

# KOMATSU®

## PC220-8M0 PC220LC-8M0

**PC**  
**220**

### HORSEPOWER

Gross: 129 kW 173 HP / 2000 min<sup>-1</sup>

Net: 123 kW 164 HP / 2000 min<sup>-1</sup>

### OPERATING WEIGHT

PC220-8M0: 23200 – 23700 kg

PC220LC-8M0: 24300 – 24900 kg

### BUCKET CAPACITY

0.72 – 1.26 m<sup>3</sup>



Photos may include optional equipment.

# **WALK-AROUND**





### PRODUCTIVITY, ECOLOGY & ECONOMY

- Low Fuel Consumption by Total Control of the Engine, Hydraulic and Electronic System
- Low Emission Engine
- Low Operation Noise

### COMFORT & SAFETY

- Large Comfortable Cab
- ROPS Cab (ISO 12117-2)
- Rear View Monitor System (Optional)

\* Information and Communication Technology

### ICT\* & KOMTRAX

- Large Multi-lingual High Resolution Liquid Crystal Display (LCD) Monitor
- Equipment Management Monitoring System
- KOMTRAX

### MAINTENANCE & RELIABILITY

- Easy Maintenance
- High Rigidity Work Equipment



	PC220-8M0	PC220LC-8M0
<b>HORSEPOWER</b>	Gross: 129 kW 173 HP / 2000 min <sup>-1</sup> Net: 123 kW 164 HP / 2000 min <sup>-1</sup>	129 kW 173 HP / 2000 min <sup>-1</sup> 123 kW 164 HP / 2000 min <sup>-1</sup>
<b>OPERATING WEIGHT</b>	23200 – 23700 kg	24300 – 24900 kg
<b>BUCKET CAPACITY</b>	0.72 – 1.26 m <sup>3</sup>	0.72 – 1.26 m <sup>3</sup>



# PRODUCTIVITY, ECOLOGY & ECONOMY

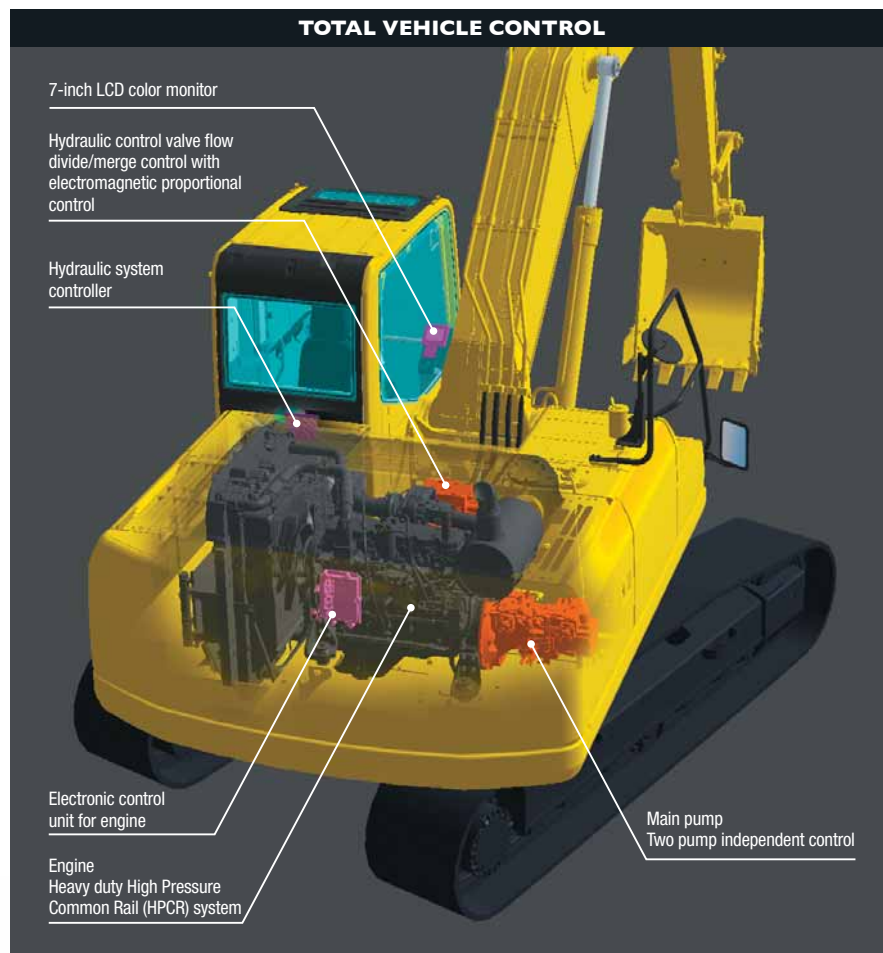
## Low Fuel Consumption

The newly-developed Komatsu SAA6D107E-1 engine enables NOx emissions to be significantly reduced with the accurate multi-staged fuel injection by the engine controller. It improves total engine durability using the high-pressure fuel injection system developed specifically for construction machinery. This excavator significantly reduces hourly fuel consumption using the highly-efficient matching techniques of the engine and hydraulic unit and also provides features that promote energy-saving operations such as the E mode and ECO gauge.

## Fuel consumption

# 5% reduced

Vs. PC220-8  
Based on typical work pattern collected via KOMTRAX.  
Fuel consumption varies depending on job conditions.



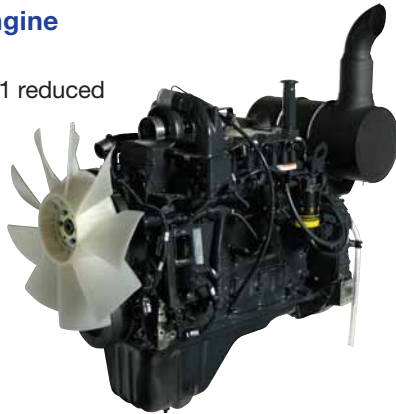
## Komatsu Technology

Komatsu develops and produces all major components, such as engines, electronics and hydraulic components, in house. With this “Komatsu Technology” and adding customer feedback, Komatsu is achieving great advancements in technology. To achieve both high levels of productivity and economical performance, Komatsu has developed the main components with a total control system. The result is a new generation of high performance and environment-friendly excavators.



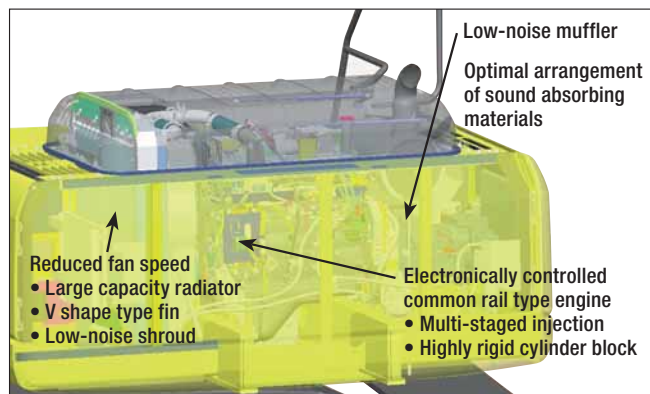
## Low Emission Engine

Komatsu SAA6D107E-1 reduced NOx emission by 29% compared with the PC220-7. This engine is U.S. EPA Tier 3 and EU Stage 3A emissions equivalent.



## Low Operation Noise

Enables a low noise operation using the low-noise engine and methods to cut noise at source.



## Idling Caution

To prevent unnecessary fuel consumption, an idling caution is displayed on the monitor, if the engine idles for 5 minutes or more.



## ECO Gauge that Assists Energy-saving Operations

Equipped with the ECO gauge that can be recognized at a glance on the right of the multi-function color monitor for environment-friendly energy-saving operations. Allows focus on operation in the green range with reduced CO<sub>2</sub> emissions and efficient fuel consumption.

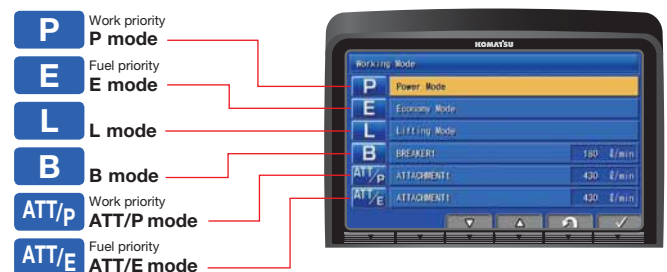


ECO gauge

## Working Modes Selectable

The PC220-8M0 excavator is equipped with six working modes (P, E, L, B, ATT/P and ATT/E mode). Each mode is designed to match engine speed and pump output to the application. This provides the flexibility to match equipment performance to the job at hand.

Working Mode	Application	Advantage
<b>P</b>	Power mode	<ul style="list-style-type: none"> <li>Maximum production/power</li> <li>Fast cycle times</li> </ul>
<b>E</b>	Economy mode	<ul style="list-style-type: none"> <li>Good cycle times</li> <li>Better fuel economy</li> </ul>
<b>L</b>	Lifting mode	<ul style="list-style-type: none"> <li>Suitable attachment speed</li> <li>Lifting capacity is increased 7% by raising hydraulic pressure.</li> </ul>
<b>B</b>	Breaker mode	<ul style="list-style-type: none"> <li>Optimum engine rpm, hydraulic flow</li> </ul>
<b>ATT/P</b>	Attachment Power mode	<ul style="list-style-type: none"> <li>Optimum engine rpm, hydraulic flow, 2way</li> <li>Power mode</li> </ul>
<b>ATT/E</b>	Attachment Economy mode	<ul style="list-style-type: none"> <li>Optimum engine rpm, hydraulic flow, 2way</li> <li>Economy mode</li> </ul>



## Large Digging Force

When press the left knob switch which is called the one-touch power max. switch and when it is kept pressed, this function temporarily increases digging force for 8.5 seconds of operation.

**Maximum arm crowd force (ISO 6015):**

121 kN (12.3 t) ➔ **129 kN (13.2 t)** **7% UP**  
(with Power Max.)

**Maximum bucket digging force (ISO 6015):**

159 kN (16.2 t) ➔ **172 kN (17.5 t)** **8% UP**  
(with Power Max.)

Measured with Power Max. function, 3045 mm arm and ISO 6015 rating.

One-touch power max. switch





# COMFORT

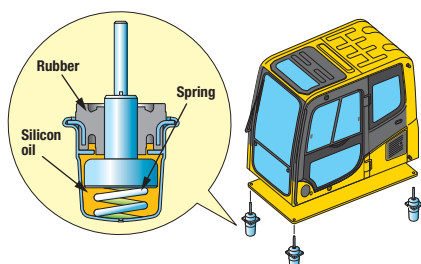


## Low Cab Noise

The newly-designed cab is highly rigid and has excellent sound absorption ability. Thorough improvement of noise source reduction and use of low noise engine, hydraulic equipment, and air conditioner allows this machine to generate a low level of noise.

## Low Vibration with Cab Damper Mounting

PC220-8M0 uses viscous damper mounting for cab that incorporates longer stroke and the addition of a spring. The new cab damper mounting combined with high rigidity deck aids vibration reduction at operator seat.



## Wide Newly-designed Cab

Newly-designed wide spacious cab includes seat with reclining backrest. The seat height and longitudinal inclination are easily adjusted using a pull-up lever. You can set the appropriate operational posture of armrest together with the console. Reclining the seat further enables you to place it into the fully flat state with the headrest attached.

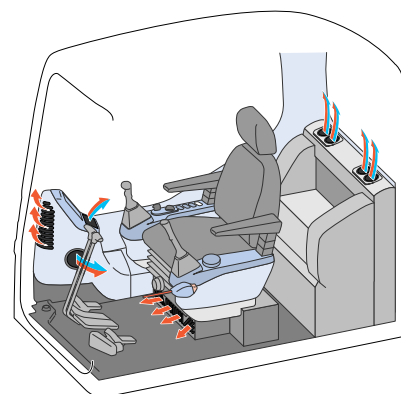


## Pressurized Cab

Optional air conditioner (A/C), air filter and a higher internal air pressure minimize external dust from entering the cab.

## Automatic Air Conditioner (A/C) (Optional)

Enables you to easily and precisely set cab atmosphere with the instruments on the large LCD. The bi-level control function keeps the operator's head and feet cool and warm respectively. This improved air flow function keeps the inside of the cab comfortable throughout the year. Defroster function keeps front glass clear.



# SAFETY

## ROPS Cab

The machine is equipped with a ROPS cab that conforms to ISO 12117-2 for excavators as standard equipment. The ROPS cab has high shock-absorption performance, featuring excellent durability and impact strength. It also satisfies the requirements of OPG top guard level 1 (ISO 10262) for falling objects. Combined with the retractable seat belt, The ROPS cab protects the operator in case of tipping over and against falling objects.

### ROPS CAB STRUCTURE



## Slip-resistant Plates

Highly durable slip-resistant plates maintain superior traction performance for the long term.



## Pump/Engine Room Partition

Pump/engine room partition prevents oil from spraying onto the engine if a hydraulic hose should burst.

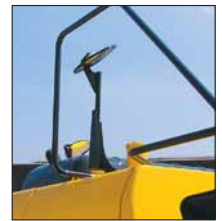
## Lock Lever

Locks the hydraulic pressure to prevent unintentional movement. Neutral start function allows machine to be started only in lock position.



## Large Side-view, Rear and Sidewise Mirrors

Enlarged left-side mirror and addition of rear and side mirror allow the PC220-8M0 to meet the visibility requirements (ISO 5006).



## Rear View Monitor System (Optional)

The operator can view the rear of the machine with a color monitor screen.



Rear view image on monitor

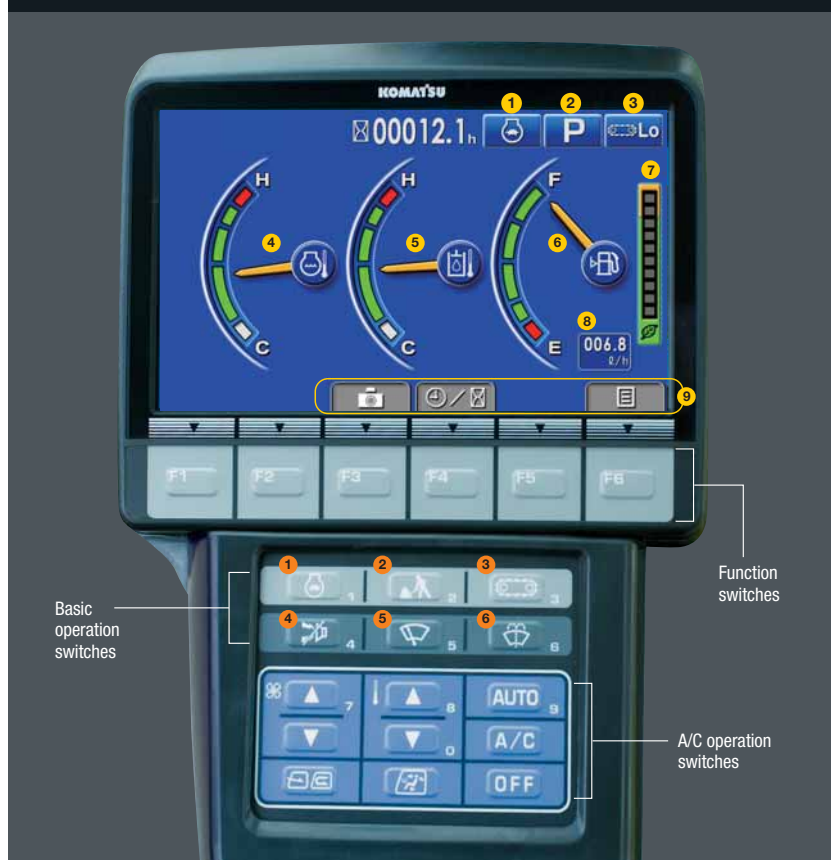
## Thermal and Fan Guards

Thermal and fan guards are placed around high-temperature parts of the engine and fan drive.





## LARGE HIGH RESOLUTION LCD MONITOR



## Large Multi-lingual High Resolution LCD Monitor

A large user-friendly high resolution LCD color monitor enables safe, accurate and smooth work. Visibility and resolution are further improved compared with current 7-inch large LCD. Simple and easy to operate switches. Function keys facilitate multi-function operations. Displays data in 13 languages to globally support operators around the world.

### Indicators

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| 1 Auto-decelerator               | 5 Hydraulic oil temperature gauge |
| 2 Working mode                   | 6 Fuel gauge                      |
| 3 Travel speed                   | 7 ECO gauge                       |
| 4 Engine water temperature gauge | 8 Fuel consumption gauge          |
|                                  | 9 Function switches menu          |

### Basic operation switches

- |                         |                     |
|-------------------------|---------------------|
| 1 Auto-decelerator      | 4 Buzzer cancel     |
| 2 Working mode selector | 5 Wiper             |
| 3 Traveling selector    | 6 Windshield washer |

## Supports Efficiency Improvement

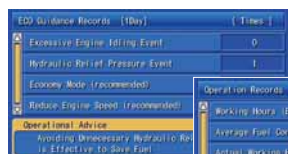
The main screen displays advices for promoting energy-saving operations as needed. The operator can use the ECO guidance menu to check the operation records, ECO guidance records, average fuel consumption logs, etc.



ECO guidance



ECO guidance menu



ECO guidance records



Operation records



Average fuel consumption logs

## Equipment Management Monitoring System

### Monitor function

Controller monitors engine oil level, coolant temperature, battery charge air clogging, etc. If the controller finds any abnormality, it is displayed on the LCD.



### Maintenance function

The monitor informs replacement time of oil and filters on the LCD when the replacement interval is reached.



### Trouble data memory function

Monitor stores abnormalities for effective troubleshooting.

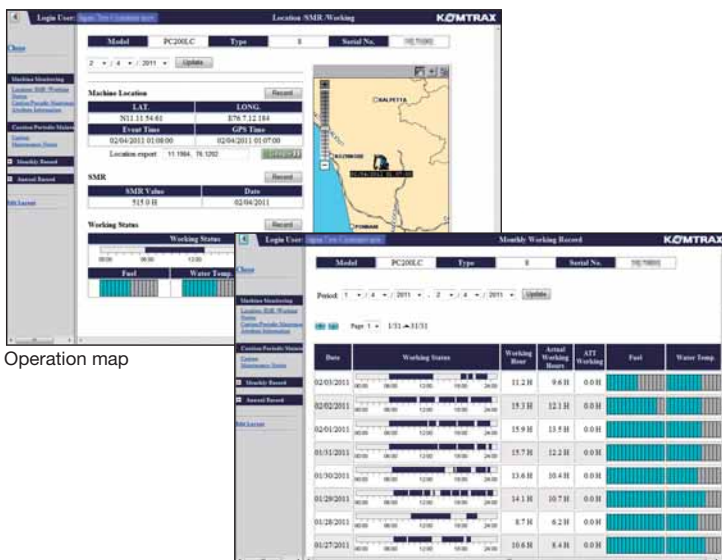
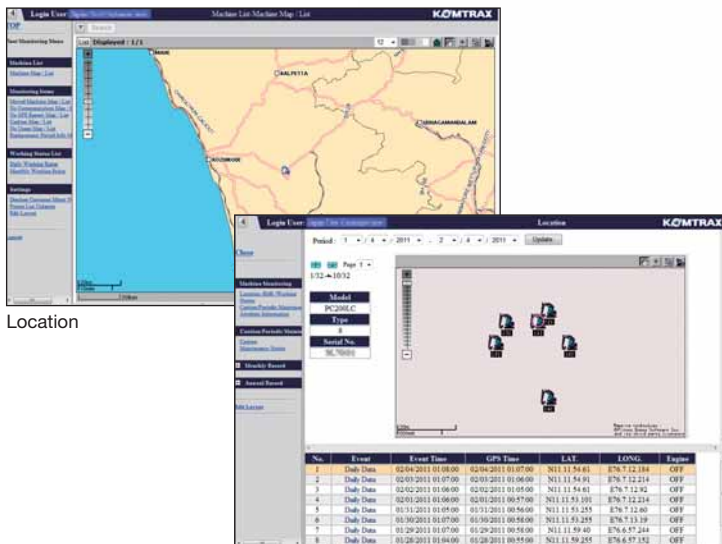




## Assists Customer's Equipment Management and Contributes to Fuel Cost Cutting

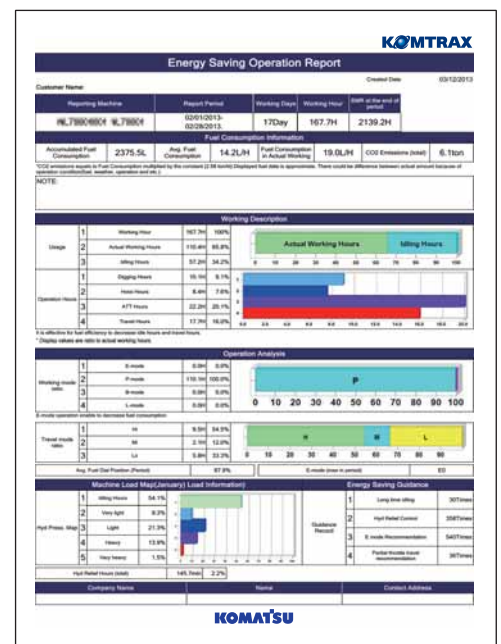
### Equipment Management Support

KOMTRAX terminal installed on your machine collects and sends information such as machine location, working record, machine conditions, etc. using wireless communication. You can review the KOMTRAX data remotely via the online application. KOMTRAX not only gives you the informations on your machine, but also the convenience of managing your fleet on the Web.



### Energy-saving Operation Support Report

KOMTRAX can provide various useful information which includes the energy-saving operation support report created based on the operating information of your machine such as fuel consumption and idle time.



# MAINTENANCE

## Side-by-side Cooling

Since radiator, aftercooler and oil cooler are arranged in parallel, it is easy to clean, remove and install them. Radiator, aftercooler, and oil cooler made of aluminum have high cooling efficiency and are easily recycled.



## Equipped with the Fuel Pre-filter (With Water Separator)

Removes water and contaminants in the fuel to prevent fuel problems. (With built-in priming pump)



## Washable Cab Floormat

The PC220-8M0's cab floormat is easy to keep clean. The gently inclined surface has a flanged floormat and drainage holes to facilitate runoff.



## Easy Access to Engine Oil Filter and Fuel Drain Valve

Engine oil filter and fuel drain valve are remote mounted to improve accessibility.



## Equipped with the Drain Valve as Standard

Prevents clothes and the ground from becoming contaminated due to oil leakage when replacing the engine oil.



## Large-capacity Fuel Tank and Rustproof Treatment

400-liter high-capacity fuel tank. Effective corrosion resistance using rust-proof treatment.

## Sloping Track Frame

Prevents dirt and sand from accumulating and allows easy mud removal.

## Gas Assisted Engine Hood Damper Cylinders

The engine hood can be easily opened and closed with the assistance of the gas assisted engine hood damper cylinders.



## Long-life Oil, Filter

Uses high-performance filtering materials and long-life oil. Extends the oil and filter replacement interval.

Engine oil & Engine oil filter	every <b>500</b> hours
Hydraulic oil	every <b>5000</b> hours
Hydraulic oil filter	every <b>1000</b> hours

## A/C Filter (Optional)

The A/C filter is removed and installed without the use of tools facilitating filter maintenance.



Internal A/C filter



External A/C filter

## Long Work Equipment Greasing Interval (Optional)

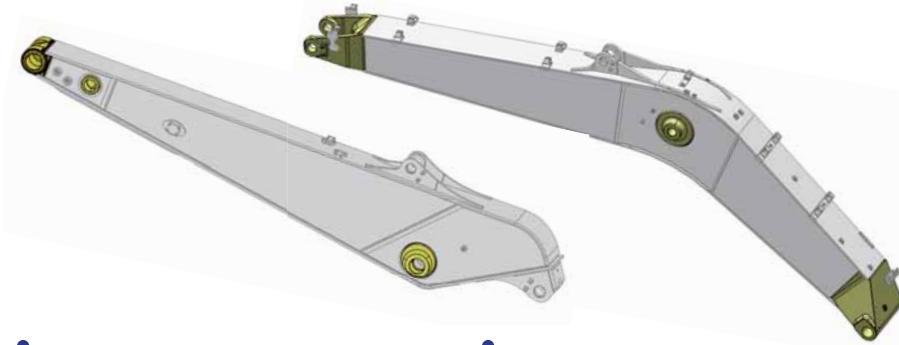
High quality bushings and resin shims are optionally available for work equipment pins excluding bucket, extending greasing interval to 500 hours.



## RELIABILITY

### High Rigidity Work Equipment

Boom and arms are constructed of thick plates of high tensile strength steel. In addition, these structures are designed with large cross-sectional areas and generous use of castings. The result is working attachments that exhibit long term durability and high resistance to bending and torsional stress.



### Sturdy Frame Structure

The revolving frame, center frame and undercarriage are designed by using the most advanced three-dimensional CAD and Finite Element Method (FEM) analysis technology.

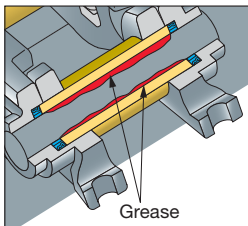
### Highly Reliable Electronic Devices

Exclusively designed electronic devices have passed severe testing.

- Controller      • Sensors
- Connectors    • Heat resistant wiring

### Grease Sealed Track

PC220-8M0 uses grease sealed tracks for extended undercarriage life.



### Track Link with Strut

PC220-8M0 uses track links with strut, providing superb durability.



### Reliable Components

All of the major machine components, such as engine, hydraulic pumps, hydraulic motors and control valves are exclusively designed and manufactured by Komatsu.

## OPTIONS

- Cab front full height guard level 1 (ISO 10262)



- Cab front full height guard level 2 (ISO 10262)



- Additional front lights
- Rain visor



- Air pre-cleaner



- OPG top guard level 2 (ISO 10262)



- Strengthened track frame undercover



- Sun visor



- Seat, suspension

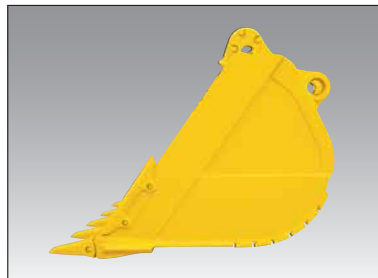


# KOMATSU BRAND BUCKET

## KOMATSU Brand Bucket for General Purpose with Wide Bucket Width

### Me Bucket

- Low resistant excavation
- High productivity
- High durability
- High fuel efficiency



Conventional



Me Bucket

### Category and Feature

Category	Load / Wear / Soil (Application)	Image
Light Duty LD	<b>Load</b> Machine power remains low during the majority of the work. No impact load. <b>Wear</b> Material is not abrasive. <b>Soil</b> Dirt, loam and clay.	
General Purpose GP	<b>Load</b> Machine power is mostly medium, but occasionally high. Bucket movements are smooth with minor shock load. Bucket penetrates easily. <b>Wear</b> Material is lightly abrasive. Some sand may be medium abrasive. <b>Soil</b> Mostly loose sand, gravel and finely broken materials.	

### Bucket Line-up

Category	Bucket Type	Capacity (m³)	Width*1 (mm)	Weight*2 (kg)	Tooth Quantity	Boom + Arm (m)			Tooth Type			
						5.85+2.00	5.85+2.50	5.85+3.05	Vertical	Horizontal	PAB*3	KMAX
LD	Conventional	1.26	1505 <1400>	845	6	○	□	●	✓	✓	✓	✓
	Me Bucket	1.20	1245 <1140>	1165	5	○	□	●		✓	✓	
GP	Conventional	0.72	1005 <900>	658	3	○	○	○	✓	✓	✓	
		1.00	1260 <1155>	734	5	○	○	○		✓	✓	✓
		1.14	1405 <1300>	793	5	○	□	□		✓	✓	✓

\*1 With side cutters or side shrouds, < > without side cutters or side shrouds \*2 With side cutters \*3 PAB: Pin And Bushing system

○: General purpose use, density up to 1.8 t/m³ □: General purpose use, density up to 1.5 t/m³ ●: Light duty work, density up to 1.2 t/m³ ■: Light duty work, density up to 0.9 t/m³

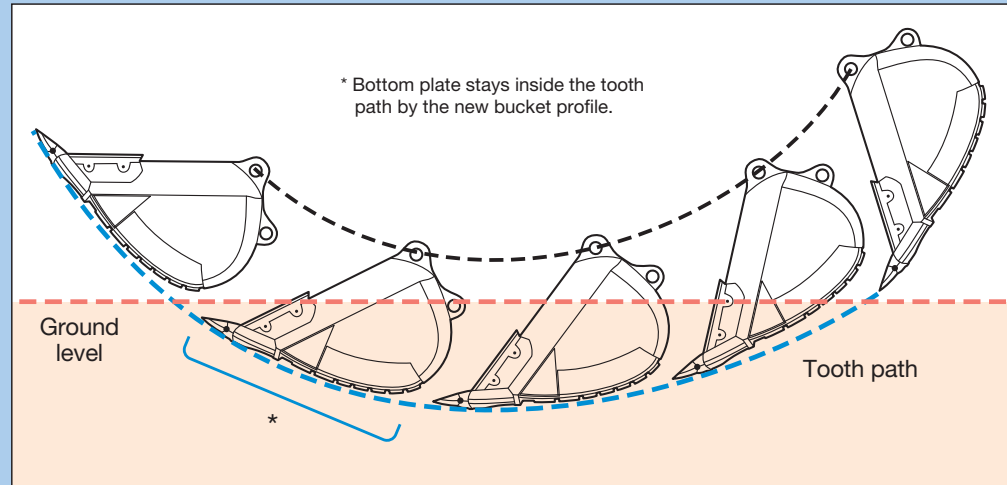
✓: Selectable



### Feature of [Me Bucket] (More suitable shape and Effectiveness Bucket)

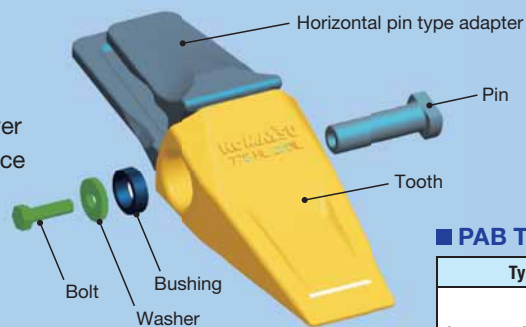
#### High Productivity by Low-resistant Excavation

The new Ideal bucket profile produces lower resistance at inside & outside bucket and production will be greatly increased.



### Feature of [PAB Tooth] (Pin And Bushing system Tooth)

- Able to fit on the bucket with horizontal pin type adapter
  - Easy change-out only with a ratchet wrench
  - Longer tooth life by easy rotation and turnover
  - Durable and reusable PAB pin with flat surface
- Limited to where horizontal pin type tooth is mainly used.



#### ■ PAB Tooth Line-up

Type	Style
Integrated Long Life IL	
Heavy Standard HS	
Heavy Rock HR	



Set PAB tooth to horizontal pin type adapter



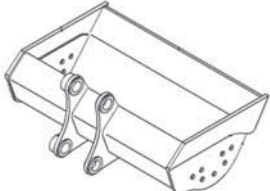
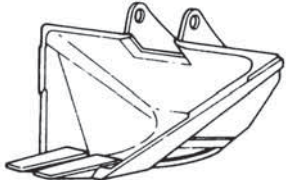
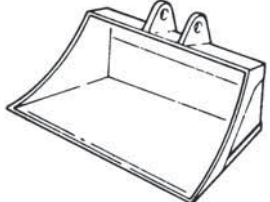
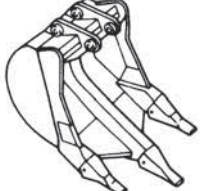
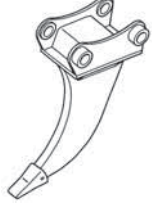
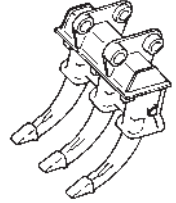
Insert exclusive pin to the adapter pin hole



Set bushing, washer and bolt and tighten by a ratchet wrench

## Special Purpose Bucket & Ripper

### ■ Feature and Specifications

Type	Feature	Bucket Capacity (SAE J 296 Heaped)	Width	Image
<b>Ditch Cleaning Bucket</b>	Most suitable for cleaning a river or dredging soft soil from the river bed. The bucket has small holes which allow the water to drain, retaining only solid objects of the ditch.	0.80 m <sup>3</sup>	1800 mm	
<b>Trapezoidal Bucket</b>	Performs digging and sloping simultaneously on a drainage or irrigation canal. Using this bucket will leave the digging profile shaped as a cross-section.	0.70 m <sup>3</sup>	—	
<b>Slope Finishing Bucket</b>	The wide bucket width and flat bottom make this bucket suitable for smoothing the slopes of irrigation canals, roads or river banks.	0.40 m <sup>3</sup>	2000 mm	
<b>Ripper Bucket</b>	Suitable for digging rock bed or hard clayey soil when normal buckets cannot penetrate deep enough. Loading is also possible.	0.62 m <sup>3</sup>	990 mm	
<b>Single-shank Ripper</b>	This ripper is used for site preparation prior to digging work, when it becomes necessary to remove rocks, pavement for other obstacles. Also effective for pulling out tree stumps.	—	—	
<b>Three-shank Ripper</b>	This ripper is an efficient tool for digging up rocks on a slope, digging, crushing and ripping of concrete surfaces, and pulling out tree stumps.	—	—	



# HENSLEY BRAND BUCKET

## Diverse Bucket Capacity by Application Featuring "KMAX" Tooth System



- Wide range selection for each application
- Larger profile and capacity to maximize production
- Multiple width options to meet specific job requirements and reduce backfill

### Category and Recommended Applications

Category	Recommended Applications	Image
<b>Trenching and Loading TL</b>	Dirt, loam, sand, gravel, loose clay, abrasive soils with limited rock mixture.	
<b>Heavy Duty Plate Lip Bucket with Wear Plate HP</b>	Abrasive soils, compact or dense clay, loose rock and gravel.	
<b>Heavy Duty Plate Lip Bucket with Wear Plate &amp; Wear Strips HPS</b>	Abrasive soils, compact or dense clay, loose rock and gravel.	
<b>Extreme Duty Plate Lip Bucket with Special Features HPX</b>	Shot rock, stratified materials, quarry or tough, highly abrasive applications.	

### Bucket Line-up

Category	Capacity (m³)	Width (mm)	Weight (kg)	Tooth Quantity	Boom + Arm (m)			Tooth Type
					5.90+2.00	5.90+2.50	5.90+3.05	
TL	0.58	610	717	3	○	○	○	✓
	0.78	762	837	4	○	○	○	✓
	0.99	914	938	5	○	○	○	✓
	1.20	1067	1018	5	○	○	□	✓
	1.41	1219	1090	5	□	□	●	✓
HP	1.63	1372	1183	6	□	●	■	✓
	0.58	610	717	3	○	○	○	✓
	0.78	762	929	4	○	○	○	✓
	0.99	914	1051	5	○	○	○	✓
	1.20	1067	1151	5	○	○	□	✓
HPS	1.41	1219	1273	5	□	□	●	✓
	1.63	1372	1399	6	●	●	■	✓
	1.84	1524	1497	7	■	■	×	✓
	0.58	610	870	3	○	○	○	✓
	0.78	762	1020	4	○	○	○	✓
HPX	0.99	914	1162	5	○	○	○	✓
	1.20	1067	1282	5	○	○	□	✓
	1.41	1219	1425	5	□	●	■	✓
	1.63	1372	1571	6	●	■	■	✓
	1.84	1524	1623	7	■	■	×	✓
HPX	0.58	610	951	3	○	○	○	✓
	0.78	762	1092	4	○	○	○	✓
	0.99	914	1233	5	○	○	○	✓
	1.20	1067	1354	5	○	□	●	✓
	1.41	1219	1475	5	□	●	■	✓
HPX	1.63	1372	1585	6	●	■	■	✓
	1.84	1524	1807	7	■	■	×	✓

○: General purpose use, density up to 1.8 t/m³ □: General purpose use, density up to 1.5 t/m³  
 ●: Light duty work, density up to 1.2 t/m³ ■: Light duty work, density up to 0.9 t/m³  
 ×: Not usable ✓: Selectable

### Feature of KMAX Tooth System

- Better penetration and cycle times
- Hardness throughout the tooth
- Unique high strength design
- Unique reusable fastener
- Less "throw away" waste
- Fast tooth changeover



#### Tooth



The KMAX RC style tooth shown here offers a consumption ratio of 60%.

#### Fastener

Simple, reusable fastener system saves time and money by unlocking with a simple 90-degree turn.



To lock, use the correct size socket, rotate the pin locking shaft 90-degree clockwise to finish the installation.



When removing the fastener, use the correct size socket to rotate the pin-locking shaft 90-degree counter-clockwise.

### KMAX Tooth Line-up

Feature	Style
<b>F</b> Flare: Loose material for clean bottom and greater fill	
<b>SYL</b> Standard: General applications	
<b>SD</b> Chisel: General purpose tooth Designed for penetration	
<b>RC</b> Rock Chisel: Designed for penetration and long wear life	
<b>T</b> Tiger: Designed for good penetration with ribs for strength	
<b>TV</b> Tiger: Offers best penetration in tight material	
<b>UT</b> Twin Tiger: Offers longer life penetration for corners	
<b>WT</b> Twin Tiger: Designed for penetration for corners	

Some application may not have been available in your country or region. If you are interested in such application, please contact a KOMATSU office near you.

# SPECIAL SPECS.

## Attachment Piping Specification

Equips PC220-8M0 for breaker and crusher installation.  
Hydraulic flow rate can be regulated by setting Breaker Mode on monitor panel during breaker operation.



# ATTACHMENT

## Komatsu Genuine Attachment Tool

Komatsu-recommended attachment tools for hydraulic excavators

A wide range of attachment tools are provided to suit customers' specific applications.

### Hydraulic breaker

The hydraulic breaker is an attachment tool used for crushing rock beds and paved surfaces, demolishing concrete structures, etc. The large gas chamber, ideal gas pressure ratio, and long-stroke piston deliver a powerful impact force. Since the breaker unit does not require an accumulator, the number of parts has been reduced, resulting in lower maintenance costs.

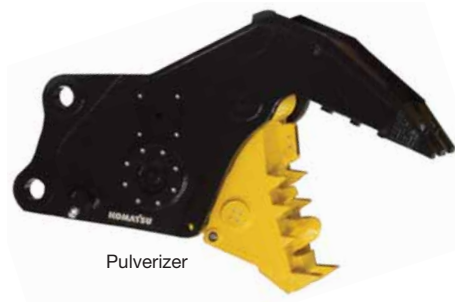


### Crusher

This attachment tool is used for demolishing concrete structures. Since it does not have a striking mechanism and features low noise and low vibration, it is suitable for work in urban areas. The open-close cylinder is equipped with a speed-up valve for increasing work speed.



Primary crusher



Pulverizer



Rotating pulverizer



## Applications of Attachment Tools

Application/ Attachment Tool	Civil Engineering	Quarry	Demolition	Industrial Waste Disposal	Iron-Making	Utility Construction	Rental
Hydraulic Breaker	○	○	○	○	○	○	○
Crusher (Primary Crusher)			○				○
Crusher (Pulverizer)			○	○			○



# KOMATSU TOTAL SUPPORT



## Komatsu Total Support

To keep your machine available and minimize operation cost when you need it, Komatsu Distributor is ready to provide variety of support before and after procuring the machine.

### Fleet recommendation

Komatsu Distributor can study customer job site and provide the most optimum fleet recommendation with detailed information to meet all of your application needs when you are considering to buy new machines or to replace the existing ones from Komatsu.



### Product support

Komatsu Distributor secure the certain quality of machine will be delivered.

### Parts availability

Komatsu Distributor is available for emergency inquiry by the customers for genuine, quality guaranteed Komatsu parts.

### Technical support

Komatsu product support service (Technical support) are designed to help customer. Komatsu Distributor offers a variety of effective services how much Komatsu is dedicated to the maintenance and support of Komatsu machine.

- Preventive Maintenance (PM) clinic
- Oil & Wear analysis program
- Undercarriage inspection service, etc.



### Repair & maintenance service

Komatsu Distributor offers quality repair service, periodical maintenance, and maintenance service to the customer, utilizing and promoting Komatsu developed programs.

### Komatsu Reman (Remanufactured) components

Komatsu Reman products are the result of the implementation of the Komatsu global Reman policy which establishes and agrees to reduce the owning, operating and total Life Cycle Costs (LCC) to Komatsu's customer through prompt delivery, high quality and competitively priced in own remanufactured products (QDC).



# SPECIFICATIONS



## ENGINE

Model ..... Komatsu SAA6D107E-1  
 Type ..... Water-cooled, 4-cycle, direct injection  
 Aspiration ..... Turbocharged, aftercooled  
 Number of cylinders ..... 6  
 Bore ..... 107 mm  
 Stroke ..... 124 mm  
 Piston displacement ..... 6.69 L  
 Horsepower:  
   SAE J1995 ..... Gross 129 kW 173 HP  
   ISO 9249 / SAE J1349 ..... Net 123 kW 164 HP  
   Rated rpm ..... 2000 min<sup>-1</sup>  
 Fan drive method for radiator cooling ..... Mechanical  
 Governor ..... All-speed control, electronic

U.S. EPA Tier 3 and EU Stage 3A emissions equivalent.



## HYDRAULICS

Type .. HydraulMind (Hydraulic Mechanical Intelligence New Design) system, closed-center system with load sensing valves and pressure compensated valves  
 Number of selectable working modes ..... 6  
 Main pump:  
   Type ..... Variable displacement piston type  
   Pumps for ..... Boom, arm, bucket, swing, and travel circuits  
   Maximum flow ..... 439 L/min  
   Supply for control circuit ..... Self-reducing valve  
 Hydraulic motors:  
   Travel ..... 2 x axial piston motor with parking brake  
   Swing ..... 1 x axial piston motor with swing holding brake  
 Relief valve setting:  
   Implement circuits ..... 37.3 MPa 380 kgf/cm<sup>2</sup>  
   Travel circuit ..... 37.3 MPa 380 kgf/cm<sup>2</sup>  
   Swing circuit ..... 28.9 MPa 295 kgf/cm<sup>2</sup>  
   Pilot circuit ..... 3.2 MPa 33 kgf/cm<sup>2</sup>  
 Hydraulic cylinders:  
 (Number of cylinders – bore x stroke x rod diameter)  
   Boom ..... 2–130 mm x 1335 mm x 90 mm  
   Arm ..... 1–145 mm x 1635 mm x 100 mm  
   Bucket for 2.5 m and 3.05 m arm ..... 1–130 mm x 1020 mm x 90 mm  
   for 2.0 m arm ..... 1–140 mm x 1009 mm x 100 mm



## DRIVES AND BRAKES

Steering control ..... Two levers with pedals  
 Drive method ..... Hydrostatic  
 Maximum drawbar pull ..... 202 kN 20570 kgf  
 Gradeability ..... 70%, 35°  
 Maximum travel speed: High ..... 5.5 km/h  
   (Auto-shift) Mid ..... 4.2 km/h  
   (Auto-shift) Low ..... 3.1 km/h  
 Service brake ..... Hydraulic lock  
 Parking brake ..... Mechanical disc brake



## SWING SYSTEM

Drive method ..... Hydrostatic  
 Swing reduction ..... Planetary gear  
 Swing circle lubrication ..... Grease-bathed  
 Service brake ..... Hydraulic lock  
 Holding brake/Swing lock ..... Mechanical disc brake  
 Swing speed ..... 11.7 min<sup>-1</sup>



## UNDERCARRIAGE

Center frame ..... X-frame  
 Track frame ..... Box-section  
 Seal of track ..... Sealed track  
 Track adjuster ..... Hydraulic  
 Number of shoes (Each side):  
   PC220-8M0 ..... 47  
   PC220LC-8M0 ..... 51  
 Number of carrier rollers (Each side) ..... 2  
 Number of track rollers (Each side):  
   PC220-8M0 ..... 8  
   PC220LC-8M0 ..... 10



## COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank ..... 400 L  
 Coolant ..... 19.9 L  
 Engine ..... 23.1 L  
 Final drive (Each side) ..... 5.0 L  
 Swing drive ..... 7.2 L  
 Hydraulic tank ..... 135 L



## OPERATING WEIGHT (APPROXIMATE)

Operating weight including 5850 mm one-piece boom, 3045 mm arm, SAE J 296 heaped 1.0 m<sup>3</sup> backhoe bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

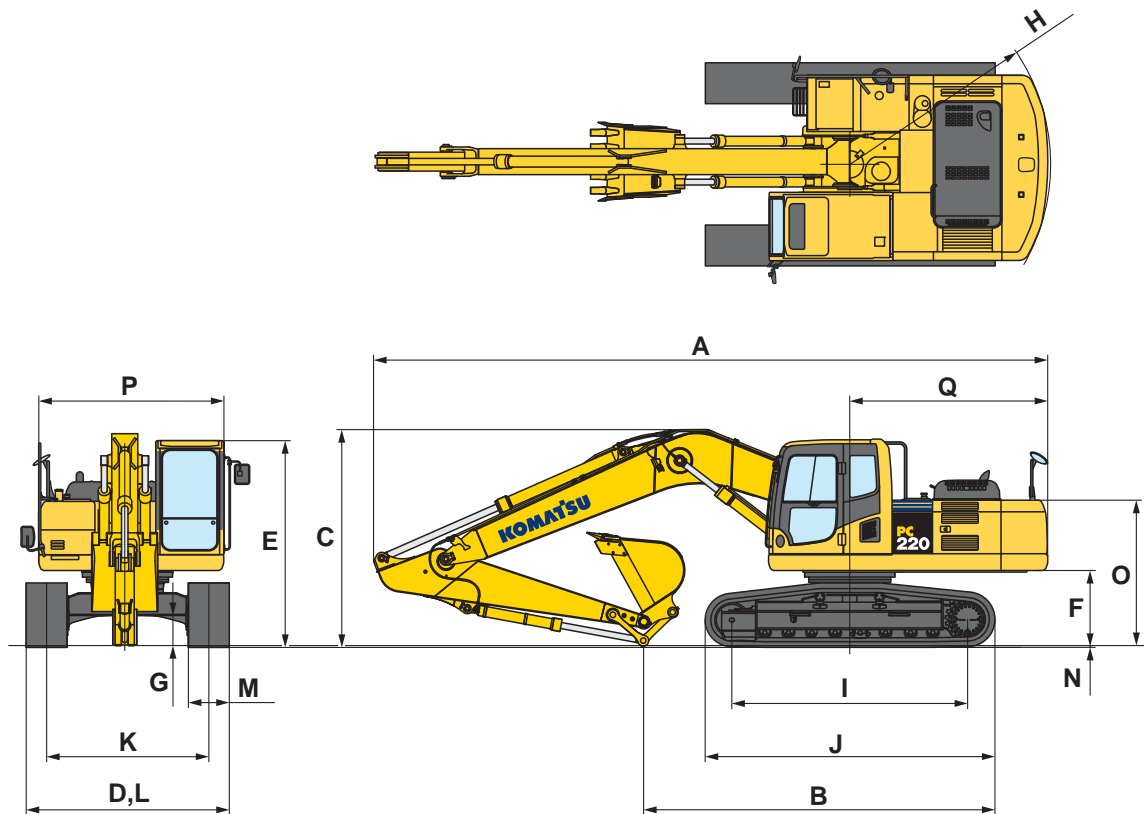
Shoes	PC220-8M0		PC220LC-8M0	
	Operating Weight	Ground Pressure	Operating Weight	Ground Pressure
600 mm	23200 kg	51.0 kPa 0.52 kgf/cm <sup>2</sup>	24300 kg	48.0 kPa 0.49 kgf/cm <sup>2</sup>
700 mm	23400 kg	44.1 kPa 0.45 kgf/cm <sup>2</sup>	24600 kg	42.1 kPa 0.43 kgf/cm <sup>2</sup>
800 mm	23700 kg	39.2 kPa 0.40 kgf/cm <sup>2</sup>	24900 kg	37.2 kPa 0.38 kgf/cm <sup>2</sup>



## DIMENSIONS

Arm Length		2000 mm	2500 mm	3045 mm
A	Overall length	9865 mm	9960 mm	9885 mm
B	Length on ground (Transport): PC220-8M0 PC220LC-8M0	6470 mm	5920 mm	5190 mm
		6660 mm	6115 mm	5390 mm
C	Overall height (To top of boom)	3220 mm	3295 mm	3185 mm

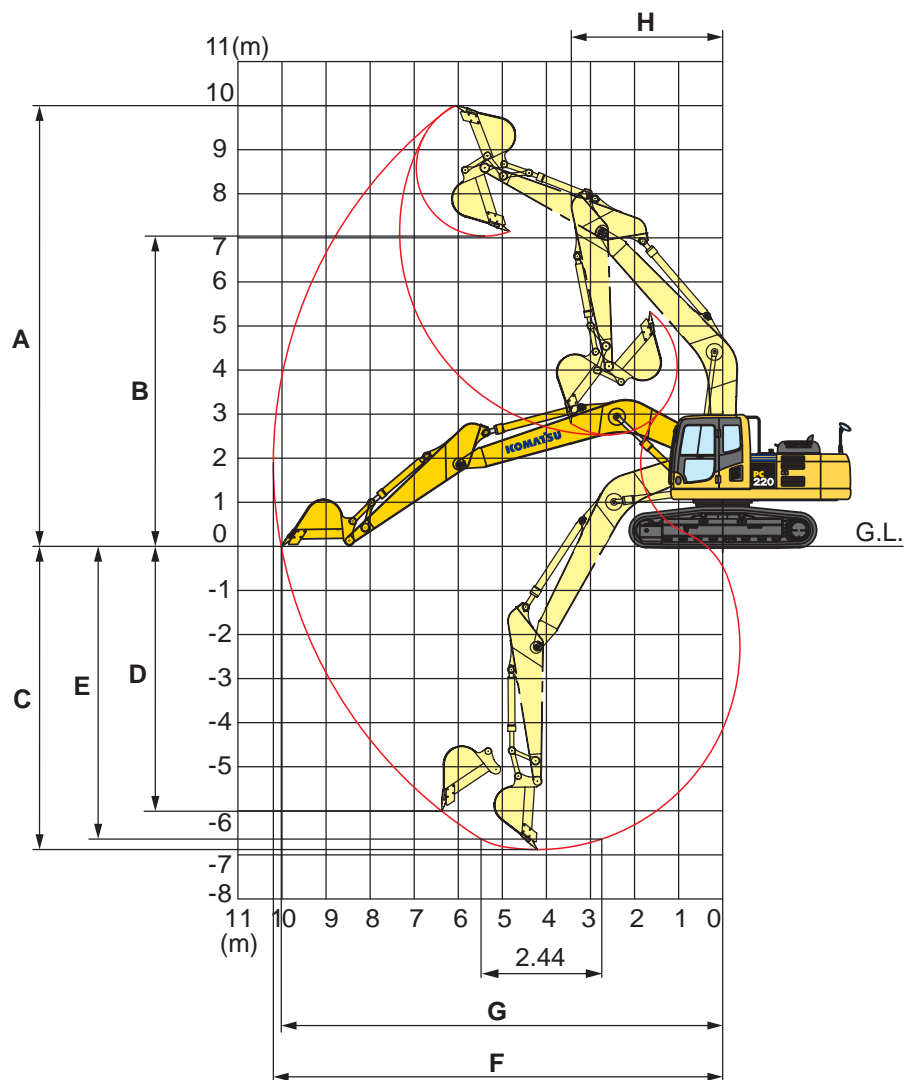
Models		PC220-8M0	PC220LC-8M0
D	Overall width	2980 mm	3280 mm
E	Overall height (To top of cab)	3055 mm	3055 mm
F	Ground clearance, counterweight	1100 mm	1100 mm
G	Ground clearance (Minimum)	440 mm	440 mm
H	Tail swing radius	2940 mm	2940 mm
I	Track length on ground	3460 mm	3845 mm
J	Track length	4260 mm	4640 mm
K	Track gauge	2380 mm	2580 mm
L	Width of crawler	2980 mm	3280 mm
M	Shoe width	600 mm	700 mm
N	Grouser height	26 mm	26 mm
O	Machine cab height	2100 mm	2110 mm
P	Machine cab width	2710 mm	2710 mm
Q	Distance, swing center to rear end	2905 mm	2905 mm





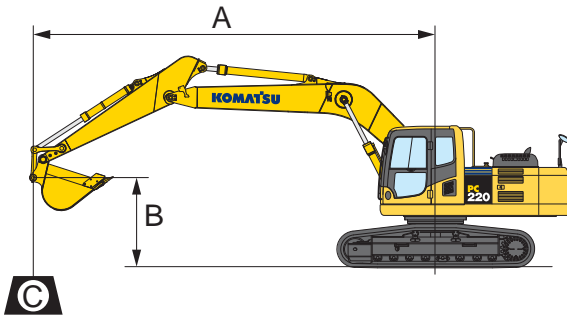

**WORKING RANGE**

Arm Length		2000 mm	2500 mm	3045 mm
<b>A</b>	Max. digging height	9665 mm	9790 mm	10000 mm
<b>B</b>	Max. dumping height	6715 mm	6860 mm	7035 mm
<b>C</b>	Max. digging depth	5825 mm	6320 mm	6920 mm
<b>D</b>	Max. vertical wall digging depth	4750 mm	5130 mm	6010 mm
<b>E</b>	Max. digging depth of cut for 2440 mm level	5585 mm	6100 mm	6700 mm
<b>F</b>	Max. digging reach	9270 mm	9670 mm	10180 mm
<b>G</b>	Max. digging reach at ground level	9070 mm	9480 mm	10020 mm
<b>H</b>	Min. swing radius	3300 mm	3320 mm	3450 mm
<b>SAE J 1179 Rating</b>	Bucket digging force at power max.	176 kN 17900 kgf	152 kN 15500 kgf	152 kN 15500 kgf
	Arm crowd force at power max.	155 kN 15800 kgf	142 kN 14500 kgf	119 kN 12100 kgf
<b>ISO 6015 Rating</b>	Bucket digging force at power max.	197 kN 20100 kgf	172 kN 17500 kgf	172 kN 17500 kgf
	Arm crowd force at power max.	161 kN 16400 kgf	148 kN 15100 kgf	129 kN 13200 kgf





## LIFTING CAPACITY WITH LIFTING MODE



- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ⊗: Rating at maximum reach

### Conditions:

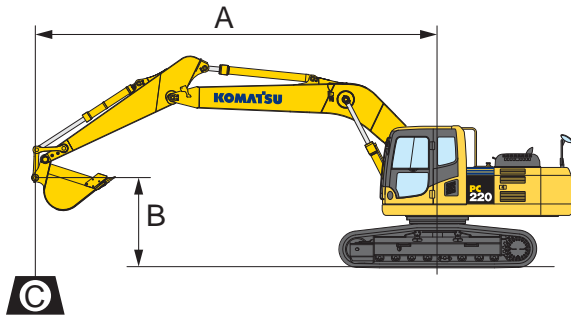
- 5850 mm one-piece boom
- 1.0 m<sup>3</sup> SAE J 296 heaped bucket
- Shoe width:  
—PC220-8M0 600 mm triple grouser

PC220-8M0		Arm: 2000 mm		Bucket: 1.0 m <sup>3</sup> SAE J 296 heaped		Shoe: 600 mm triple grouser							
B	A	⊗ MAX		7.5 m		6.0 m		4.5 m		3.0 m		1.5 m	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.5 m		*5400 kg	*5400 kg										
6.0 m		*5150 kg	4200 kg			*5750 kg	5300 kg						
4.5 m		5000 kg	3400 kg	5000 kg	3400 kg	*6500 kg	5050 kg	*7950 kg	*7950 kg	*11200 kg	*11200 kg		
3.0 m		4500 kg	3050 kg	4900 kg	3300 kg	7100 kg	4800 kg	*10950 kg	7500 kg				
1.5 m		4350 kg	2900 kg	4750 kg	3150 kg	6800 kg	4500 kg	10850 kg	6950 kg				
0 m		4500 kg	2950 kg	4650 kg	3050 kg	6600 kg	4350 kg	10600 kg	6750 kg				
-1.5 m		5000 kg	3300 kg			6550 kg	4300 kg	10650 kg	6750 kg	*8900 kg	*8900 kg		
-3.0 m		6350 kg	4200 kg			6700 kg	4400 kg	10800 kg	6900 kg	*16650 kg	13950 kg		
-4.5 m		*8950 kg	6850 kg					*9550 kg	7200 kg				

PC220-8M0		Arm: 2500 mm		Bucket: 1.0 m <sup>3</sup> SAE J 296 heaped		Shoe: 600 mm triple grouser							
B	A	⊗ MAX		7.5 m		6.0 m		4.5 m		3.0 m		1.5 m	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.5 m		*5300 kg	*5300 kg			*5250 kg	*5250 kg						
6.0 m		*5100 kg	3900 kg			*5200 kg	*5200 kg						
4.5 m		4700 kg	3200 kg	5150 kg	3500 kg	*6000 kg	5200 kg	*7100 kg	*7100 kg				
3.0 m		4250 kg	2850 kg	5000 kg	3350 kg	7200 kg	4900 kg	*9900 kg	7750 kg				
1.5 m		4100 kg	2750 kg	4800 kg	3200 kg	6900 kg	4600 kg	11050 kg	7100 kg				
0 m		4200 kg	2750 kg	4700 kg	3100 kg	6700 kg	4400 kg	10700 kg	6800 kg				
-1.5 m		4600 kg	3050 kg	4650 kg	3050 kg	6600 kg	4300 kg	10600 kg	6700 kg	*10100 kg	*10100 kg	*8950 kg	*8950 kg
-3.0 m		5650 kg	3700 kg			6650 kg	4350 kg	10750 kg	6850 kg	*17950 kg	13900 kg	*10050 kg	*10050 kg
-4.5 m		8500 kg	5600 kg					*10700 kg	7100 kg	*15150 kg	14150 kg		

PC220-8M0		Arm: 3045 mm		Bucket: 1.0 m <sup>3</sup> SAE J 296 heaped		Shoe: 600 mm triple grouser							
B	A	⊗ MAX		7.5 m		6.0 m		4.5 m		3.0 m		1.5 m	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.5 m		*3350 kg	*3350 kg			*4350 kg	*4350 kg						
6.0 m		*3200 kg	*3200 kg	*4700 kg	3650 kg	*4450 kg	*4450 kg						
4.5 m		*3250 kg	2750 kg	*5050 kg	3550 kg	*5300 kg	5300 kg						
3.0 m		*3400 kg	2500 kg	5000 kg	3350 kg	*6600 kg	4950 kg	*8700 kg	7900 kg	*11950 kg	*11950 kg		
1.5 m		3600 kg	2350 kg	4800 kg	3200 kg	6950 kg	4600 kg	*10950 kg	7200 kg	*6750 kg	*6750 kg		
0 m		3650 kg	2400 kg	4650 kg	3050 kg	6650 kg	4350 kg	10650 kg	6750 kg	*8250 kg	*8250 kg		
-1.5 m		4000 kg	2600 kg	4550 kg	3000 kg	6500 kg	4200 kg	10500 kg	6600 kg	*9850 kg	*9850 kg	*7650 kg	*7650 kg
-3.0 m		4700 kg	3100 kg	4600 kg	3000 kg	6500 kg	4200 kg	10550 kg	6650 kg	*17800 kg	13550 kg	*10600 kg	*10600 kg
-4.5 m		6450 kg	4250 kg			6700 kg	4400 kg	10800 kg	6900 kg	*16550 kg	14000 kg		

\* Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

**LIFTING CAPACITY WITH LIFTING MODE**

- A: Reach from swing center  
 B: Bucket hook height  
 C: Lifting capacity  
 Cf: Rating over front  
 Cs: Rating over side  
 ⊗: Rating at maximum reach

**Conditions:**

- 5850 mm one-piece boom
- 1.0 m<sup>3</sup> SAE J 296 heaped bucket
- Shoe width:  
—PC220LC-8M0 700 mm triple grouser

PC220LC-8M0		Arm: 2000 mm		Bucket: 1.0 m <sup>3</sup> SAE J 296 heaped		Shoe: 700 mm triple grouser							
B	A	⊗ MAX		7.5 m		6.0 m		4.5 m		3.0 m		1.5 m	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.5 m		*5400 kg	*5400 kg										
6.0 m		*5150 kg	4850 kg			*5750 kg	*5750 kg						
4.5 m		*5200 kg	3950 kg	*6000 kg	3950 kg	*6500 kg	5850 kg	*7950 kg	*7950 kg	*11200 kg	*11200 kg		
3.0 m		*5500 kg	3550 kg	6000 kg	3850 kg	*7650 kg	5550 kg	*10950 kg	8700 kg				
1.5 m		5350 kg	3400 kg	5850 kg	3700 kg	8400 kg	5300 kg	*12200 kg	8150 kg				
0 m		5500 kg	3500 kg	5750 kg	3600 kg	8200 kg	5100 kg	*13050 kg	7900 kg				
-1.5 m		6150 kg	3900 kg			8150 kg	5050 kg	*13000 kg	7950 kg	*8900 kg	*8900 kg		
-3.0 m		7800 kg	4900 kg			8250 kg	5150 kg	*12100 kg	8100 kg	*16650 kg	*16650 kg		
-4.5 m		*8950 kg	8000 kg					*9550 kg	8400 kg				

PC220LC-8M0		Arm: 2500 mm		Bucket: 1.0 m <sup>3</sup> SAE J 296 heaped		Shoe: 700 mm triple grouser							
B	A	⊗ MAX		7.5 m		6.0 m		4.5 m		3.0 m		1.5 m	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.5 m		*5300 kg	*5300 kg			*5250 kg	*5250 kg						
6.0 m		*5100 kg	4450 kg			*5200 kg	*5200 kg						
4.5 m		*5200 kg	3700 kg	*5600 kg	4100 kg	*6000 kg	6000 kg	*7100 kg	*7100 kg				
3.0 m		5200 kg	3350 kg	6050 kg	3900 kg	*7250 kg	5650 kg	*9900 kg	8950 kg				
1.5 m		5000 kg	3200 kg	5900 kg	3750 kg	8450 kg	5350 kg	*12200 kg	8300 kg				
0 m		5150 kg	3250 kg	5800 kg	3650 kg	8250 kg	5150 kg	*13050 kg	7950 kg				
-1.5 m		5700 kg	3600 kg	5750 kg	3600 kg	8150 kg	5050 kg	*13100 kg	7900 kg	*10100 kg	*10100 kg	*8950 kg	*8950 kg
-3.0 m		6950 kg	4350 kg			8200 kg	5100 kg	*12550 kg	8000 kg	*17950 kg	*16450 kg	*10050 kg	*10050 kg
-4.5 m		*8800 kg	6500 kg					*10700 kg	8300 kg	*15150 kg	*15150 kg		

PC220LC-8M0		Arm: 3045 mm		Bucket: 1.0 m <sup>3</sup> SAE J 296 heaped		Shoe: 700 mm triple grouser							
B	A	⊗ MAX		7.5 m		6.0 m		4.5 m		3.0 m		1.5 m	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.5 m		*3350 kg	*3350 kg			*4350 kg	*4350 kg						
6.0 m		*3200 kg	*3200 kg	*4700 kg	4200 kg	*4450 kg	*4450 kg						
4.5 m		*3250 kg	3250 kg	*5050 kg	4100 kg	*5300 kg	*5300 kg						
3.0 m		*3400 kg	2900 kg	*5650 kg	3900 kg	*6600 kg	5700 kg	*8700 kg	*8700 kg	*11950 kg	*11950 kg		
1.5 m		*3750 kg	2800 kg	5900 kg	3750 kg	*7900 kg	5350 kg	*11300 kg	8400 kg	*6750 kg	*6750 kg		
0 m		*4250 kg	2850 kg	5750 kg	3600 kg	8250 kg	5100 kg	*12650 kg	7950 kg	*8250 kg	*8250 kg		
-1.5 m		4950 kg	3100 kg	5650 kg	3550 kg	8050 kg	4950 kg	*12950 kg	7800 kg	*9850 kg	*9850 kg	*7650 kg	*7650 kg
-3.0 m		5800 kg	3650 kg	5700 kg	3550 kg	8050 kg	5000 kg	*12750 kg	7850 kg	*17800 kg	16250 kg	*10600 kg	*10600 kg
-4.5 m		*7900 kg	5000 kg			*8200 kg	5150 kg	*11550 kg	8100 kg	*16550 kg	*16500 kg		

\* Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.





## STANDARD EQUIPMENT

### ENGINE:

- Automatic engine warm-up system
- Dry type air cleaner, double element
- Engine, Komatsu SAA6D107E-1
- Engine overheat prevention system
- Radiator and oil cooler dust proof net
- Suction fan

### ELECTRICAL SYSTEM:

- Alternator, 24 V/35 A
- Auto-decelerator
- Batteries, 2 X 12 V/110 Ah
- Starting motor, 24 V/4.5 kW
- Working light, 2 (Boom and RH)

### HYDRAULIC SYSTEM:

- Boom holding valve
- Power maximizing system
- Pressure Proportional Control (PPC) hydraulic control system
- Working mode selection system

### GUARDS AND COVERS:

- Fan guard structure
- Track guiding guard, center section

### UNDERCARRIAGE:

- Hydraulic track adjusters (Each side)
  - Track roller
    - PC220-8M0, 8 each side
    - PC220LC-8M0, 10 each side
- Track shoe
  - PC220-8M0, 600 mm triple grouser
  - PC220LC-8M0, 700 mm triple grouser

### OPERATOR ENVIRONMENT:

- Equipment management monitoring system
- Large multi-lingual high resolution LCD monitor
- Rear view mirrors (RH, LH, rear, sidewise)
- ROPS cab (ISO 12117-2)

### OTHER EQUIPMENT:

- Counterweight
- Electric horn
- Rear reflector
- Slip-resistant plates
- Travel alarm



## OPTIONAL EQUIPMENT

### ENGINE:

- Additional filter system for poor-quality fuel (Water separator)
- Air pre-cleaner
- Large capacity fuel pre-filter

### ELECTRICAL SYSTEM:

- Alternator, 24 V/60 A
- Batteries, large capacity
- Working lights
  - 2 on cab
  - 1 on counterweight

### HYDRAULIC SYSTEM:

- Long lubricating intervals for work equipment bushing (500 hours)
- Service valve

### UNDERCARRIAGE:

- Shoes, triple grouser shoes
  - PC220-8M0 700 mm, 800 mm
  - PC220LC-8M0 600 mm, 800 mm, 900 mm
- Track frame undercover
- Track roller guards (Full length)

### OPERATOR ENVIRONMENT:

- A/C with defroster
- Bolt-on top guard, OPG top guard level 2 (ISO 10262)
- Cab accessories
  - Rain visor
  - Sun visor
- Cab front guard
  - Full height guard, OPG level 1 (ISO 10262)
  - Full height guard, OPG level 2 (ISO 10262)
  - Half height guard

- Heater with defroster
- Rear view monitor system
- Seat belt, retractable
- Seat, suspension

### WORK EQUIPMENT:

- Arms
  - 2000 mm arm assembly
  - 2500 mm arm assembly
  - 3045 mm arm assembly
- Boom
  - 5850 mm

