

# KOMATSU<sup>®</sup>

# WA475-10

Tier 4 Final Engine

## WHEEL LOADER

# WA475



Photos may include optional equipment.

### NET HORSEPOWER

290 HP @ 1600 rpm  
216 kW @ 1600 rpm

### OPERATING WEIGHT

56,240 – 60,400 lb  
25,510 – 27,397 kg

### BUCKET CAPACITY

5.5 – 6.0 yd<sup>3</sup>  
4.2 – 4.6 m<sup>3</sup>

# WALK-AROUND

WA475-10



Photos may include optional equipment. WA475-10 Yard Loader shown.

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290 HP @ 1600 rpm  
216 kW @ 1600 rpm

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56,240 – 60,400 lb  
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## PERFORMANCE, DURABILITY AND FUEL ECONOMY

### New KHMT Transmission

**Komatsu SmartLoader Logic** helps reduce fuel consumption with no decrease in production.



A powerful **Komatsu SAA6D125E-7 engine** provides a net output of 216 kW **290 HP** with 17% improved fuel consumption. This engine is EPA Tier 4 Final emissions certified.

**Variable Geometry Turbocharger (VGT)** uses a hydraulic actuator to provide optimum air flow under all speed and load conditions.

**Komatsu Diesel Particulate Filter (KDPF) and Selective Catalytic Reduction (SCR) systems** reduce particulate matter and NOx while providing automatic regeneration that does not interfere with daily operation.

**Variable displacement piston pumps with CLSS** provides quick response and smooth operation to maximize productivity.

### Rearview monitoring system (standard)

**Advanced diagnostic system** continuously monitors machine operation and vital systems to identify machine issues and assist with troubleshooting.

### Cooling

- Hydraulically driven, variable speed
- Auto-reversing fan is standard
- Wider core coolers resist clogging
- Swing out fan for easy cleaning

**Remote boom and bucket positioners** can set kick-outs from inside the cab.

### Economy & Productivity

- Komatsu Hydraulic Mechanical Transmission (KHMT)
- Optimized control system of KHMT
- 8% increase in breakout force
- 20% increase in boom lift force
- New bucket design

### Easy Operation

- Independent work equipment control
- Travel speed control dial
- Auto hill holding function
- Automatic digging system

### Operator Environment

- Large front and rear glass with high visibility
- New 5-way adjustable console
- Command selector for intuitive monitor operation
- User interface preferred switch layout
- Powered adjustable rearview mirror with heater

### Easy Maintenance

- Powered tiltable engine hood
- Engine hood side covers for daily maintenance
- Improved maintainability of components

### Convenience Features

- Tie-offs
- LED headlamps and work equipment lights

### Ecology

- Komatsu's proven U.S. EPA Tier 4 Final emission regulations-compliant engine

### Durability & Reliability

- High reliability Komatsu components

### Information and Communication Technology (ICT)

- KOMTRAX®

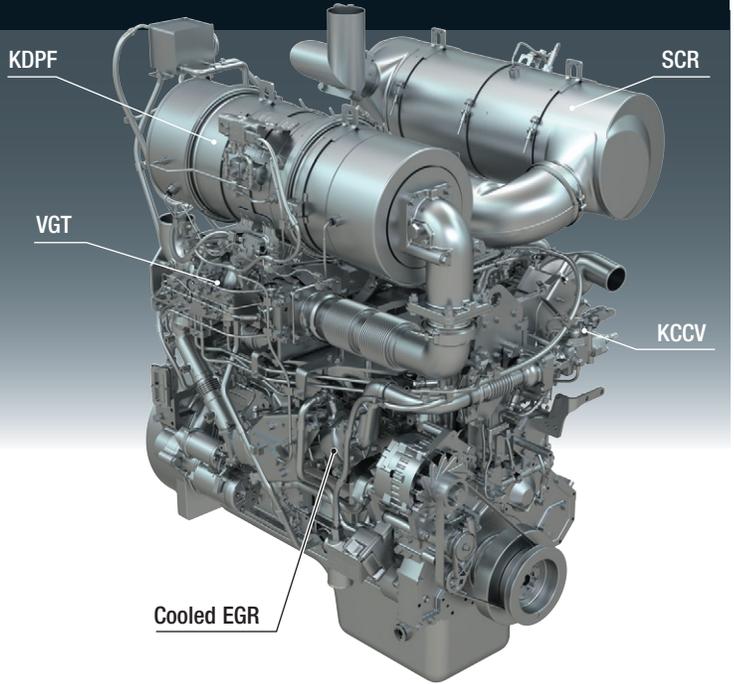
**Komatsu Auto Idle Shutdown** helps reduce idle time and operating costs.

# PERFORMANCE FEATURES

## KOMATSU NEW ENGINE TECHNOLOGIES

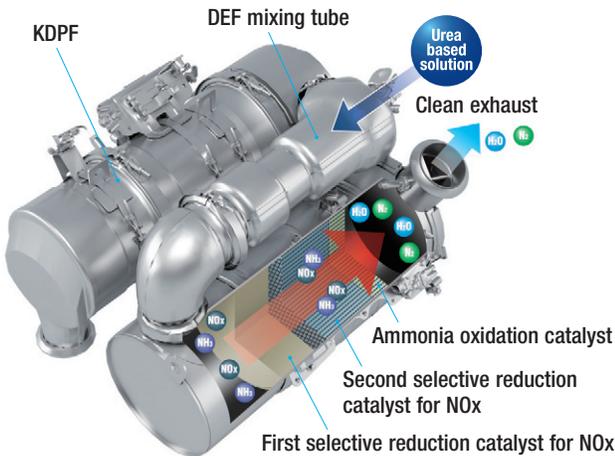
### U.S. EPA Tier 4 Final Engine

The Komatsu SAA6D125E-7 engine is U.S. EPA Tier 4 Final emissions certified and provides exceptional performance while reducing fuel consumption. It is based on Komatsu proprietary technologies developed over many years.



### Technologies Applied to New Engine Heavy-duty aftertreatment system

This new system combines a Komatsu Diesel Particulate Filter (KDPF) and SCR. The SCR NOx reduction system injects the correct amount of Diesel Exhaust Fluid (DEF) at the proper rate, thereby decomposing NOx into H<sub>2</sub>O and N<sub>2</sub>.



### Electronic control system

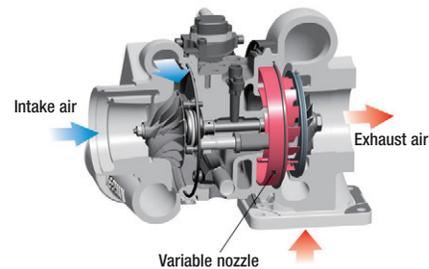
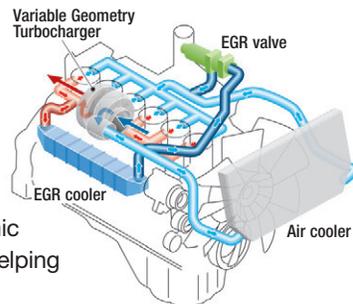
The electronic control system performs high-speed processing of all signals from sensors installed in the vehicle and engine to ensure total control of equipment in all conditions of use. Conditions of the engine are displayed via an on-board network on the monitor inside the cab, providing necessary information to the operator. Furthermore, managing the information via KOMTRAX helps customers engage in appropriate maintenance.

### Variable Geometry Turbocharger (VGT) system

The VGT system features Komatsu design hydraulic technology for variable control of air-flow and supplies optimal air according to load conditions. The upgraded version realizes better exhaust temperature management.

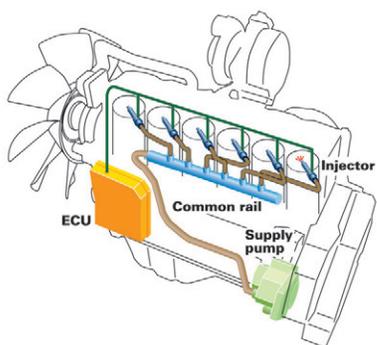
### Heavy-duty cooled Exhaust Gas Recirculation (EGR) system

The system recirculates a portion of exhaust gas into air intake and lowers combustion temperatures, thereby reducing NOx emissions. Furthermore, while EGR gas flow is increased, by incorporating a high-efficiency and compactly designed cooling system, the system achieves a dynamic reduction of NOx, while helping reduce fuel consumption.



### Heavy-duty High-Pressure Common Rail (HPCR) fuel injection system

The system is designed to achieve an optimal injection of high-pressure fuel digitally, thereby bringing near complete combustion to reduce PM emissions.

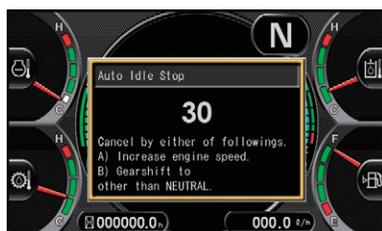


### Komatsu SmartLoader Logic

The WA475-10 provides Komatsu SmartLoader Logic, an engine control system. This technology creates enough 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. This system optimizes the engine torque for all applications to minimize fuel consumption. Komatsu SmartLoader Logic functions automatically and doesn't interfere with operation, saving fuel without decreasing production.

### Komatsu Auto Idle Shutdown

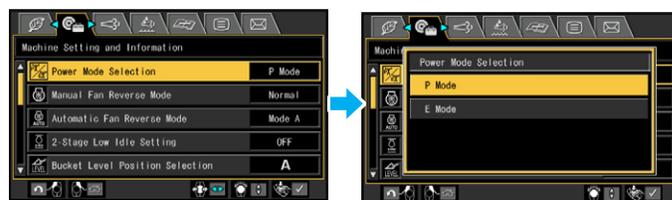
In order to reduce idle time, Komatsu offers Komatsu Auto Idle Shutdown. This function will shut the engine off and apply the parking brake and hydraulic lock after a preset idle time limit. This time limit can be set by the operator or service technician and may range from 3 minutes to 60 minutes.



### Dual-mode Engine Power Select System

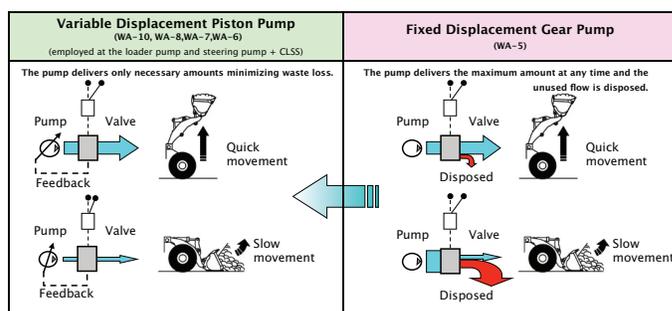
This wheel loader offers two selectable operating modes — Economy and Power.

- Achieve low fuel consumption**  
 E mode suppresses wasteful acceleration, while maintaining the same bucket fill rates and climbing speed.
- Bucket filling rate is same as P mode**  
 When digging, rim pull force is automatically adjusted to provide sufficient rim pull force so the bucket filling rate is the same as it would be in P mode.
- Climbing speed is same as P mode**  
 When driving, if a decrease in acceleration is detected, the rim pull force will automatically and smoothly change so max vehicle speed will be the same as it would be in P mode.



### Variable Displacement Piston Pump & CLSS

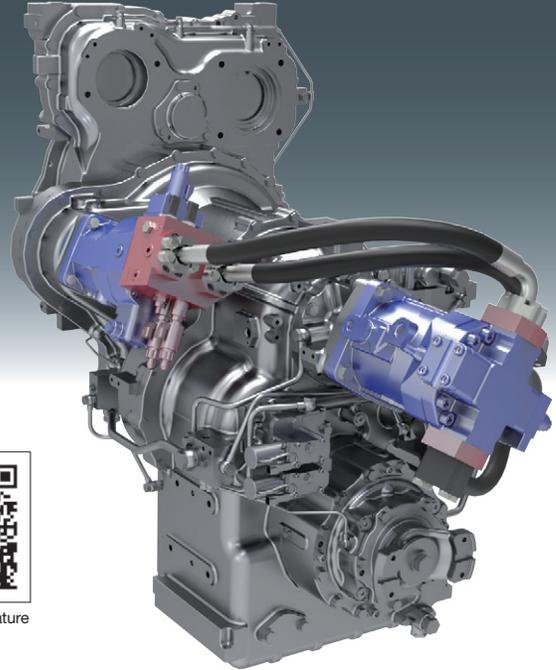
The variable displacement piston pump combined with the Closed-center Load Sensing System (CLSS) delivers hydraulic flow just as the job requires preventing wasted hydraulic flow. Minimized loss contributes to better fuel economy.



# PERFORMANCE FEATURES

## Komatsu Hydraulic Mechanical Transmission (KHMT)

Fuel economy is greatly improved with the KHMT without losing productivity.



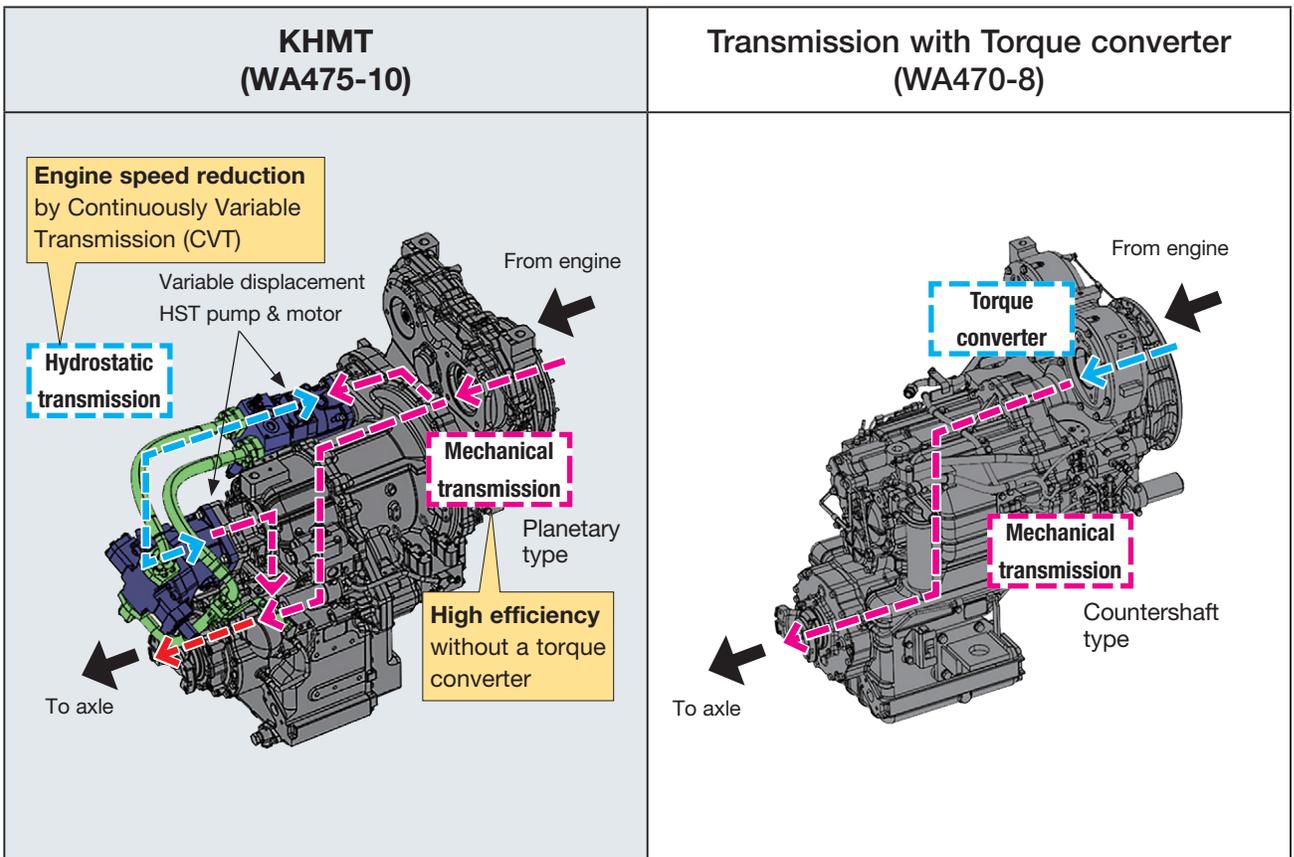
Fuel efficiency (tons/gal)

Increased by up to **30%**

\* Compared with WA470-8.



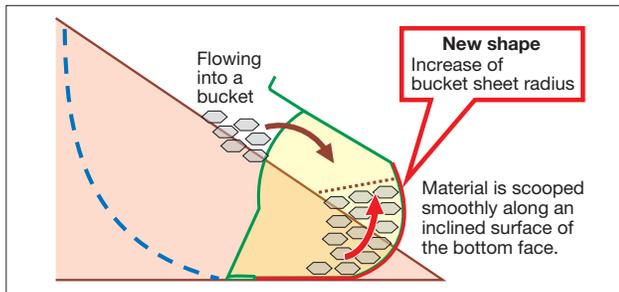
Movie for this feature



WA475-10

### New Bucket Design

The newly designed bucket helps to improve overall machine productivity. Generous curves on the side wall and wrap improve pile penetration and make it easy to fill. Material retention is improved in carry operations.



### Optimized Control System of KHMT

The control system of the KHMT comprehensively judges the machine condition and the loads during operation. It controls the engine speed, and the distribution of engine power automatically to promote optimized acceleration, traction and power for the work equipment, while maintaining a lower, more constant engine speed. In addition, an operator can control the machine intuitively and help achieve optimal operation easily. As a result, the WA475-10 has high productivity, low fuel consumption and helps reduce operator fatigue operator fatigue.

### Breakout Force (by Lift Cylinder)

Breakout Force may be increased by up to 8% compared to the WA470-8. Boom lift force may be increased by up to 20% compared to the WA470-8.

### Breakout Force (by Lift Cylinder)

**Up to +8%**



### Helps eliminate waste and improve efficiency

#### • High-performance load meter NEW

Load meter accuracy has been improved with more convenient functionality



#### • Automatic measurement function

Weight in the bucket can be taken by simply pressing a switch.

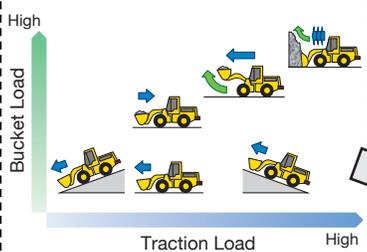
#### • Dump monitoring

Allows for real time monitoring of the weight of any material in the bucket after dumping.

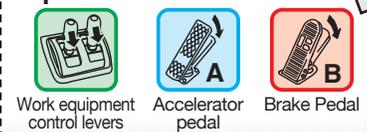
#### • Easy

Calibration can be done with onsite materials and truck scale. Empty bucket calibration can be done anytime. Dedicated weight for calibration is no longer needed.

### - Work Situation & Load

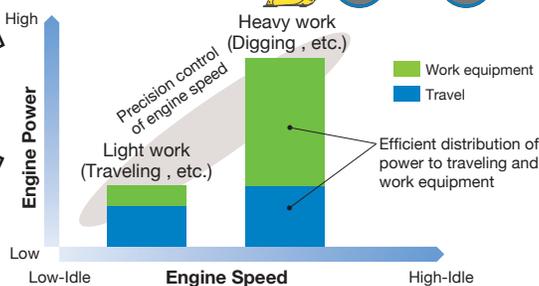


### - Operator Command



### Precision control system of KHMT

1. Efficient Engine Speed
2. Efficient Engine Power Supply
3. Efficient Engine Power Distribution



# EASY OPERATION

## Independent Work Equipment Control

### Simple Operation for Work Equipment

The operator no longer needs to use the accelerator to speed up the work equipment controls. The work equipment speed is now controlled with the levers only.

•Work equipment control levers



•Accelerator pedal



•Brake pedal



Movie for this feature

Operation	<p><b>Raise work equipment</b></p>
WA475-10	<p><b>Only operation of work equipment control levers</b></p> <p>Control speed by lever angle</p>
Conventional model	<p><b>Combined operation of work equipment</b></p> <p>Control work equipment speed by accelerator</p>

### Easy Approach

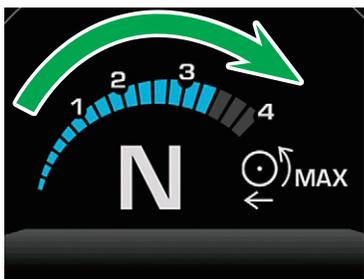
Since operator can control work equipment speed only with levers, they can easily operate work equipment and travel. Operator can easily approach dump truck with no dragging of the brake, thus fuel economy is improved.

Operation	Start raising work equipment	Simultaneously operate work equipment and travel system	Approach dump truck
WA475-10	<p>Work equipment operation</p>	<p><b>Easy operation</b></p>	
Travel operation	<p><b>Fuel economy is improved due to no dragging of brake.</b></p>	<p><b>Brake is used to decelerate and stop</b></p>	
Conventional model	<p>Work equipment operation</p>	<p><b>Combined operation of levers and accelerator to increase work equipment speed</b></p>	
Travel operation	<p><b>Combined operation of brake and accelerator</b></p>		

WA475-10

### Travel Speed Control Dial

The operator can control max. travel speed with travel speed control dial. It makes various operations such as V-shape, travel on level ground and downhill easier.



Movie for this feature

#### •When traveling downhill

The operator can control the downhill travel speed with the dial. Load spillage is reduced by smooth deceleration. Axle overheating is also prevented because of the reduced need for using the brake pedal.



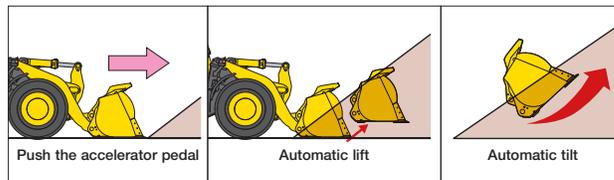
### Auto Hill Holding Function

This function prevents the machine from rolling back on uphill applications such as stock piling operation even if the operator does not apply the brake pedal. It makes operation easier and the operator is less fatigued.



### Automatic Digging System

The automatic digging system actuates the bucket tilt and lifting operations by detecting the sensing pressure applied to the work equipment. This system can alleviate operator fatigue and realize the ideal load capacity. The ON/OFF changeover can be done on the R.H. front switch panel easily.



### Max. Traction Switch

Even when the traction control is ON, the operator can increase the rim pull simply by pressing the Max. Traction Switch. The rim pull can be controlled easily during operation.

Max. Traction Switch



### 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 less shock.

### Electronically Controlled Suspension System

The Electronically Controlled Suspension System or ride control system uses an accumulator which absorbs some of 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.

# OPERATOR ENVIRONMENT



## Newly Designed Cab

A pressurized, large, four-post cab provides a quiet operator environment with impressive visibility. Visibility is improved by adding a lower glass area and eliminating the rear pillars. This contributes to comfortable operation together with the newly designed console. In addition, the outside air intake type, fully automatic, large-capacity air conditioner is installed as standard, keeping the inside of the cab comfortable all year round.

## Exceptional Visibility

The interior is newly designed and a glass area is added to the lower position of the front corner of the cab and side door. The areas around the wheels can now be visually checked easily.

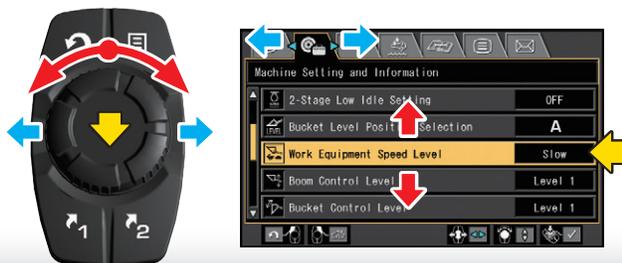


## 5-way Adjustable Console and Integrated Switches

To suit various types of operator posture during operation, the following have been added: console tilt, armrest tilt, armrest swing, as well as fore/aft and armrest height has been added. Switches for frequent use during operation (Horn Switch, Parking Brake Switch, Travel Speed Control Dial, Air Conditioner Switch, Working Lamp Switch, Directional Selector Switch, etc.) are integrated into R.H. console and front pillar. The operator can access these switches without changing posture.

## Command Selector

Command selector makes user menu control intuitive. Frequent access can be registered to the shortcut switch.



- 1 Console fore/aft
- 2 Armrest height
- 3 Armrest swing **NEW**
- 4 Armrest tilt **NEW**
- 5 Console tilt **NEW**



### New Operator Seat

The operator seat dampens vibrations from the machine, and provides a comfortable ride for the operator. In addition, the operator is less fatigued after long hours of operation thanks to the seat adjustment function which can be customized to the operator.



### Advanced Joystick Steering System (AJSS)

Minimize operator fatigue with the advanced joystick steering system (AJSS) that provides precise wrist and finger steering and control, even during full speed travel.



### Storage Space, AUX and Power Outlet (R.H.)

- Smartphone holder with USB Charging Port
- Various connectors
  - ①AUX ②12V ③USB
- Storage space (Operation and Maintenance Manual pocket, magazine rack, tray)



### Large Utility Space (L.H.)

A multi-purpose space is provided on the left side of the seat, featuring a drink holder and an area for a large cooler box on the floor.

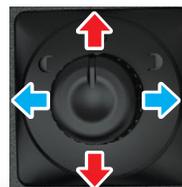


### Multifunction Audio

The cab is equipped with an AM/FM radio with AUX, USB and Bluetooth® wireless technology.

### Electric Mirror with Heater

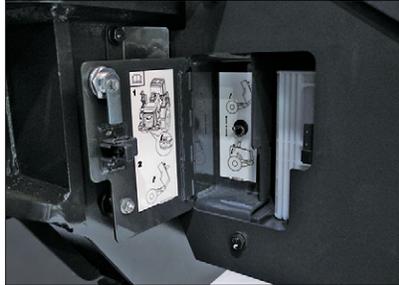
Electric mirrors can be adjusted with a switch in the cab.



# MAINTENANCE FEATURES

## Powered Tiltable Engine Hood

The engine hood can be opened and closed using an electric motor switch. The engine compartment is greatly improved and easy to maintain. The hood control switch is located near the battery box on the left side of machine.



## Swing-out Type Cooling Fan

Swing out type hydraulic cooling fan can be opened and closed with a single touch. The radiator can be cleaned from rear as well.



## Auto Reversing Fan

The engine cooling fan is driven hydraulically. It can be set to reverse automatically during operation. Fan reverse mode and timing can be controlled through the monitor.

## Easy Window Cleaning

Wide steps, a roof handrail and tie-off points are installed to provide easy window cleaning.



Anchor point of Tie-off



Steps



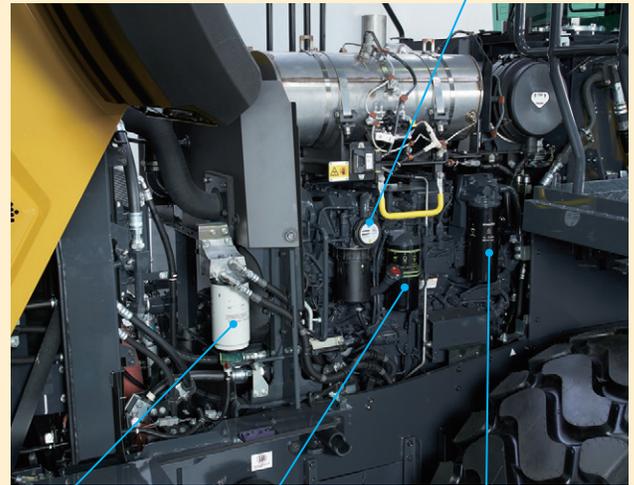
Roof handrail

## Downtime Reduction

The aftertreatment devices and engine can be easily replaced by opening the engine hood. In addition, the cab can be easily replaced as well.

From R.H. side of machine

Komatsu Closed Crankcase Ventilation (KCCV)



Fuel Prefilter \*

Fuel filter

Engine oil filter

\* Replaceable from engine hood side cover



### Engine Hood Side Covers

The operator can access engine areas that are serviced every day from the engine R.H. and L.H. hood side covers. The side-by-side type radiator can be easily cleaned.



### Air Cleaner

The air cleaner is located on the right side platform for easy access.



### Battery Disconnect Switch

The battery disconnect switch is located in the right side of the engine. This can be used to disconnect power when performing service work on the machine. This switch can be locked out by using a lock out hasp.



### DEF Tank

The DEF tank is located on the right hand side of the machine behind a ladder for easy access. The inside of the cover has a holder for the DEF tank cap.



## Maintenance Information

### •Maintenance time display

Maintenance	Interval	Remain
Air Cleaner Cleaning or Change	—	—
Coolant Change	—	—
Fuel Prefilter Change	500 h	499 h
Engine Oil Change	500 h	10 h
Engine Oil Filter Change	500 h	499 h

### •Aftertreatment devices regeneration display



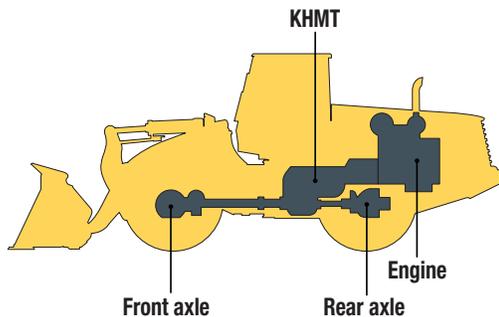
### •Supports the DEF level and refill timing



# DURABILITY & RELIABILITY

## Komatsu Components

Komatsu manufactures the engine, Hydraulic Mechanical Transmission, hydraulic units, electric parts, and even each bolt on this wheel loader. Komatsu loaders are manufactured with an integrated production system under a strict quality control program.



## Wet Multiple-disc Brakes and Fully Hydraulic Braking System

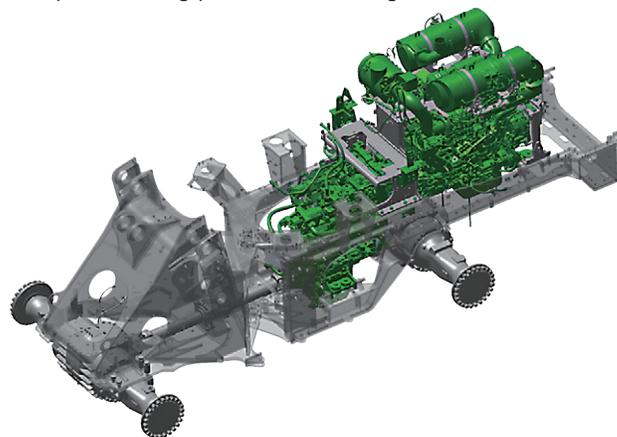
Wet multiple-disc brakes are fully sealed. Contaminants are kept out, reducing wear and resulting maintenance. Brakes require no adjustments for wear, meaning lower maintenance costs and higher reliability. The parking brake is also adjustment-free, with wet multiple-disc for high reliability and long life. Added reliability is designed into the braking system by the use of two independent hydraulic circuits, providing hydraulic backup should one of the circuits fail. Fully hydraulic brakes mean no air system to bleed and no condensation of water in the system that can lead to contamination, corrosion, and freezing.

## Cation Electrodeposition Primer Paint/Powder Coating Final Paint

Cation electrodeposition paint is applied as a primer paint and powder coating is applied as topcoat to the exterior metal sheet parts. This process results in a beautiful rust resistant machine, even in the most severe environments. Some external parts are made of plastic providing long life and high impact resistance.

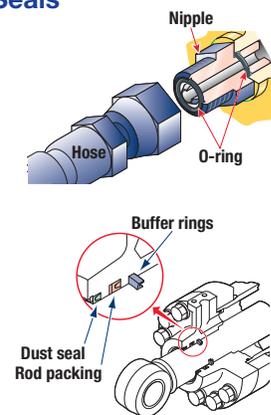
## High-rigidity Frames and Loader Linkage

The front and rear frames and the loader linkage have more torsional rigidity to provide increased resistance to stresses. The frames and loader linkage are designed to accommodate actual working loads, and simulated computer testing proves their strength.



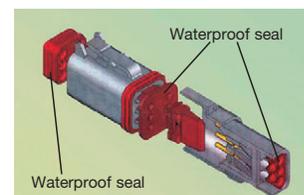
## Flat Face-to-face O-ring Seals

Flat face-to-face O-ring seals are used to securely seal hydraulic hose connections and to prevent oil leakage. In addition, buffer rings are installed to the head side of the all-hydraulic cylinders to lower the load on the rod seals and maximize the reliability.



## Sealed Connectors

Main harnesses and controller connectors are equipped with sealed connectors providing high reliability, water resistance and dust resistance.

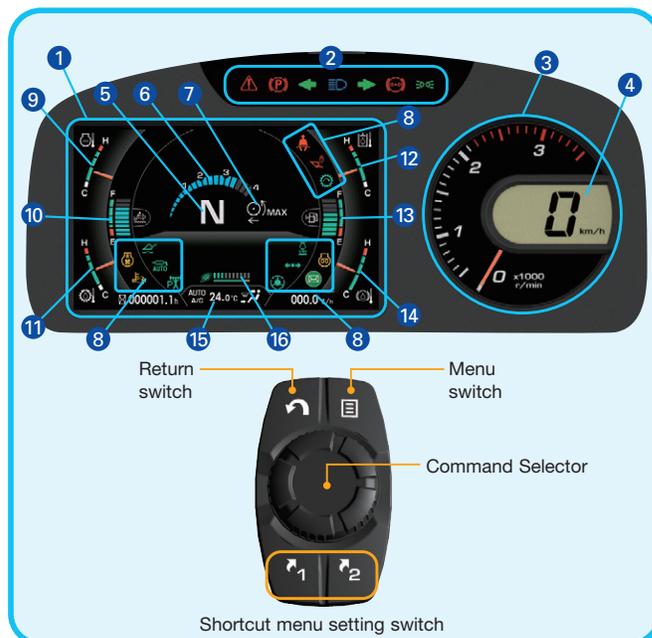


### High Resolution 7-inch Color Liquid Crystal Display (LCD) Monitor

The machine monitor displays various machine information and allows for various settings of the machine. The monitor is a 7-inch color LCD monitor displays maintenance information, operation record, Ecology guidance record, etc. The command selector is used to select various screens. By using the command selector, you can display various user menus on the LCD screen and adjust the machine settings.

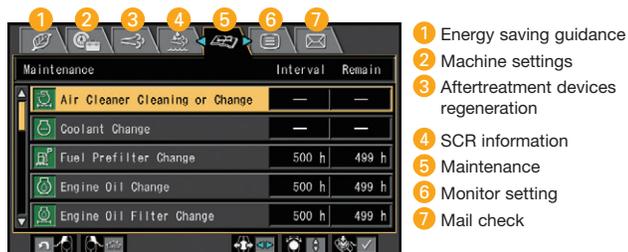
#### Machine monitor

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| 1 LCD unit                        | 9 Engine coolant temperature gauge    |
| 2 LED unit                        | 10 DEF level gauge                    |
| 3 Engine tachometer               | 11 Transmission oil temperature gauge |
| 4 Speedometer                     | 12 Hydraulic oil temperature gauge    |
| 5 Shift lever position display    | 13 Fuel gauge                         |
| 6 Travel speed control dial gauge | 14 Brake oil temperature gauge        |
| 7 Traction level display          | 15 Air conditioner display            |
| 8 Pilot lamps                     | 16 Ecology gauge                      |



### Visual User Menu

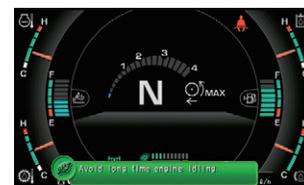
Pressing the menu switch on the command selector displays the user menu screen. The menus are grouped for each function, and use easy-to-understand icons which enable the machine to be operated intuitively.



### Energy Saving Operation Ecology Guidance

In order to support optimum operation, the following guidance messages are displayed for fuel saving operation.

- 1) Excessive engine idling event
- 2) Hydraulic relief pressure event
- 3) Excessive digging event



The Ecology guidance menu enables the operator to check the operation record, fuel consumption history and Ecology guidance record by pushing the button. The records can be used to reduce the overall fuel consumption.

### 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.



# KOMATSU PARTS & SERVICE SUPPORT



## KOMATSU CARE

### Program Includes:

The WA475-10 comes standard with complimentary factory scheduled maintenance for the first 3 Years or 2,000 Hours, whichever comes first.

### Planned Maintenance Intervals at:

500/1000/1500/2000 hour intervals. (250 hr. initial interval for some products) Complimentary Maintenance Interval includes: Replacement of Oils & Fluid Filters with genuine Komatsu Parts, 50-Point inspection, Komatsu Oil & Wear Analysis Sampling (KOWA) / Travel & Mileage (distance set by distributor; additional charges may apply)

### Benefits of Using Komatsu CARE

- Assurance of Proper Maintenance with OEM Parts & Service
- Increased Uptime & Efficiency
- Factory Certified Technicians Performing Work
- Cost of Ownership Savings
- Transferable Upon Resale

### Complimentary KDPF Exchanges

The WA475-10 comes standard with 2 Complimentary KDPF Exchange units for the first 5 Years or 9000 hours whichever comes first. The suggested KDPF Exchange unit service intervals are 4500 hours & 9000 hours. End user must have authorized Komatsu distributor perform the removal & installation of the KDPF.

### Complimentary SCR Maintenance

The WA475-10 also includes 2 factory recommended services of the Selective Catalytic Reduction (SCR) Diesel Exhaust Fluid (DEF) system during the first 5 Years or 9000 hours whichever comes first. The service includes factory recommended DEF tank flush & strainer cleaning at the suggested service intervals of 4500 hours & 9000 hours.

Interval PM	i250	500	1000	1500	2000
CLEAN AC FRESH AND RECIRC AIR FILTERS	✓				
REPLACE HYDRAULIC OIL FILTER ELEMENT	✓				✓
REPLACE TRANSMISSION OIL FILTER	✓		✓		✓
KOWA SAMPLING - (Engine, Front Axle, Rear Axle, Transmission, Hydraulics)	✓	✓	✓	✓	✓
CHECK AND CLEAN FUEL BREATHER ELEMENT	✓	✓	✓	✓	✓
CHECK AND CLEAN AIR CLEANER	✓	✓	✓	✓	✓
LUBRICATE REAR AXLE PIVOT PIN	✓	✓	✓	✓	✓
LUBRICATE WORK EQUIPMENT	✓	✓	✓	✓	✓
DRAIN WATER AND SEDIMENT FROM FUEL TANK	✓	✓	✓	✓	✓
COMPLETE 50 POINT INSPECTION FORM; LEAVE PINK COPY WITH CUSTOMER OR IN CAB	✓	✓	✓	✓	✓
RESET MONITOR PANEL MAINTENANCE COUNTER FOR APPROPRIATE ITEMS	✓	✓	✓	✓	✓
REPLACE AC FRESH & RECIRC AIR FILTER		✓	✓	✓	✓
CHANGE ENGINE OIL		✓	✓	✓	✓
REPLACE ENGINE OIL FILTER		✓	✓	✓	✓
REPLACE FUEL PRE-FILTER		✓	✓	✓	✓
REPLACE FUEL MAIN FILTER			✓	✓	✓
CHANGE TRANSMISSION OIL			✓	✓	✓
CLEAN TRANSMISSION OIL STRAINER			✓	✓	✓
CLEAN TRANSMISSION BREATHER ELEMENT			✓	✓	✓
REPLACE DEF TANK BREATHER			✓	✓	✓
LUBRICATE CENTER HINGE PIN			✓	✓	✓
LUBRICATE DRIVE SHAFT CENTER SUPPORT			✓	✓	✓
CHANGE OIL IN HYDRAULIC TANK					✓
CLEAN HYDRAULIC TANK STRAINER					✓
REPLACE HYDRAULIC TANK BREATHER ELEMENT					✓
CHANGE FRONT AND REAR AXLE OIL					✓
REPLACE DEF PUMP FILTER					✓
REPLACE KCCV FILTER					✓
FACTORY TRAINED TECHNICIAN LABOR	✓	✓	✓	✓	✓
2 KDPF Exchanges suggested at 4,500 Hrs and 9,000 Hrs.					
2 SCR System Maintenance Services suggested at 4,500 Hrs. and 9000 Hrs.					

## Komatsu CARE® – Extended Coverage

- Extended Coverage can provide peace of mind by protecting customers from unplanned expenses that effect cash flow
- Purchasing extended coverage locks-in the cost of covered parts and labor for the coverage period and helps turn these into fixed costs



## Komatsu Parts Support

- 24/7/365 to fulfill your parts needs
- 9 parts Distribution Centers strategically located across the U.S. and Canada
- Distributor network of more than 300 locations across U.S. and Canada to serve you
- Online part ordering through Komatsu eParts
- Remanufactured components with same-as-new warranties at a significant cost reduction



## Komatsu Oil and Wear Analysis (KOWA)

- KOWA detects fuel dilution, coolant leaks, and measures wear metals
- Proactively maintain your equipment
- Maximize availability and performance
- Can identify potential problems before they lead to major repairs
- Reduce life cycle cost by extending component life

\* Certain exclusions and limitations apply. Refer to the customer certificate for complete program details and eligibility. Komatsu® and Komatsu Care® are registered trademarks of Komatsu Ltd. Copyright 2019 Komatsu America Corp.

WA475-10

# KOMTRAX EQUIPMENT MONITORING

GET THE WHOLE STORY WITH  
**KOMTRAX**<sup>®</sup>

✓ **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



**KOMTRAX**<sup>®</sup>

For construction and compact equipment.

**KOMTRAX Plus**<sup>®</sup>

For production and mining class machines.

# SPECIFICATIONS



## ENGINE

Model..... Komatsu SAA6D125E-7\*  
 Type..... Water-cooled, 4-cycle  
 Aspiration..... Turbo-charged, after-cooled, cooled EGR  
 Number of cylinders..... 6  
 Bore..... 125 mm **4.9"**  
 Stroke..... 150 mm **5.9"**  
 Piston displacement..... 11.04 ltr **674 in<sup>3</sup>**  
 Governor..... All-speed, electronic  
 Horsepower:  
   SAE J1995..... Gross 217 kW **291 HP**  
   ISO 9249 / SAE J1349..... Net 216 kW **290 HP**  
     Net horsepower at the maximum speed  
     of radiator cooling fan is **208 kW 279 HP**  
 Rated rpm..... 1600 rpm  
 Fan drive method for radiator cooling..... Hydraulic  
 Fuel system..... Direct injection  
 Lubrication system:  
   Method..... Gear pump, force-lubrication  
   Filter..... Full-flow type  
 Air cleaner..... Dry type with double elements and  
   dust evacuator, plus dust indicator

\*EPA Tier 4 Final emissions certified



## TRANSMISSION

Transmission..... Hydraulic Mechanical planetary type  
 Measured with 26.5R25 tires

Travel speed	Forward*	Reverse*
	3.0 - 38.0 km/h	3.0 - 28.0 km/h
	<b>1.9-23.6 mph</b>	<b>1.9-17.4 mph</b>



## AXLES AND FINAL DRIVES

Drive system..... Four-wheel drive  
 Front..... Fixed, semi-floating  
 Rear..... Center-pin support, semi-floating,  
   26° total oscillation  
 Reduction gear..... Spiral bevel gear  
 Differential gear..... Conventional type  
 Final reduction gear..... Planetary gear, single reduction



## BRAKES

Service brakes..... Hydraulically actuated,  
   wet multiple-disc brakes actuate on four wheels  
 Parking brake..... Wet multiple-disc brake  
 Secondary brake..... One of dual service brake circuits  
   is commonly used



## STEERING SYSTEM

Type..... Articulated type, fully-hydraulic power steering  
 Steering angle..... 35° each direction (40° to max end stop)  
 Minimum turning radius at  
 the center of outside tire..... 6630 mm **21' 9"**



## HYDRAULIC SYSTEM

Steering system:  
 Hydraulic pump..... Piston type  
 Capacity..... 157.7 ltr/min **41.7 U.S. gal/min** at rated rpm  
 Relief valve setting..... 24.5 MPa 250 kgf/cm<sup>2</sup> **3,555 psi**  
 Hydraulic cylinders:  
   Type..... Double-acting, piston type  
   Number of cylinders..... 2  
   Bore x stroke..... 95 mm x 441 mm **3.7" x 17.4"**  
 Loader control:  
 Hydraulic pump..... Piston pump  
 Capacity..... 333 ltr/min **88.0 U.S. gal/min** at rated rpm  
 Relief valve setting..... 35.3 MPa 360 kgf/cm<sup>2</sup> **5120 psi**  
 Hydraulic cylinders:  
   Type..... Double-acting, piston type  
   Number of cylinders—bore x stroke:  
     Lift cylinder..... 2- 150 mm x 764 mm **5.9" 30"**  
     Bucket cylinder..... 1- 180 mm x 540 mm **7.0" x 21.2"**  
   Control valve..... 2-spool type  
 Control positions:  
   Boom..... Raise, hold, lower, and float  
   Bucket..... Tilt-back, hold, and dump  
 Hydraulic cycle time (rated load in bucket)  
   Raise..... 5.8 s  
   Dump..... 1.8 s  
   Lower (Empty)..... 3.1 s

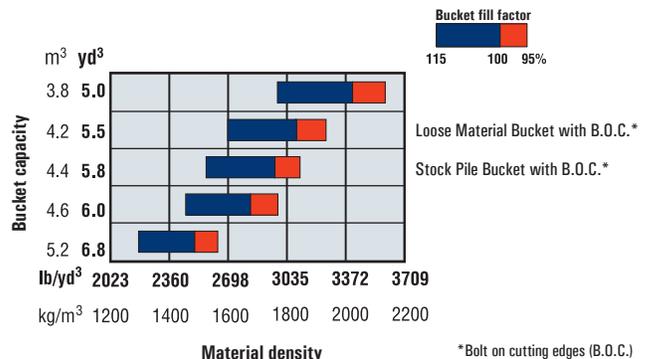


## SERVICE REFILL CAPACITIES

Cooling system..... 65 ltr **17.1 U.S. gal**  
 Fuel tank..... 380 ltr **100.3 U.S. gal**  
 Engine..... 38 ltr **10.0 U.S. gal**  
 Hydraulic system..... 135 ltr **35.7 U.S. gal**  
 Axle front..... 59 ltr **15.6 U.S. gal**  
 Axle rear..... 59 ltr **15.6 U.S. gal**  
 Transfer case..... 40 ltr **10.6 U.S. gal**  
 DEF tank..... 36 ltr **9.5 U.S. gal**



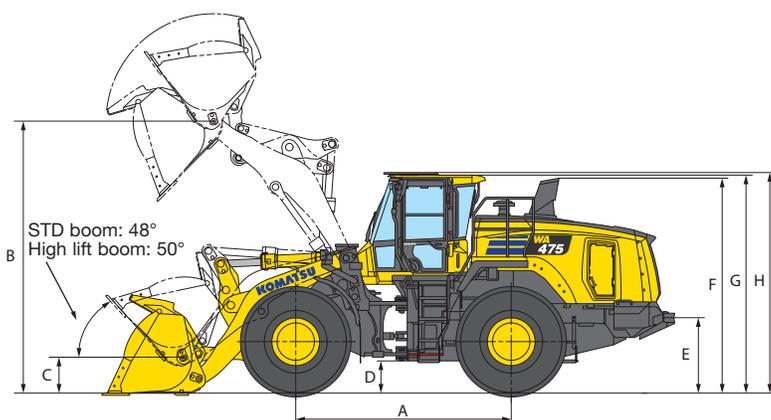
## BUCKET SELECTION GUIDE



WA475-10



## DIMENSIONS



Measured with 26.5R25 (L-3) tires, ROPS/FOPS cab

Tread	Standard Boom	2300 mm	<b>7'7"</b>
	High Lift Boom	2314 mm	<b>7'8"</b>
Width over standard tires	Standard Boom	3060 mm	<b>10'</b>
Width over 775/65R29 tires	High Lift Boom	3150 mm	<b>10'4"</b>
A Wheelbase		3450 mm	<b>11'4"</b>
B Hinge pin height, max. height	Standard Boom	4370 mm	<b>14'4"</b>
	High Lift Boom	4870 mm	<b>16'</b>
C Hinge pin height, carry position	Standard Boom	580 mm	<b>1'11"</b>
	High Lift Boom	730 mm	<b>2'4"</b>
D Ground clearance		520 mm	<b>1'8"</b>
E Hitch height	Standard Boom	1200 mm	<b>3'11"</b>
	High Lift Boom	1230 mm	<b>4'</b>
F Overall height, top of the stack		3450 mm	<b>11'4"</b>
G Overall height, ROPS cab		3500 mm	<b>11'5"</b>
H Overall height, top of roof rail		3540 mm	<b>11'8"</b>

	Standard Boom				High Lift Boom
	Stock Pile Bucket	Loose Material Bucket	Yard Loader Bucket	Light Material Bucket	Excavating Bucket
	Bolt-on Cutting Edge				
Bucket capacity: heaped	4.2 m <sup>3</sup> <b>5.5 yd<sup>3</sup></b>	4.4 m <sup>3</sup> <b>5.8 yd<sup>3</sup></b>	4.6 m <sup>3</sup> <b>6.0 yd<sup>3</sup></b>	5.2 m <sup>3</sup> <b>6.8 yd<sup>3</sup></b>	3.8 m <sup>3</sup> <b>5.0 yd<sup>3</sup></b>
struck	3.6 m <sup>3</sup> <b>4.7 yd<sup>3</sup></b>	3.9 m <sup>3</sup> <b>5.1 yd<sup>3</sup></b>	4.0 m <sup>3</sup> <b>5.2 yd<sup>3</sup></b>	4.5 m <sup>3</sup> <b>5.9 yd<sup>3</sup></b>	3.2 m <sup>3</sup> <b>4.2 yd<sup>3</sup></b>
Bucket width *with bucket side guard	3170 mm <b>10'5"</b>	3170 mm <b>10'5"</b>	3185 mm* <b>10'6"</b>	3185 mm* <b>10'6"</b>	3185 mm* <b>10'6"</b>
Bucket weight	2196 kg <b>4,841 lb</b>	2290 kg <b>5,048 lb</b>	2369 kg <b>5,223 lb</b>	2475 kg <b>5,456 lb</b>	2108 kg <b>4,647 lb</b>
H Dumping clearance, max. height and 45° dump angle*	3075 mm <b>10'1"</b>	3045 mm <b>10'0"</b>	3010 mm <b>9'11"</b>	2925 mm <b>9'7"</b>	3645 mm <b>12'0"</b>
I Reach at max. height and 45° dump angle*	1350 mm <b>4'5"</b>	1380 mm <b>4'6"</b>	1410 mm <b>4'8"</b>	1495 mm <b>4'11"</b>	1460 mm <b>4'9"</b>
J Reach at 2130 mm 7' clearance and 45° dump angle*	2020 mm <b>6'7"</b>	2035 mm <b>6'8"</b>	2045 mm <b>6'9"</b>	2090 mm <b>6'10"</b>	2510 mm <b>8'3"</b>
K Reach with arm horizontal and bucket level*	2935 mm <b>9'7"</b>	2975 mm <b>9'9"</b>	3015 mm <b>9'10"</b>	3135 mm <b>10'0"</b>	3330 mm <b>10'11"</b>
L Operating height (fully raised)	6090 mm <b>19'11"</b>	6135 mm <b>20'1"</b>	6170 mm <b>20'3"</b>	6270 mm <b>20'7"</b>	6520 mm <b>21'4"</b>
M Overall length (bucket on ground)	9185 mm <b>30'2"</b>	9225 mm <b>30'3"</b>	9275 mm <b>30'5"</b>	9395 mm <b>30'10"</b>	9705 mm <b>31'10"</b>
Loader clearance circle (bucket at carry, outside corner of bucket)	15380 mm <b>50'5"</b>	15400 mm <b>50'6"</b>	15430 mm <b>50'7"</b>	15500 mm <b>50'10"</b>	15835 mm <b>51'11"</b>
Digging depth: 0°	105 mm <b>4.1"</b>	105 mm <b>4.1"</b>	105 mm <b>4.1"</b>	105 mm <b>4.1"</b>	230 mm <b>9"</b>
10°	375 mm <b>1'3"</b>	380 mm <b>1'3"</b>	385 mm <b>1'3"</b>	405 mm <b>1'4"</b>	480 mm <b>1'7"</b>
Static tipping load: straight	20540 kg <b>45,283 lb</b>	20190 kg <b>44,511 lb</b>	22310 kg <b>49,185 lb</b>	22030 kg <b>48,568 lb</b>	18100 kg <b>39,820 lb</b>
40° full turn	17770 kg <b>39,176 lb</b>	17455 kg <b>38,481 lb</b>	19250 kg <b>42,439 lb</b>	19000 kg <b>41,888 lb</b>	15530 kg <b>34,238 lb</b>
Breakout force	197.2 kN 20110 kgf <b>44,332 lb</b>	190 kN 19430 kgf <b>42,713 lb</b>	184 kN 18800 kgf <b>41,455 lb</b>	171 kN 17450 kgf <b>38,465 lb</b>	206 kN 21049 kgf <b>46,405 lb</b>
Operating weight	25510 kg <b>56,239 lb</b>	25600 kg <b>56,438 lb</b>	27310 kg <b>60,208 lb</b>	27420 kg <b>60,451 lb</b>	27560 kg <b>60,759 lb</b>
Equipped with 775/65R29 tires	No	No	Yes	Yes	Yes

\* At the end of tooth or B.O.C.E.

All dimensions, weights, and performance values based on SAE J732c and J742b standards.

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS cab, and operator.

Machine stability and operating weight affected by counterweight, tire size, and other attachments.

Apply the following weight changes to operating weight and static tipping load.



## STANDARD EQUIPMENT

- 2-spool valve for boom and bucket control
- Alternator, 140 A
- Anchorage points
- Automatic hydraulic-driven fan with automatic reverse rotation
- Back-up alarm
- Batteries, 140 Ah/12V (2), 930 CCA
- Battery disconnect
- Boom Kick-out, in-cab adjustable
- Bucket Positioner, in-cab adjustable, 3 positions
- Color rear view camera and monitor
- Counterweight, standard and additional
- Electronically Controlled Suspension System (ECSS)
- Engine, Komatsu SAA6D125E-7 diesel
- Engine shut-off system, electric
- EPC fingertip controls with F-N-R switch, two levers
- Equipment Management Monitoring System (EMMS)
  - Lights (central warning, brake oil pressure, engine oil pressure, parking brake, cooling fan reverse, KDPF restriction, seat belt caution, Komtrax message)
  - Gauges (Engine water temperature, ecology, fuel level, DEF level, hydraulic oil temperature, speedometer/tachometer)
- Front fenders with extensions
- Fuel pre-filter with water separator
- Heated and power adjustable rear view mirrors, outside (2) inside (2)
- Horn, electric
- Integrated Load Meter
- Komatsu SmartLoader Logic
- Komatsu Auto Idle Shutdown
- KOMTRAX® Level 5
- Lift cylinders and bucket cylinder
- Lights
  - Back-up light, LED
  - Stop and tail light, LED
  - Turn signal lamps, 2 front and 2 rear with hazard switch
  - Working lights, LED, 2 front cab mount
  - Working lights, LED, 2 front fender mount
  - Working lights, LED, 2 rear grill mount
- Loader linkage with standard lift arm
- Parking brake, electric
- Radiator, wider core
- Radiator mask, swing out
- Rear full fenders
- Rims for 26.5-25 tires
- ROPS/FOPS Cab Level 2
  - 2 x DC12V electrical outlets
  - Ashtray
  - Auto air conditioner
  - Cigarette lighter, 24V
  - Color LCD/TFT multi-monitor
  - Cup holder
  - Floor mat
  - Operator seat, reclining, air suspension type, heated
  - Radio, AM/FM with AUX input jack
  - Rear defroster, electric
  - Seatbelt, 2-point retractable, 76 mm 3" width
  - Space for Lunch box
  - Steering wheel, tilt and telescopic
  - Sun visor, front window
  - Windshield washer and wiper, front with intermittent
  - Windshield washer and wiper, rear
- Service brakes, wet disc type
- Starting motor, 7.5 kW
- Transmission KHMT infinitely variable with 4 forward/reverse virtual gear settings
- Vandalism protection kit, padlocks for battery box (2)



## OPTIONAL EQUIPMENT

- 3-spool valve with lever and piping
- Advanced Joystick Steering (AJSS)
- Auxiliary steering (SAE)
- Cutting edge (bolt-on type)
- Engine oil and coolant heaters
- Engine pre-cleaner with extension
- Hight lift boom
- Limited slip differential (F&R)
- Multifunction Monolever (MFML)
- Various tire options, radial and bias
- Various bucket options

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# KOMATSU®

*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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WA475-10