrupt normal operation.

Variable Geometry Turbocharger (VGT) System
The VGT system uses proven, Komatsu-designed hydraulic technology for variable control of airflow and supplies optimal air based on load conditions.

Heavy-Duty Cooled Exhaust Gas Recirculation (EGR) System
The system recirculates a portion of exhaust gas into the air intake and lowers combustion temperatures. The system reduces NOx emissions and lowers fuel consumption.

High Pressure Common Rail (HPCR) Fuel Injection System
The system is designed to achieve an optimal injection of high-pressure fuel via computerized control, providing near-complete combustion to reduce PM emissions.

Low Fuel Consumption
By optimally controlling engine power and creating a high efficiency power train and hydraulic system, new features on the WA900-8 enhance fuel efficiency.

Komatsu SmartLoader Logic
The WA900-8 is equipped with Komatsu SmartLoader Logic, an engine control system. This technology outputs the correct engine torque for each work phase. For example, engine torque needs are higher for digging in V-shape loading, but less when driving with an empty bucket. Komatsu SmartLoader Logic functions automatically and does not interfere with operation, reducing fuel consumption while maintaining machine performance. When Komatsu SmartLoader Logic is enabled, the mode indicator on the machine monitor will automatically change between the Eco and Power icon depending on the demand of the application.
Variable Displacement Piston Pump & Closed Center Load Sensing System (CLSS)
The variable displacement piston pump combined with the closed-center load sensing system delivers hydraulic flow when it is needed. The variable displacement piston pump destrokes to minimize unnecessary hydraulic flow when not required, keeping hydraulic oil temperatures cool and reducing fuel consumption.

Fuel consumption (gal/hour)

Reduced by up to 10%

*Compared with the WA900-3E0 and with Komatsu SmartLoader Logic enabled on the WA900-8. Fuel Consumption varies depending on working conditions.

Tire Slip Control System
This system is effective for extending the service life of tires. It senses tire slip with a speed sensor, then controls the torque converter with the modulation clutch.

Large-capacity Torque Converter
The Komatsu designed power train has a large capacity torque converter for efficient travel performance and increased tractive effort when digging.

Redesigned Komatsu Bucket
The redesigned Komatsu bucket provides improved productivity and durability. The bucket has a new shape with an increased radius and floor inclination that make the bucket easier to fill and improves material retention. The spill guard design was adjusted to give operators improved visibility to the pile. Sweeper wings on either side of the bucket help to protect the front tires.

Automatic Digging System
New automatic digging system actuates the bucket tilt and lifting operations by sensing the pressure applied to the work equipment. This system can alleviate the operator’s fatigue and optimize bucket load. It can easily be activated or deactivated on the right hand console and can be used independently of the Semi-auto Approach or Semi-auto Dump Systems.

Semi-auto Approach System
The Semi-auto Approach system raises the boom automatically when reversing out of the pile in v-cycle truck loading applications. The speed at which the boom raises is adjustable based on tire rotation (slow, standard, fast). The lift arms will raise until reaching the upper setting of the boom positioner, resulting in lower operator fatigue and allowing the operator to focus on the travel path of the loader. This system can easily be activated or deactivated on the right hand console and can be used independently of the Automatic Digging or Semi-auto Dump Systems.

Semi-auto Dump System
The Semi-auto Dump system automatically raises the lift arms and dumps the bucket when the left inside button of the bucket lever is pressed. The bucket automatically levels and the lift arms return to the lower boom positioner setting. The lift arms will not lower until the bucket has cleared the truck because it is based on tire rotation. This system enables easy dumping operation and reduces operator fatigue. It can easily be activated or deactivated from the right hand console and can be used independently of the Automatic Digging or Semi-auto Approach Systems.

Fuel efficiency (ton/gal)

Increased by 17%

*Compared with the WA900-3E0

The new productivity features on the WA900-8 in combination with the features to reduce fuel consumption result in a 17% improvement in fuel efficiency compared to the WA900-3E0.
New Operator Seat with Electronic Pilot Control (EPC) Levers
A new air suspension, heated and ventilated operator seat provides enhanced support on rough roads and dampens machine vibrations resulting in a more comfortable ride for the operator. An EPC lever console and advanced joystick steering lever are integrated in and move with the seat. The angle of the armrest is fully adjustable for optimum operator comfort.

Advanced Joystick Steering System (AJSS)
The Advanced Joystick Steering System (AJSS) allows steering and directional selection to be controlled by the operator’s left hand. With the feedback function, the machine steering angle matches the angle of the joystick.

Low Noise Design
The large cab is mounted with Komatsu’s unique viscous mounts. The engine, hydraulically driven fan, and hydraulic pumps are mounted with rubber cushions. The cab sealing has been improved to provide a quiet, low-vibration and comfortable operator environment. The cab is pressurized to minimize dust intrusion.

<table>
<thead>
<tr>
<th>Noise Level</th>
<th>Value (dB(A))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator’s ear noise level</td>
<td>73</td>
</tr>
<tr>
<td>Dynamic noise level (outside)</td>
<td>115</td>
</tr>
</tbody>
</table>

Operator’s ear - ISO 6396:2008
Dynamic - ISO 6395:2008
* at 70% max fan speed

Integrated Load Meter
The Komatsu integrated load meter system displays payload data directly on the monitor panel. Payload data is also accessible remotely via KOMTRAX Plus.
Large ROPS/FOPS Cab
The ROPS/FOPS certified cab is standard equipment on the WA900-8. Walkways with handrails on the front and rear of the machine provide easy access to the cab. A wide pillar-less flat glass window provides excellent front visibility. Heated mirrors and heated rear window provide excellent visibility in cold weather conditions.

ROPS (ISO 3471): Rollover Protective Structure
FOPS (ISO 3449): Falling Objects Protective Structure

Non-glare Bucket Treatment
The Komatsu buckets come standard with non-glare paint. This reduces the effect of the reflection of the work lamps when working in dark environments.

Power Staircase
An optional hydraulic staircase is available for improved machine access. The integrated ladder prevents the parking brake from being released when in the down position.

Radio with Bluetooth & AUX Inputs
The AM/FM radio is equipped with bluetooth and aux inputs allowing the operator to connect to the speakers in the cab.

Automatic Climate Control System
The automatic climate control system allows the operator to set the desired cab temperature.

Standard Equipment

<table>
<thead>
<tr>
<th>Lunch box tray</th>
<th>Hot or cool box</th>
<th>Parking brake switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front, side, and rear windshield wipers</td>
<td>Secondary engine shutdown switch</td>
<td>12 V outlets</td>
</tr>
</tbody>
</table>

Auxiliary input (MP3 jack)  Auxiliary input (USB jack)
**Work Equipment Shock Reduction Control**
Stroke-end shock of the work equipment can be adjusted to reduce operator fatigue and accommodate different loading applications. There are four settings: Low, Medium, High, and Off. The operator can select the setting through the monitor panel.

**Automatic Transmission**
The automatic transmission with electronically controlled modulation valve (ECMV) automatically selects the proper gear based on travel speed, engine speed, and other travel conditions. The ECMV engages the clutch smoothly to prevent lag and shock when shifting gears. This system provides efficient machine operation and a comfortable ride. The mode select system allows operator to select manual shifting or automatic shifting.

**Auto Kick-down Control**
Down-shifting from second to first gear can be done automatically using the auto kick-down feature when beginning the digging cycle. The WA900-8 will automatically shift from first gear back to second gear when put in reverse. Digging in first gear results in better bucket penetration and reversing out of the pile in second gear reduces cycles time for increased production. Manual kick-down can be accomplished using the kick-down button located on the boom control lever.

**Electronically Controlled Suspension System**
The electronically controlled suspension system uses an accumulator which absorbs the shock in the boom arm, giving the operator a much smoother ride. This reduces operator fatigue and reduces material spillage during load-and-carry operations. The electronically controlled suspension system is speed sensitive, ensuring that the boom cushioning function doesn’t interfere with stationary digging.

**Variable Traction Control System**
Machine rim pull can be set between 100% tractive effort down to 20% using the variable traction control system knob. Setting the correct rim pull to match underfoot conditions reduces tire slippage for increased tire life.

**Modulation Clutch**
The modulation clutch adjusts the tractive effort using the left brake pedal from 100% to 20% of the torque converter output torque.

- Useful for a smooth approach when loading haul trucks.
- Provides simple control of tire slippage.
- Reduces shock when shifting from forward to reverse.

**Remote Bucket & Boom Positioner with Shockless Stop Function**
The operator can set the bucket angle and remote boom positioner from the cab. Once the positioner is set, the bucket is smoothly stopped at the desired position with no shock. Both the upper and lower boom positions are adjustable in the cab with the push of a button.

**Throttle Lock with Auto Deceleration**
Low idle engine RPM can be set using the Throttle Lock switch located on the right console. Auto deceleration reduces engine to 680 RPM automatically if no operator command is sensed after ten seconds for additional fuel savings.
KomVision Monitor

KomVision with Radar Obstacle Detection
KomVision with Radar Obstacle Detection (optional) is a six-camera system that provides the operator with a bird’s-eye view of the machine and surrounding working area on a dedicated monitor. Radar obstacle detection provides an audible in cab alert when an object is detected by any of the four radar panels. KomVision with Radar Obstacle Detection improves operator situational aware on the jobsite.

LED Lighting Package
22 LED work lamps provide excellent visibility in various working conditions.

Rear View Monitoring System
The operator can view the rear working area of the machine with a full color monitor located on the right side of the cab. This monitor can be always on or only on when in reverse. Visual guidelines can be added for additional guidance. The rear view monitoring system is standard and uses a separate camera and dedicated monitor from KomVision with Radar Obstacle Detection system.
High Resolution 7-inch Color LCD Monitor
The machine monitor displays various machine information and allows for various settings of the machine. The LCD monitor is a 7-inch color LCD and displays maintenance information, operation records, and ecology guidance records. The switch panel is used to select various screens and the air conditioner control screen. By using the switch panel, users can display various user menus on the LCD screen and adjust machine settings.

Machine monitor
1. LCD unit
2. Engine coolant temperature gauge
3. Engine tachometer
4. Hydraulic oil temperature gauge
5. Speedometer
6. Oil pressure gauge
7. Air conditioner display
8. Message pilot lamp
9. Pilot lamps
10. Engine oil gauge
11. Torque converter oil temperature gauge
12. Fuel gauge
13. Message pilot lamp
14. Pilot lamps
15. Air conditioner display
16. Switch panel

Switch panel
1. Air conditioner switches / Numeral key pad
2. Function switches

Visual User Menu
Pressing the menu switch on the switch panel displays the user menu screen. The menus are grouped for each function, and use easy-to-understand icons which enable the machine to be operated intuitively.

Energy Saving Operation Ecology Guidance
In order to support optimum operation, an easy-to-read "Ecology gauge" is displayed on the machine monitor screen. In addition, the following five guidance messages are displayed for fuel saving operation.

1) Excessive engine idling event
2) Hydraulic relief pressure event
3) Dragging of brake event
4) Excessive stepping on accelerator event
5) Excessive digging event

Machine Monitor with Troubleshooting Function to Minimize Downtime
Various meters, gauges, and warning functions are centrally arranged on the machine monitor. The monitor simplifies start-up inspection and promptly warns the operator with a lamp and buzzer if any abnormalities should occur. In addition, abnormalities are indicated in four levels to identify proper level and urgency of response.

Operator Identification Function
Operator identification can be used to track operator performance and machine utilization. The data is transmitted via KOMTRAX Plus and can be used to analyze machine operation information by operator.

Operation Records, Fuel Consumption History, and Ecology Guidance Records
The ecology guidance menu enables the operator to check fuel consumption history, operation, and ecology guidance records. The records can be used to reduce overall fuel consumption.
MAINTENANCE FEATURES

Side-opening Engine Bay Doors
The wide access areas on both the left and right sides of the engine and standard LED engine bay lamps make daily maintenance easy. Large steps are provided on each side of the frame for additional convenience.

Reversing Fan
The engine cooling fan is driven hydraulically. The reversible fan can be controlled through the monitor.

Battery and Starter Isolators
Battery and starter isolators are located on the left side at the primary ingress location of the machine. The battery isolator disconnects power when performing service work on the machine. The starter isolator allows for cab power but prevents the engine from starting. Padlocks can be installed to lockout the machine.

Machine Immobilization Switch
The machine immobilization switch is located near the right side battery box. When activated, the transmission, steering, and work equipment are locked out. A status indicator lamp shows the state of the machine immobilization switch.

Anchorage Points
Nine ISO 14567 certified anchorage points for service lanyard tie-offs are located throughout the machine.
MAINTENANCE FEATURES

Swing-out Type Cooling Fan and Wide Core Radiator
The cooling fan swings out for easy cleaning. Wide cooling fin spacing reduces clogging.

Modular Radiator Core System
The modular core radiator allows for individual cores to be replaced without the need to remove the entire radiator assembly.

Engine Compartment
The WA900-8 engine compartment is configured for easy serviceability. Special attention was paid to the location of maintenance items such as the filters, dipsticks, and oil fill locations. The aftertreatment components are also easy to access.

Ground Level Service Center
Fill and drains for the transmission oil, hydraulic oil, engine oil, and coolant are accessible at the ground level service center. The auto-lubrication grease fill and live oil sampling ports are arranged to significantly reduced maintenance time.

Rear Full Fenders
Rear full fenders with steps and handrails are standard on both sides of the machine. The fenders protect the machine from materials that may be thrown by the tires and give technicians easy access to the engine compartment.

Fast Fuel System
The refueling port can be accessed from the ground level for reduced fueling time with the fast fill fuel coupler.

Maintenance Information
“Maintenance time caution lamp” display
When the remaining time to maintenance becomes less than 30 hours*, the maintenance time monitor icon illuminates. Pressing the menu switch displays the maintenance screen.

*: The setting can be changed within the range between 10 and 200 hours.
KOMTRAX EQUIPMENT MONITORING

WHAT
- KOMTRAX is Komatsu’s remote equipment monitoring and management system
- KOMTRAX continuously monitors and records machine health and operational data
- Information such as fuel consumption, utilization, and a detailed history lowering owning and operating cost

WHEN
- Know when your machines are running or idling and make decisions that will improve your fleet utilization
- Detailed movement records ensure you know when and where your equipment is moved
- Up to date records allow you to know when maintenance is due and help you plan for future maintenance needs

WHERE
- KOMTRAX data can be accessed virtually anywhere through your computer, the web or your smart phone
- Automatic alerts keep fleet managers up to date on the latest machine notifications

WHY
- Knowledge is power - make informed decisions to manage your fleet better
- Knowing your idle time and fuel consumption will help maximize your machine efficiency
- Take control of your equipment - any time, anywhere

WHO
- KOMTRAX is standard equipment on all Komatsu construction products

GET THE WHOLE STORY WITH KOMTRAX

KOMTRAX Plus
Assists Customer’s Equipment Management and Contributes to Fuel Cost Cutting

Equipment Management Support
KOMTRAX Plus enables expanded monitoring of the fleet via satellite and wireless LAN. Users can analyze "machine health" and performance from a remote location, on a near-real time basis. This includes component condition and trend data. By making this critical information readily accessible, KOMTRAX Plus is an effective tool in maximizing productivity and lowering operating costs.
**ENGINE**

Model: Komatsu SAA12V140E-7
Type: Water-cooled, 4-cycle
Aspiration: Turbo-charged, after-cooled, cooled EGR
Number of cylinders: 12
Bore: 140 mm
Stroke: 165 mm
Piston displacement: 30.48 ltr
Governor: All-speed, electronic

*EPA Tier 4 Final emissions certified

**TRANSMISSION**

Torque converter: Three-elements, one-stage, one-phase
Transmission: Full-powershift, planetary type

<table>
<thead>
<tr>
<th>Travel speed</th>
<th>Forward*</th>
<th>Reverse*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>7.6 km/h 4.7 mph</td>
<td>7.9 km/h 4.9 mph</td>
</tr>
<tr>
<td>2nd</td>
<td>11.9 km/h 7.4 mph</td>
<td>12.1 km/h 7.5 mph</td>
</tr>
<tr>
<td>3rd</td>
<td>23.3 km/h 14.5 mph</td>
<td>24.1 km/h 15.0 mph</td>
</tr>
</tbody>
</table>

*P-mode Measured with 45/65-R45 tires

**AXLES AND FINAL DRIVES**

Drive system: Four-wheel drive
Front: Fixed, full-floating
Rear: Center-pin support, full-floating, 20° total oscillation
Reduction gear: Conventional type
Differential gear: Planetary gear, single reduction

**HYDRAULIC SYSTEM**

Steering system:
Hydraulic pump: Piston type
Capacity: 2 x 220 ltr/min
Relief valve setting: 34.3 MPa 350 kgf/cm²
Hydraulic cylinders:
Type: Double-acting, piston type
Number of cylinders: 2
Bore x stroke: 160 mm x 576 mm 6.34 x 22.7°

Hydraulic system:
Capacity: 4 x 230 ltr/min
Relief valve setting: 34.3 MPa 350 kgf/cm²
Hydraulic cylinders:
Type: Double-acting, piston type
Number of cylinders: 2
Bore x stroke: 160 mm x 576 mm 6.34 x 22.7°

**SERVICE REFILL CAPACITIES**

Fuel tank: 370 ltr 97.7 U.S. gal
Engine: 1555 ltr 410.8 U.S. gal
Hydraulic system: 1020 ltr 269.5 U.S. gal
Axle front: 370 ltr 97.7 U.S. gal
Torque converter and transmission: 180 ltr 47.6 U.S. gal

**BUCKET SELECTION GUIDE**

```
<table>
<thead>
<tr>
<th>m³ (yd³)</th>
<th>Standard Boom</th>
<th>Excavating Bucket (spade nose) with Teeth &amp; Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.0 17.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>m³ (yd³)</th>
<th>Standard Boom</th>
<th>Excavating Bucket (spade nose) with Teeth &amp; Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.5 19.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>m³ (yd³)</th>
<th>High Lift Boom</th>
<th>Excavating Bucket (spade nose) with Teeth &amp; Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.5 15.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

**BRACKES**

Service brakes: Hydraulically actuated, wet multiple-disc
Parking brake: Wet multiple-disc

**STEERING SYSTEM**

Steering angle: 40° each direction
Minimum turning radius at the center of outside tire: 9880 mm 32° 5°
**DIMENSIONS**

Measured with 45/65 R45 (L-5) tires, ROPS/FOPS (ISO 3471/ISO 3449) cab

<table>
<thead>
<tr>
<th>Bucket capacity:</th>
<th>Standard Boom</th>
<th>High Lift Boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excavating Bucket</td>
<td>Excavating Bucket</td>
</tr>
<tr>
<td>Spade nose Teeth and Segments</td>
<td>Spade nose Teeth and Segments</td>
<td></td>
</tr>
<tr>
<td>Heaped bucket capacity</td>
<td>13.0 m³</td>
<td>11.5 m³</td>
</tr>
<tr>
<td>Struck bucket capacity</td>
<td>17.0 yd³</td>
<td>15.0 yd³</td>
</tr>
<tr>
<td>Bucket width</td>
<td>4935 mm</td>
<td>4935 mm</td>
</tr>
<tr>
<td>Bucket weight</td>
<td>13115 kg</td>
<td>12215 kg</td>
</tr>
<tr>
<td>Dumping clearance, max. height and 45° dump angle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15'1&quot;</td>
<td>26'5&quot;</td>
<td></td>
</tr>
<tr>
<td>Reach at max. height and 45° dump angle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8'10&quot;</td>
<td>10'1&quot;</td>
<td></td>
</tr>
<tr>
<td>Reach at 2130 mm 7° clearance and 45° dump angle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13'0&quot;</td>
<td>13'11&quot;</td>
<td></td>
</tr>
<tr>
<td>Reach with arm horizontal and bucket level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17'2&quot;</td>
<td>17'10&quot;</td>
<td></td>
</tr>
<tr>
<td>Operating height (fully raised)</td>
<td>9780 mm</td>
<td>10155 mm</td>
</tr>
<tr>
<td>32'1&quot;</td>
<td>33'4&quot;</td>
<td></td>
</tr>
<tr>
<td>Overall length (bucket on ground)</td>
<td>15355 mm</td>
<td>15610 mm</td>
</tr>
<tr>
<td>50'9&quot;</td>
<td>51'3&quot;</td>
<td></td>
</tr>
<tr>
<td>Loader clearance circle (bucket at carry, outside corner of bucket)</td>
<td>23340 mm</td>
<td>23840 mm</td>
</tr>
<tr>
<td>7'6&quot;</td>
<td>7'7&quot;</td>
<td></td>
</tr>
<tr>
<td>Digging depth: 0°</td>
<td>225 mm</td>
<td>225 mm</td>
</tr>
<tr>
<td>9&quot;</td>
<td>9&quot;</td>
<td></td>
</tr>
<tr>
<td>10’</td>
<td>660 mm</td>
<td>630 mm</td>
</tr>
<tr>
<td>2'2&quot;</td>
<td>2'1&quot;</td>
<td></td>
</tr>
<tr>
<td>Static tipping load: straight</td>
<td>71840 kg</td>
<td>65620 kg</td>
</tr>
<tr>
<td>95880 lb</td>
<td>144,667 lb</td>
<td></td>
</tr>
<tr>
<td>40° full turn</td>
<td>63610 kg</td>
<td>58100 kg</td>
</tr>
<tr>
<td>140,236 lb</td>
<td>128,089 lb</td>
<td></td>
</tr>
<tr>
<td>Breakout force</td>
<td>71900 kgf</td>
<td>77000 kgf</td>
</tr>
<tr>
<td>160,511 lb</td>
<td>169,754 lb</td>
<td></td>
</tr>
<tr>
<td>Operating weight</td>
<td>116400 kg</td>
<td>116720 kg</td>
</tr>
<tr>
<td>256,618 lb</td>
<td>257,324 lb</td>
<td></td>
</tr>
</tbody>
</table>

*1 At the end of tooth. *2 At the end of segment edges.

All dimensions, weights, and performance values based on ISO 7131 and 7546 standards.
Static tipping load, operating weight and overall length shown include lubricant, coolant, full fuel tank, ROPS (ISO 3471) cab and operator. Machine stability and operating weight affected by counterweight, tire size, and other attachments.
STANDARD EQUIPMENT FOR BASE MACHINE

ENGINE AND RELATED COMPONENTS:
- Air Cleaner, Double Element with Dust Indicator and Evacuator
- Engine, KOMATSU SAA12V140E-7, 12 Cylinder, Turbocharged, After Cooled, Diesel
- Gross HP: 900HP (672kW) / 2050 RPM (SAE J1995)
- Net HP: 899 HP (671kW) / 2050 RPM (ISO 9249 / SAE J1349)
- Engine Pre-lubrication System
- Exhaust Pipe Glasswooled with 2 x KDPF/KDOC
- Fuel Pre-Filter with Water Separator
- Hydraulic Cooling Fan, Reversible, Swing Out
- Radiator, Modular Core, Swing Out
- Lattice Type Mask

ELECTRICAL SYSTEM:
- Access Stair Lamps, (1 RH & 2 LH)
- Alternator, 24V (140 Ampere)
- Back-up Alarm
- Back-up Lights, Rear, LED
- Batteries, 4 x 12V, (160Ah)
- Beacon, Amber Color
- Circuit Breaker
- Emergency Stop Switches, Ground Level (RH & LH)
- Heavy Duty Wiring Harness
- Horn, Electric
- Instrument Monitor Panel, Multi Color Display
- Secondary Shutdown Switch, Engine, Cab Mounted
- Starting Motors, 11kW / 2 x 24V, Direct Electric
- Stop and Tail Lights, LED
- Turn Signals, (2 Front, 2 Rear) with Hazard Switch, LED
- Work Lamps, LED, 22:
  - 6 Front Work Lamps (3 RH & 3 LH)
  - 6 Rear Work Lamps (3 RH & 3 LH)
  - 4 Side Work Lamps (2 RH & 2 LH)
  - 2 Axle Mounted Work Lamps (Front)
  - 4 Cab Mounted Work Lamps (2 Front & 2 Rear)

POWER TRAIN & CONTROLS:
- 3rd gear prohibition and speed limit control
- Brake Cooling
- Brake, Parking, Wet Multiple Disc, SAHR
- Brakes, Service, Wet Multiple Disc, Sun Gear
- Powertrain Underguard
- Secondary Steering (ISO 5010)
- Steering, Advanced Joystick Steering System (AJSS)
- Transmission, 3-speed Planetary Automatic Powershift Modulation Clutch Kickdown, Automatic and Manual Control
- Throttle Lock with Auto Deceleration
- Variable Traction Control System

OPERATOR ENVIRONMENT:
- 45 Degree Stairways (LH & RH)
- Access Ladder (LH & RH)
- Cab, Steel, LH Entrance, ROPS/FOPS
- Access Stair Lamps, (1 RH & 2 LH)
- 4 Side, Rear (Intermittent)
- Cap Lock & Cover for Fuel Tank
- Electronic Control Unit (ECU)
- Emergency Stop Switches, Ground Level (RH & LH)
- Engine Bay Lamps, LED
- Engine Pre-lubrication System
- Exhaust Pipe Glasswooled with 2 x KDPF/KDOC
- Flow-Through Microfilter
- Fuel Pretreatment System
- Fuel Pre-Filter with Water Separator
- Hydraulic Cooling Fan, Reversible, Swing Out
- Horn, Electric
- Instrument Monitor Panel, Multi Color Display
- Secondary Shutdown Switch, Engine, Cab Mounted
- Wiper/Washer Front (Intermittent), Blade
- Throttle Lock with Auto Deceleration
- Variable Traction Control System

OPTIONAL EQUIPMENT
- 15.0 yd³ bucket
- 17.0 yd³ bucket
- 19.0 yd³ bucket
- 45/65R45 (L-S) tubeless tires
- 45 deg Power Staircase
- Cold weather arrangement (electric heaters for hydraulic oil, transmission oil, engine oil, and coolant)
- High lift boom
- KomVision (with radar)

MAINTENANCE:
- Anchor Points, Tie Off Type
- Battery Isolator, Lockable
- Engine Bay Lamps, LED
- Fast Fuel System
- Ground Level Service Center: Grease Gauge, Indicator Lamp, Refill Port, Centralized KOWA Sampling Fluids Ports, Transmission, Hydraulic & Engine Oil, Torque Converter & Engine Coolant
- Jump Start Receptacle
- Machine Immobilization Switch, Lockable
- Starter Isolator, Lockable

HYDRAULICS & WORK EQUIPMENT:
- 2-spool Valve for Boom and Bucket with Electronic Pilot Controls
- Automatic Digging System
- Boom Positioner with Kick-Out
- Bucket Positioner with Kick-Out
- Electronically Controlled Suspension System (ECSS)
- Inline Filters, Steering and Hydraulic
- Semi-Auto Approach and Dump System
- Wall Digging Protection Control
- Work Equipment Shock Reduction Control

OTHER STANDARD EQUIPMENT:
- Auto Idle Shutdown
- Auto-Lubrication System
- Front Fenders (LH & RH)
- Komatsu SmartLoader Logic
- KOMTRAX Plus
- Load Meter System
- Platform, Counterweight with Handrails
- Platform, Front with Handrails
- Rims for 45/65-45 Tires
- Tow Hitch

VANDALISM PROTECTION:
- Battery Box Lock
- Cap Lock & Cover for Fuel Tank
- Radiator, Filler Lock and Cover

Note: All comparisons and claims of improved performance made herein are made with respect to the prior Komatsu model unless otherwise specifically stated.

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