

# KOMATSU®

## PC400-8R PC400LC-8R

### HORSEPOWER

Gross: 270 kW 362 HP @ 1900 rpm

Net: 257 kW 345 HP @ 1900 rpm

### OPERATING WEIGHT

PC400-8R: 41740–42590 kg

92,020–93,890 lb

PC400LC-8R: 42290–43200 kg

93,230–95,240 lb

**PC**  
**400**

HYDRAULIC EXCAVATOR



Photos may include optional equipment.

# WALK-AROUND

## Productivity Features

### • High Production and Low Fuel Consumption

High power, working performance and fuel efficiency improve production and fuel costs.

### • Excellent Machine Stability

Large counterweight offers superior machine stability and balance.

### • Large Digging Force

Pressing the Power Max function button temporarily increases the digging force 7%.

### • Two-mode Setting for Boom

Switch selection allows either powerful digging or smooth boom operation.

See page 5.

## Large TFT LCD Monitor

- Easy-to-see and use 7" large multi-function color monitor
- Can be displayed in 12 languages for global support.

TFT : Thin Film Transistor  
LCD : Liquid Crystal Display

See page 8.

## Safety Design

- ROPS cab (ISO 12117-2)
- Anti-slip plates for safe work on machine
- Rear view monitoring system for easy checking behind the machine (optional)

See page 7.



## Ecology and Economy Features

- Low emission engine  
A powerful turbocharged and air to air aftercooled Komatsu SAA6D125E-5 engine provides **257 kW** 345 HP. This engine is EPA Tier 2 and EU Stage 2 emissions equivalent.
- Economy mode saves fuel consumption.
- Low operation noise  
See pages 4 and 5.

## Large Comfortable Cab

- Low-noise cab
- Low vibration with cab damper mounting
- Highly pressurized cab with optional air conditioner
- Operator seat and console with armrest that enables operations in the appropriate operational posture.  
See page 6.

## Easy Maintenance

- Long replacement interval of engine oil, engine oil filter, hydraulic oil and hydraulic filter.
- Side-by-side radiator and oil cooler configuration enables independent removal and installation of those two components.
- Equipped with the EMMS monitoring system.
- Easy access to engine oil filter and fuel drain valve
- Large fuel tank capacity
- Electric priming pump installed.
- Equipped with large size steps for easier maintenance.

See page 9.

## Excellent Reliability and Durability

- The fuel reliability is improved by adding fuel main-filter and water separator working against low grade fuel.

- Equipped with fuel pre-filter as standard (with water separator).
- High pressure in-line filter

See page 10.

## Variable Track Gauge (optional)

- Greatly increases lateral stability
- Compliant with transportation regulations

See page 5.

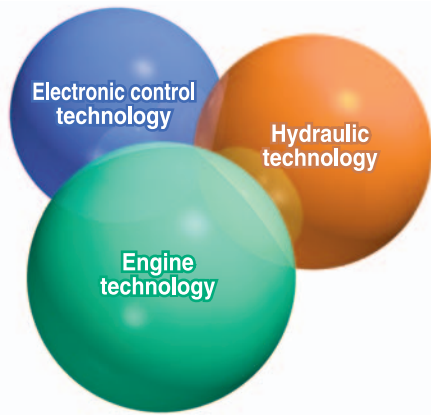
**HORSEPOWER**  
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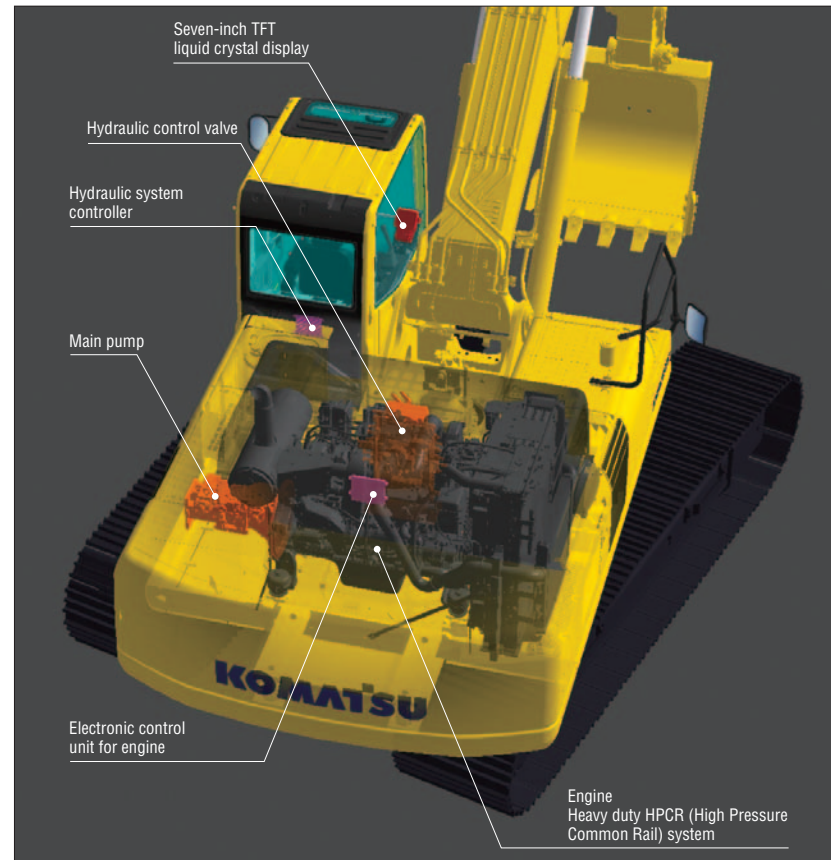
**BUCKET CAPACITY**  
1.30 – 2.20 m<sup>3</sup>  
1.70 – 2.88 yd<sup>3</sup>

# PRODUCTIVITY & ECOLOGY FEATURES

## 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.



## High Power Komatsu SAA6D125E Engine

The PC400-8R gets its exceptional power and work capacity from a Komatsu SAA6D125E-5 engine. Output is **257 kW** 345 HP, providing increased hydraulic power and improved fuel efficiency.

The SAA6D125E-5 engine is EPA Tier 2 and EU Stage 2 emissions equivalent.

The SAA6D125E-5 engine adopts the electronically controlled Heavy Duty HPCR\* fuel injection system.

\*HPCR : High Pressure Common Rail



## Low Operation Noise

Enables a low noise operation using the low-noise engine and methods to cut noise at source. Ambient noise meets the EU Stage 2 noise regulation.

## Excellent Machine Stability

Large counterweight offers superior machine stability and balance.

## Working Modes Selectable

Two established work modes are further improved.

**P mode** – Power or work priority mode has low fuel consumption, but fast equipment speed and maximum production and power are maintained.

**E mode** – Economy or fuel priority mode further reduces fuel consumption, but maintains the P-mode-like working equipment speed for light duty work.

You can select Power or Economy modes using a one-touch operation on the monitor panel depending on workloads.



## 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

## Idling Caution

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



## Large Digging Force

With the one-touch Power Max. function digging force has been further increased. (8.5 seconds of operation)

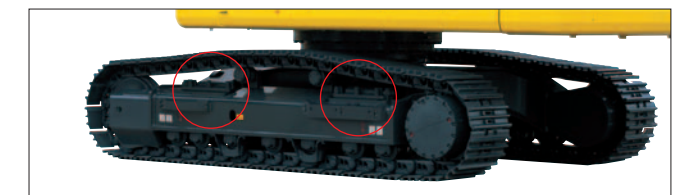
**Maximum arm crowd force (ISO):**  
200 kN (20.4t) → **214 kN (21.8t)** **7% UP**  
(with Power Max.)

**Maximum bucket digging force (ISO):**  
256 kN (26.1t) → **275 kN (28.0t)** **7% UP**  
(with Power Max.)

\*Measured with Power Max function, 3380 mm 11'1" arm and ISO rating

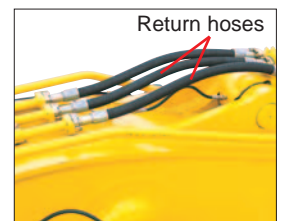
## Variable Track Gauge (optional)

- Lateral stability is significantly improved when operating with the gauge extended.
- Lateral stability is increased by 30% (compared with the fixed gauge version).
- With trackframes retracted, overall width complies with many local transportation regulations.



## Smooth Loading Operation

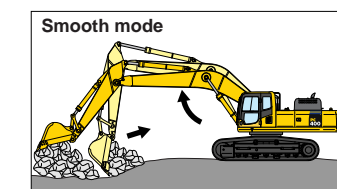
Two return hoses improve hydraulic performance. In the arm out function, a portion of the oil is returned directly to the tank providing smooth operation.



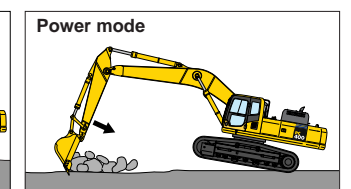
Return hoses

## Two-mode Setting for Boom

Smooth mode provides easy operation for gathering blasted rock or scraping down operation. When maximum digging force is needed, switch to Power mode for more effective excavating.



Boom floats upward, reducing lifting of machine front. This facilitates gathering blasted rock and scraping down operations.



Boom pushing force is increased, ditch digging and box digging operation on hard ground are improved.

# WORKING ENVIRONMENT

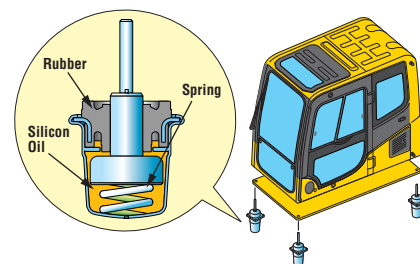


### Low Cab Noise

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

PC400-8R 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.

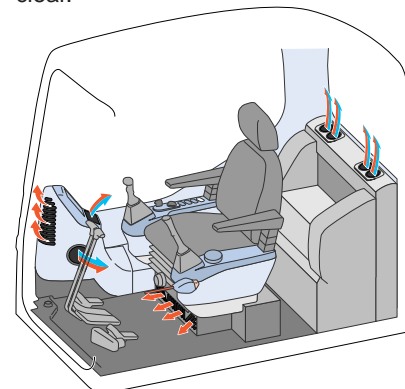


### Pressurized Cab

Optional air conditioner, air filter and a higher internal air pressure (+6.0 mm Aq +0.2"Aq) prevent external dust from entering the cab.

### Automatic Air Conditioner (optional)

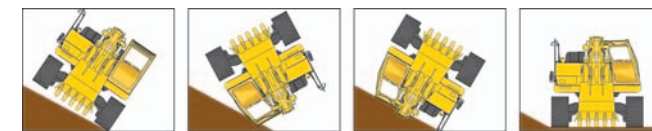
Enables you to easily and precisely set cab atmosphere with the instruments on the large LCD. The bi-level control function keeps the operator's head and feet cool and warm respectively. This improved air flow function keeps the inside of the cab comfortable throughout the year. Defroster function keeps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



## Safety Features

### 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 ISO OPG top guard level 1 for falling objects. Combined with the retractable seat belt, The ROPS cab protects the operator in case of tipping over and against falling objects.



### Anti-slip Plates

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



### Lock Lever

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



### Pump/Engine Room Partition

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



### Thermal and Fan Guards

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



Large Serrated Steps



Large Handrail

# MAINTENANCE FEATURES

## Large LCD Color Monitor

### Large Multi-lingual LCD Monitor

A large user-friendly color monitor enables safe, accurate and smooth work. Improved screen visibility is achieved by the use of TFT liquid crystal display that can easily be read at various angles and lighting conditions. Simple and easy to operate switches. Function keys facilitate multi-function operations. Displays data in 12 languages to globally support operators around the world.



- Indicators**
- 1 Auto-decelerator
  - 2 Working mode
  - 3 Travel speed
  - 4 Engine water temperature gauge
  - 5 Hydraulic oil temperature gauge
  - 6 Fuel gauge
  - 7 Eco-gauge
  - 8 Function switches menu

- Basic operation switches**
- 1 Auto-decelerator
  - 2 Working mode selector
  - 3 Traveling selector
  - 4 Buzzer cancel
  - 5 Wiper
  - 6 Windshield washer

### Mode Selection

The multi-function color monitor has Power mode, Economy mode, Lifting mode, Breaker mode and Attachment mode.

Working Mode	Application	Advantage
P	Power mode	<ul style="list-style-type: none"> <li>Maximum production/power</li> <li>Fast cycle time</li> </ul>
E	Economy mode	<ul style="list-style-type: none"> <li>Excellent fuel economy</li> </ul>
L	Lifting mode	<ul style="list-style-type: none"> <li>Hydraulic pressure is increased by 7%</li> </ul>
B	Breaker operation	<ul style="list-style-type: none"> <li>Optimum engine rpm, hydraulic flow</li> </ul>
ATT	Attachment mode	<ul style="list-style-type: none"> <li>Optimum engine rpm, hydraulic flow, 2 way</li> </ul>

### Lifting Mode

When the Lifting mode is selected, lifting capacity is increased 7% by raising hydraulic pressure.

### EMMS

#### (Equipment Management Monitoring System)

#### Monitor Function

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



#### Maintenance Function

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



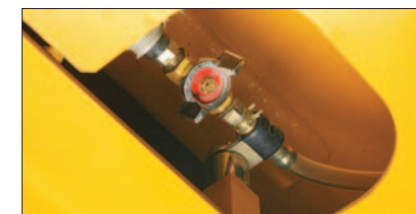
#### Trouble Data Memory Function

Monitor stores abnormalities for effective troubleshooting.

## Easy Maintenance

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

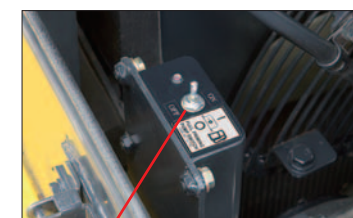
Engine oil dipstick and fill, and fuel filter are mounted on same side to improve accessibility. Fuel drain valve are remotely mounted to improve accessibility.



Fuel Drain Valve

### Electric Priming Pump

Bleeding air from fuel system is easily accomplished with the electric priming pump.



Electric priming pump switch

### Easy Radiator Cleaning

Since radiator and oil cooler are arranged side-by-side, it is easy to clean, remove and install them.

### Large-size Steps

On both right and left track frames are fixed with wider steps for easier maintenance.



### Large Capacity Air Cleaner

Large capacity air cleaner is comparable to that of larger machines. The larger air cleaner can extend air cleaner life during long-term operation and prevents early clogging and resulting power decrease. Reliability is improved by a new seal design.



### Long-life Oil, Filter

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



Hydraulic oil filter (Eco-white element)

- Engine oil & Engine oil filter every **500** hours
- Hydraulic oil every **5000** hours
- Hydraulic oil filter every **1000** hours

### Long Work Equipment Greasing Interval (optional)

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

### Large Fuel Tank Capacity

Large fuel tank capacity extends operating hours before refueling. Fuel tank is treated for rust prevention and improved corrosion resistance.

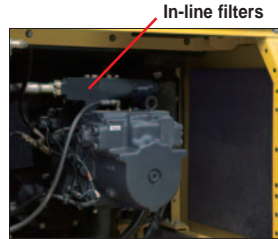


# RELIABILITY FEATURES

## Excellent Reliability and Durability

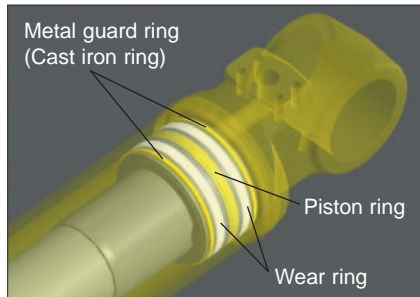
### High Pressure In-line Filter

In-line filters are provided at outlet port (pressure side) of each pump to protect hydraulic system contamination.



### Metal Guard Rings

Metal guard rings protect all the hydraulic cylinders and improve reliability.



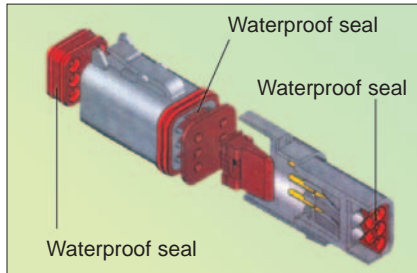
### Fuel Main-filter

The reliability of fuel systems is improved, because fuel main-filter additionally installed removes contamination and sludge contained in fuel.



### DT-type Connectors

DT-type connectors seal tight and have higher reliability.



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

Removes water and contaminants in the fuel to prevent fuel problems.



### Water Separator

Removes water from the fuel and improves the reliability of fuel systems.



# SPECIFICATIONS

## ENGINE

Model . . . . . Komatsu SAA6D125E-5  
 Type . . . . . Water-cooled, 4-cycle, direct injection  
 Aspiration . . . . . Turbocharged, aftercooled  
 Number of cylinders . . . . . 6  
 Bore . . . . . 125 mm 4.92"  
 Stroke . . . . . 150 mm 5.91"  
 Piston displacement . . . . . 11.04 ltr 674 in<sup>3</sup>  
 Horsepower:  
 SAE J1995 . . . . . Gross 270 kW 362 HP  
 ISO 9249 / SAE J1349 . . . . . Net 257 kW 345 HP  
 Rated rpm . . . . . 1900 rpm  
 Fan drive type . . . . . Mechanical  
 Governor . . . . . All-speed control, electronic  
 EPA Tier 2 and EU Stage 2 emissions equivalent.

## HYDRAULICS

Type . . . . . HydraMind (Hydraulic Mechanical Intelligence New Design) system, closed-center system with load sensing valves and pressure compensated valves  
 Number of selectable working modes . . . . . 4  
 Main pump:  
 Type . . . . . Variable displacement piston type  
 Pumps for . . . . . Boom, arm, bucket, swing, and travel circuits  
 Maximum flow . . . . . 690 ltr/min 182 U.S. gal/min  
 Supply for control circuit . . . . . Self-reducing valve  
 Hydraulic motors:  
 Travel . . . . . 2 x axial piston motors 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> 5,400 psi  
 Travel circuit . . . . . 37.3 MPa 380 kgf/cm<sup>2</sup> 5,400 psi  
 Swing circuit . . . . . 27.9 MPa 285 kgf/cm<sup>2</sup> 4,050 psi  
 Pilot circuit . . . . . 3.2 MPa 33 kgf/cm<sup>2</sup> 470 psi  
 Hydraulic cylinders:  
 (Number of cylinders – bore x stroke x rod diameter)  
 Boom . . . . . 2–160 mm x 1570 mm x 110 mm 6.3" x 61.8" x 4.3"  
 Arm . . . . . except 2.4 m 7'10" arm  
 . . . . . for 2.4 m 7'10" arm  
 . . . . . 1–185 mm x 1820 mm x 120 mm 7.3" x 71.7" x 4.7"  
 . . . . . 1–185 mm x 1590 mm x 120 mm 7.3" x 62.6" x 4.7"  
 Bucket . . . . . 1–160 mm x 1270 mm x 110 mm 6.3" x 50" x 4.3"

## DRIVES AND BRAKES

Steering control . . . . . Two levers with pedals  
 Drive method . . . . . Hydrostatic  
 Maximum drawbar pull . . . . . 330 kN 33700 kgf 74,300 lb  
 Gradeability . . . . . 70%, 35°  
 Maximum travel speed: High . . . . . 5.5 km/h 3.4 mph  
 (Auto-Shift) Mid . . . . . 4.0 km/h 2.5 mph  
 (Auto-Shift) Low . . . . . 3.0 km/h 1.9 mph  
 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 . . . . . 9.1 rpm

## UNDERCARRIAGE

Center frame . . . . . X-frame  
 Track frame . . . . . Box-section  
 Seal of track . . . . . Sealed track  
 Track adjuster . . . . . Hydraulic  
 Number of shoes (each side):  
 PC400-8R . . . . . 46  
 PC400LC-8R . . . . . 49  
 Number of carrier rollers . . . . . 2 each side  
 Number of track rollers (each side):  
 PC400-8R . . . . . 7  
 PC400LC-8R . . . . . 8

## COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank . . . . . 650 ltr 172 U.S. gal  
 Coolant . . . . . 36.0 ltr 9.5 U.S. gal  
 Engine . . . . . 37.0 ltr 9.8 U.S. gal  
 Final drive, each side . . . . . 10.5 ltr 2.8 U.S. gal  
 Swing drive . . . . . 20.0 ltr 5.3 U.S. gal  
 Hydraulic tank . . . . . 248 ltr 65.5 U.S. gal

## OPERATING WEIGHT (APPROXIMATE)

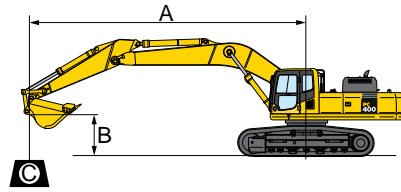
Operating weight including 7060 mm 23'2" one-piece boom, 3380 mm 11'1" arm, SAE heaped 1.9 m<sup>3</sup> 2.49 yd<sup>3</sup> bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Shoes	PC400-8R		PC400LC-8R	
	Operating Weight	Ground Pressure	Operating Weight	Ground Pressure
600 mm 23.6"	41740 kg 92,020 lb	77.8 kPa 0.79 kgf/cm <sup>2</sup> 11.3 psi	42290 kg 93,230 lb	73.3 kPa 0.75 kgf/cm <sup>2</sup> 10.6 psi
700 mm 27.6"	42160 kg 92,950 lb	67.3 kPa 0.69 kgf/cm <sup>2</sup> 9.76 psi	42740 kg 94,220 lb	63.5 kPa 0.65 kgf/cm <sup>2</sup> 9.24 psi
800 mm 31.5"	42590 kg 93,890 lb	59.5 kPa 0.61 kgf/cm <sup>2</sup> 8.63 psi	43200 kg 95,240 lb	56.2 kPa 0.57 kgf/cm <sup>2</sup> 8.15 psi





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
C: Rating at maximum reach

Table with columns for model (PC400LC-8R), arm length (2400 mm), bucket capacity (1.9 m³), and various reach and height specifications. It contains multiple rows of lifting capacity data in kg and lb.

Table with columns for model (PC400LC-8R), arm length (2900 mm), bucket capacity (1.9 m³), and various reach and height specifications. It contains multiple rows of lifting capacity data in kg and lb.

Table with columns for model (PC400LC-8R), arm length (3380 mm), bucket capacity (1.90 m³), and various reach and height specifications. It contains multiple rows of lifting capacity data in kg and lb.

Table with columns for model (PC400LC-8R), arm length (4000 mm), bucket capacity (1.6 m³), and various reach and height specifications. It contains multiple rows of lifting capacity data in kg and lb.



STANDARD EQUIPMENT

- Alternator, 50 Ampere, 24V
Anti-slip plates
Auto-decel
Automatic engine warm-up system
Batteries, 110 Ah/2 x 12V
Boom holding valve
ROPS cab (ISO 12117-2)
Corrosion resistor
Counterweight, 9220kg 20,330lb
Dry type air cleaner, double element
Electric horn
Engine, Komatsu SAA6D125E-5
Engine overheat prevention system
Fan guard structure
Fuel pre-filter (with water separator)
Hydraulic track adjusters (each side)
Multi-function color monitor
Power maximizing system
PPC hydraulic control system
Radiator & oil cooler dust proof net
Rear reflector
Rear view mirror (RH, LH)
Seat belt, retractable
Track guiding guard, center section
Track roller
Track shoe
Travel alarm
Two-mode settings for boom
Water separator
Working light, 2 (boom and RH)
Working mode selection system



OPTIONAL EQUIPMENT

- Air conditioner with defroster
Alternator, 60 ampere, 24 V
Arms
Batteries, 140 Ah/2 x 12 V
Bolt-on top guard, (Operator Protective Guards level 2 (OPG))
Boom, 7060 mm 23'2"
Cab accessories
Cab front guard
Heater with defroster
Long lubricating intervals for implement bushings
Rear view mirror (rear and sidewise)
Rear view monitoring system
Seat, suspension
Seat, suspension with heater
Service valve
Shoes, triple grouser shoes
Track roller guards (full length)
Track frame undercover
Variable track gauge
Working lights (2 on cab)



SPECIAL PURPOSE BUCKET

- Ripper bucket for hard and rock ground
Capacity
SAE heaped 1.1 m³ 1.44 yd³
CECE heaped 1.0 m³ 1.31 yd³
Width 1250 mm 49.2"
Single-shank ripper is recommended for rock-digging and crushing, hard soil digging, pavement removal works, etc.

\*Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE standard No. J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



**KOMATSU**<sup>®</sup>