

# KOMATSU®

## PC210LCi-11

Tier 4 Final Engine

### HYDRAULIC EXCAVATOR



Photo may include optional equipment.

#### NET HORSEPOWER

165 HP @ 2000 rpm  
123 kW @ 2000 rpm

#### OPERATING WEIGHT

50,706–51,588 lb  
23000–23400 kg

#### BUCKET CAPACITY

0.66–1.57 yd<sup>3</sup>  
0.50–1.20 m<sup>3</sup>

# PC210LCi

**intelligent**  
**MACHINE CONTROL**

# WALK-AROUND



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PG210LGH-11

## MAKE EVERY PASS COUNT



**Improve your efficiency** – less time required to complete excavation to finish grade with intelligent Machine Control (see pg 5).

**Semi-automatic operation** – next generation technology goes beyond traditional machine guidance (indicate only) type systems.

### Innovative

- intelligent Machine Control excavator features semi-automatic operation of work equipment for highly accurate work.
- Large 12.1" (30.7 cm) monitor neatly displays simultaneous information such as magnified fine grading view, 3D view, current as-built status, etc.

### Integrated

- Complete factory installed integrated intelligent Machine Control system comes standard with stroke sensing hydraulic cylinders, Global Navigation Satellite System (GNSS) components and an Inertial Measurement Unit (IMU) sensor. All components are validated to Komatsu's rigid quality & durability standards.

### Intelligent

- intelligent Machine Control excavator allows the operator to focus on moving material efficiently while semi-automatically tracing the target surface and limiting over-excavation.
- Facing angle compass, light bar and sound guidance aid in ease of operation and bucket positioning.



# INTELLIGENT MACHINE CONTROL

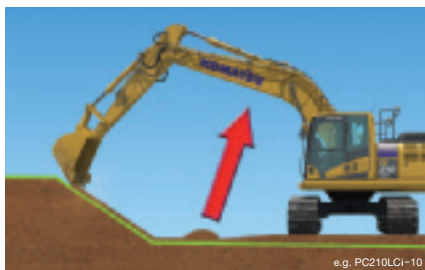


Photo may include optional equipment.

## Intelligent Machine Control

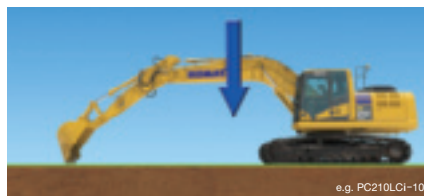
Intelligent Machine Control is based on Komatsu's unique sensor package, including stroke sensing hydraulic cylinders, an IMU sensor, and GNSS antennas. It utilizes 3D design data loaded in the control box to accurately check its position against the target. If the bucket hits the target surface,

it is semi-automatically limited to minimize over-excavation. If the operator turns off Auto mode, the machine can be operated with highly accurate, responsive machine guidance (indicate only).



### • Auto grade assist

With the auto grade assist function, the operator moves the arm, the boom adjusts the bucket height automatically, tracing the target surface and minimizing digging too deep. This allows the operator to perform rough digging without worrying about the design surface, and to perform fine digging by operating the arm lever only. The working range is extended by holding the lever to move the boom downward.



### • Auto stop control

During boom or bucket operation, the work equipment automatically stops when the bucket edge reaches the design surface, thus minimizing damage to the design surface.



### • Minimum distance control

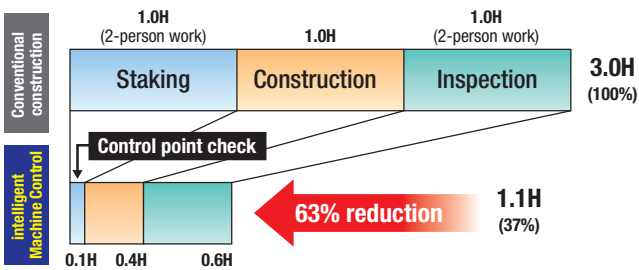
The intelligent Machine Control excavator controls the bucket by automatically selecting the point on the bucket closest to the target surface. Should the machine not be facing a sloped surface at a right angle, it will still follow the target surface and minimize digging below it.



### Improved Construction Efficiency

Staking, survey and final inspection (which is usually done manually), can be reduced with the intelligent Machine Control excavator by setting 3D design data on the control box. Also, use of the facing angle compass can minimize leveling work for the surface on which the machine sits. Even if the machine is inclined while working, the facing angle compass allows the operator to ensure that the machine is facing perpendicular to the target surface. The intelligent Machine Control technology allows the operator to improve work efficiency (i.e. shorter construction time) while minimizing over-excavating the target surface from rough digging to finish grading.

### Comparison of Construction Time Based On In-House Test of Excavation and Grading Slope Surface



\* When used by an expert operator, the Komatsu intelligent Machine Control system increases construction efficiency.  
 \* The above data does not include design time or working data creation time. The above data is based on in-house construction tests, performed by Komatsu, whose conditions may differ from actual construction.



### Comparison of Slope Shaping Work

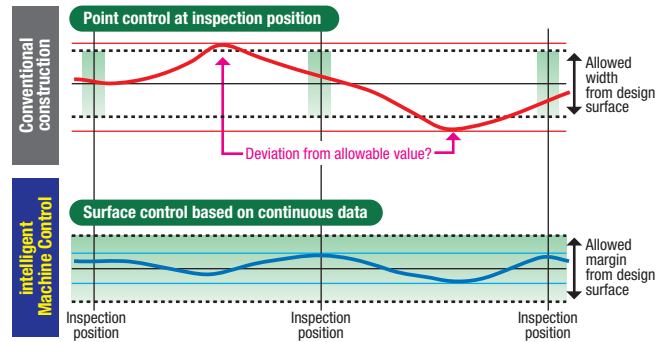
Conventional construction	intelligent Machine Control
Shaping with reference to finishing stakes	Reduces staking work and the number of assistant workers.

e.g. PC210LCi-10

### Improved Work Accuracy

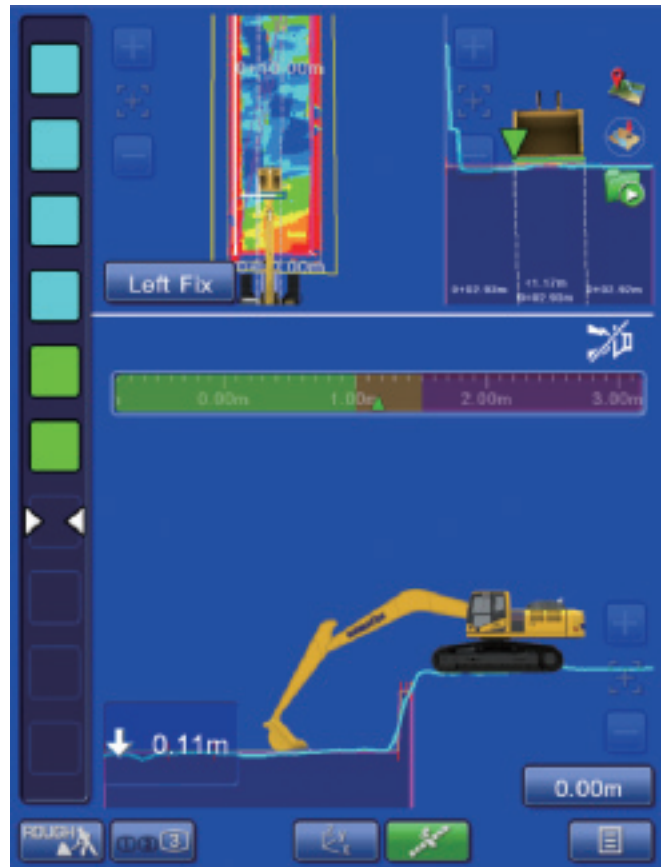
The bucket edge/tip position is instantly displayed on the control box, eliminating the wait time for display on the monitor during construction. The large and easy-to-view control box displays information clearly, aiding in highly accurate work. With manual operation and conventional machine guidance, finish grade quality and excavating accurately depends heavily on the skill of the operator. With the intelligent Machine Control excavator, the bucket is automatically limited to follow the target grade without over-excavating.

### Relationship Between Finished Surface and Allowable Value

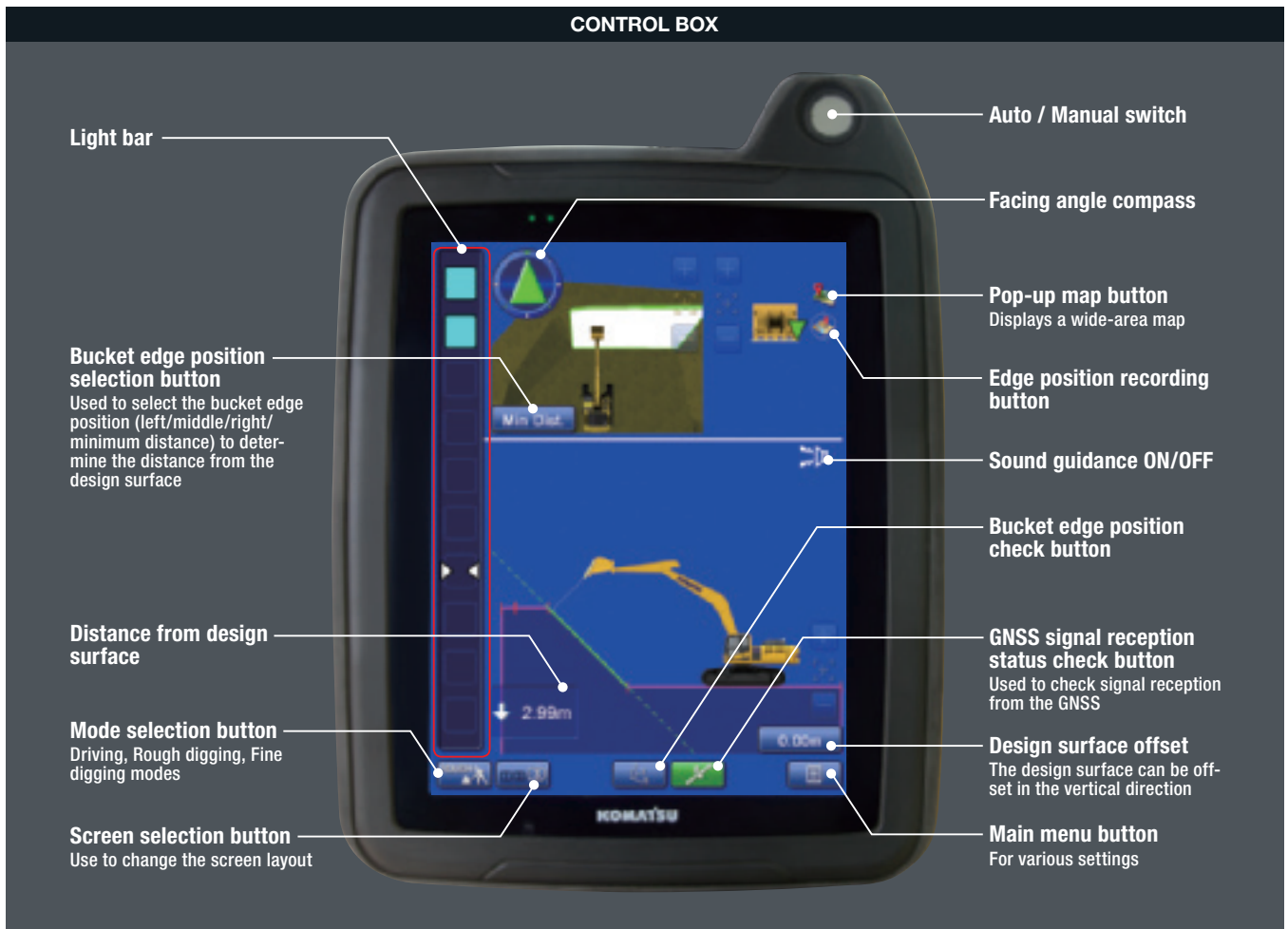


### As-Built Surface Track Mapping

Operator can display and check the as-built status and find where to cut and fill.



# iNTELLIGENT MACHINE CONTROL



## Control Box

The monitor of the Komatsu intelligent Machine Control (control box) uses a large 12.1" (30.7 cm) screen for visibility and ease of use. The simple screen layout displays the necessary information in an easily understood fashion. Touch screen icon interface instead of multi-step menu simplifies operation.

## Bucket Edge Guidance with Eyesight and Sound

### Light bar

Colors show the bucket edge position relative to the target surface. Since the light bar is located on the left side of the screen, the bucket edge position can be viewed simply while operating, which increases the work efficiency.



### Sound guidance

The operator can recognize the target surfaces not only by eyesight, but also by sound. Unique tones can be programmed for various bucket edge distances from the target surface.



## Machine Navigation

### Facing angle compass

The orientation and color of the facing angle compass's arrow shows the operator the facing angle of the bucket edge relative to the target surface. This allows the bucket edge to be accurately positioned square with the target surface, which is useful when finishing slopes.



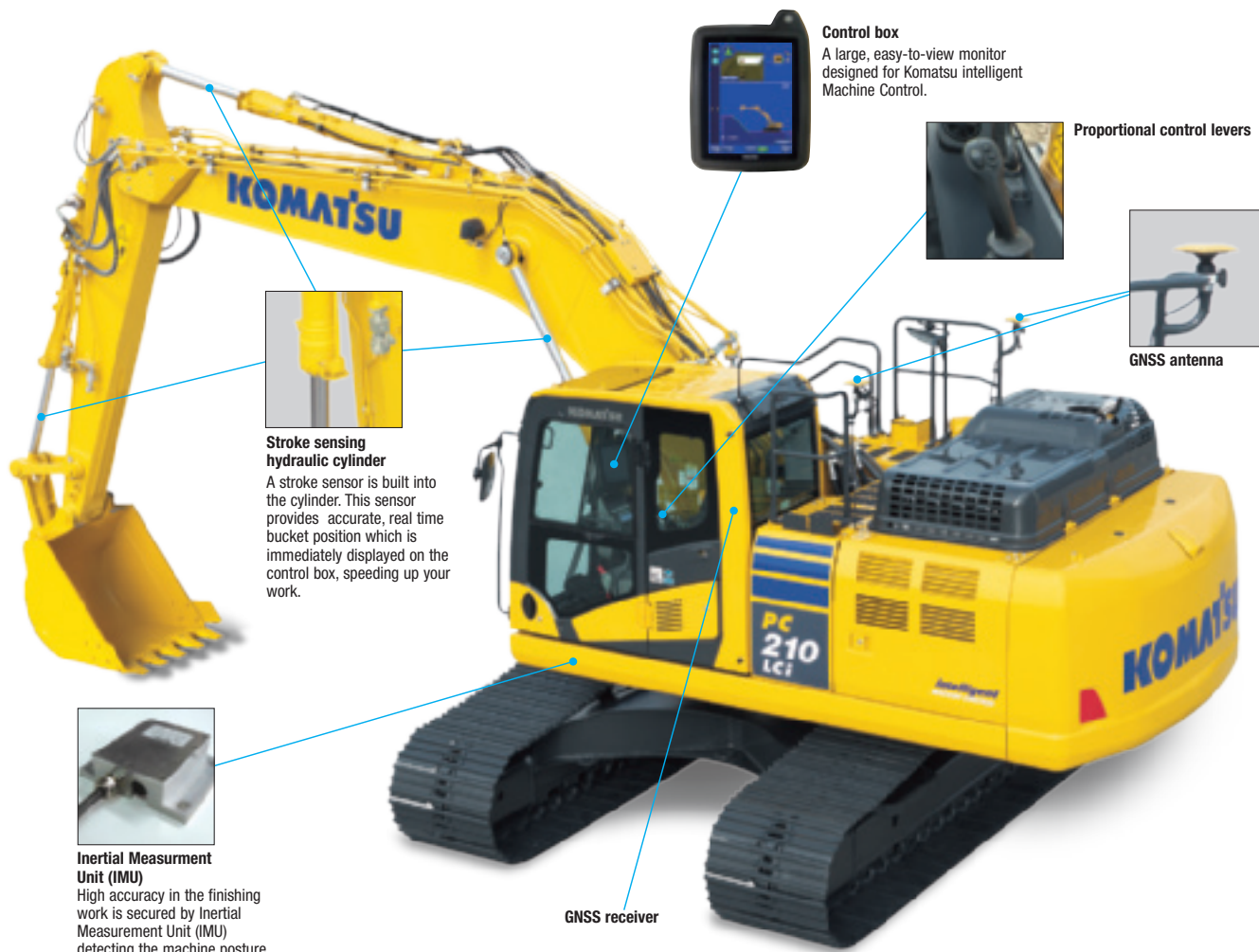
## Enhanced operability of the machine control

Semi-auto/manual mode switching and design surface offset function can be operated with switches on the control levers.

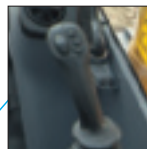




Factory installed Komatsu intelligent Machine Control components.



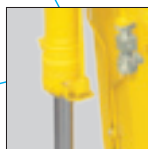
**Control box**  
A large, easy-to-view monitor designed for Komatsu intelligent Machine Control.



Proportional control levers



GNSS antenna



**Stroke sensing hydraulic cylinder**  
A stroke sensor is built into the cylinder. This sensor provides accurate, real time bucket position which is immediately displayed on the control box, speeding up your work.



**Inertial Measurement Unit (IMU)**  
High accuracy in the finishing work is secured by Inertial Measurement Unit (IMU) detecting the machine posture.

GNSS receiver

**TOPCON** Sitelink 3D Enterprise

The Sitelink 3D Enterprise connects the office and machine via a network, to help visualize the worksite clearly.



Transmission of design data from office to machine



Sending messages from office to machine or vice versa



Progress information and as-built data can be sent to the office from the machine in real time.



Remote assistance function enables troubleshooting from anywhere via the internet.

Please contact your local Topcon dealer for details.

# PERFORMANCE FEATURES

## KOMATSU NEW ENGINE TECHNOLOGIES

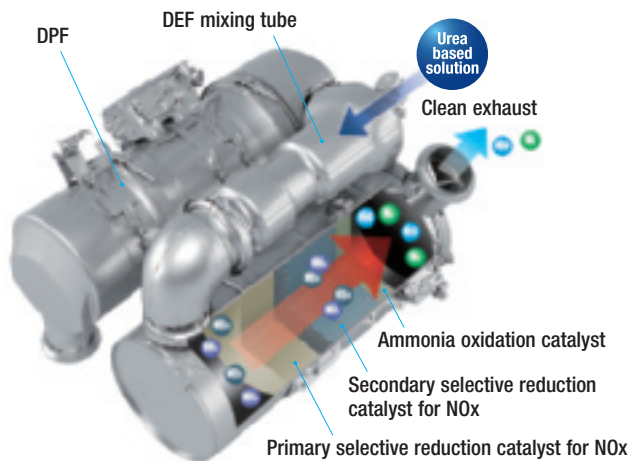
### New Tier 4 Final Engine

The Komatsu SAA6D107E-3 engine is EPA Tier 4 Final emissions certified and provides exceptional performance while reducing fuel consumption. Based on Komatsu proprietary technologies developed over many years, this new diesel engine reduces nitrogen oxides (NOx) by more than 80% when compared to Tier 4 interim levels. Through the in-house development and production of engines, electronics, and hydraulic components, Komatsu has achieved great advancements in technology, providing high levels of performance and efficiency in virtually all applications.

### Technologies Applied to New Engine

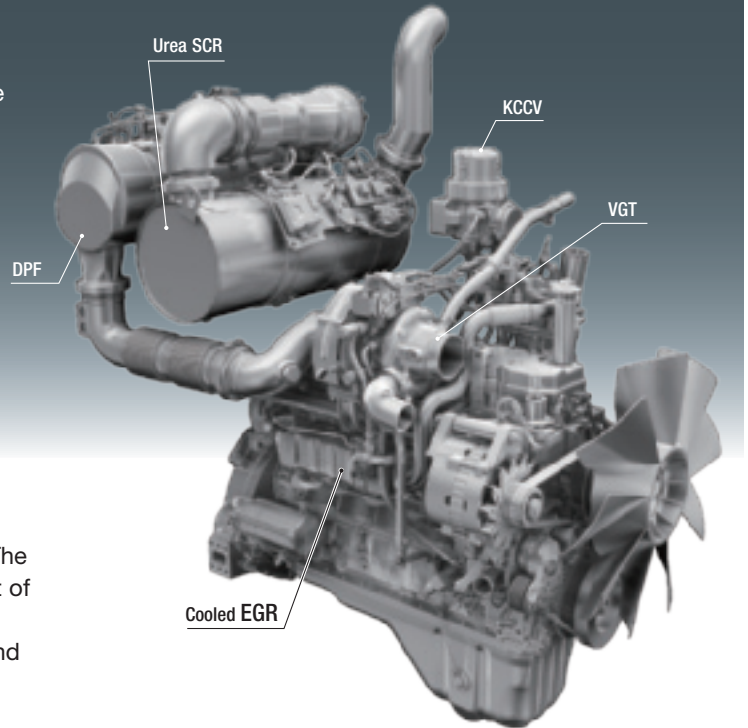
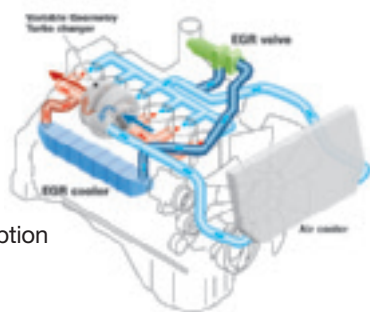
#### Heavy-duty aftertreatment system

This new system combines a Diesel Particulate Filter (DPF) and Selective Catalytic Reduction (SCR). The SCR NOx reduction system injects the correct amount of Diesel Exhaust Fluid (DEF) at the proper rate, thereby decomposing NOx into non-toxic water vapor (H<sub>2</sub>O) and nitrogen gas (N<sub>2</sub>).



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

The system recirculates a portion of exhaust gas into the air intake and lowers combustion temperatures, thereby reducing NOx emissions. EGR gas flow has been decreased for Tier 4 Final with the addition of SCR technology. The system achieves a dynamic reduction of NOx, while helping reduce fuel consumption below Tier 4 Interim levels.

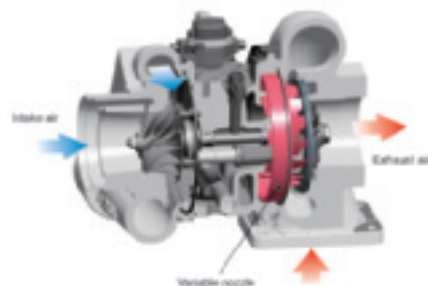


#### Advanced Electronic Control System

The electronic control system performs high-speed processing of all signals from sensors installed in the vehicle providing total control of equipment in all conditions of use. Engine condition information is displayed via an on-board network to the monitor inside the cab, providing necessary information to the operator. Additionally, managing the information via KOMTRAX helps customers keep up with required maintenance.

#### Variable Geometry Turbocharger (VGT) system

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







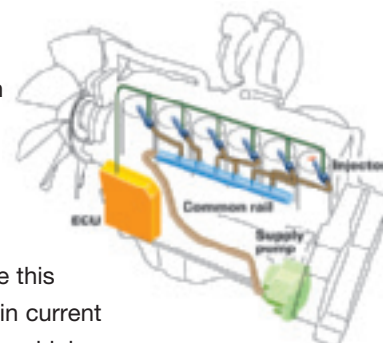
**Komatsu Auto Idle Shutdown**

Komatsu auto idle shutdown automatically shuts the engine down after idling for a set period of time to reduce unnecessary fuel consumption and exhaust emissions. The countdown to engine shutdown can be easily programmed from 5 to 60 minutes.



**Heavy-Duty High-Pressure Common Rail (HPCR) Fuel Injection System**

The system is designed to achieve an optimal injection of high-pressure fuel by means of computerized control, providing close to complete combustion to reduce PM emissions. While this technology is already used in current engines, the new system uses high pressure injection, thereby reducing both PM emissions and fuel consumption over the entire range of engine operating conditions. The Tier 4 Final engine has advanced fuel injection timing for reduced fuel consumption and lower soot levels.



**Fuel Consumption**

**Reduced by up to 6%**

(vs PC210LC-10 Based on typical work pattern  
Collected via KOMTRAX)

This fuel consumption data is the result of using a prototype machine, and actual results may vary.



# PERFORMANCE FEATURES

## Increased Work Efficiency

### Powerful digging force

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

#### Maximum arm crowd force (ISO)

**101 kN(10.3t) ➔ 108 kN(11.0t) 7% UP**  
(with Power Max.)

#### Maximum bucket digging force (ISO)

**138 kN(14.1t) ➔ 149 kN(15.2t) 8% UP**  
(with Power Max.)

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



## Large Displacement High Efficiency Pump

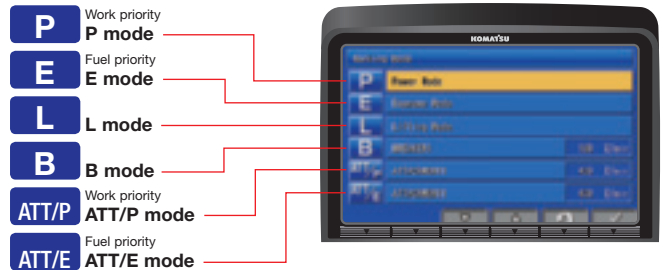
Large displacement hydraulic implement pumps provide high flow output at lower engine RPM as well as operation at the most efficient engine speed.



## Working Mode Selection

The PC210LCi-11 excavator is equipped with six working modes (P, E, L, B, ATT/P and ATT/E). Each mode is designed to match engine speed, pump flow, and system pressure to the application. The PC210LCi-11 features an attachment mode (ATT/E) that allows operators to run attachments while in Economy mode.

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>•Increases 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, 2-way</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, 2-way</li> <li>•Economy mode</li> </ul>



## High Rigidity Work Equipment

Booms and arms are constructed with thick plates of high tensile strength steel. In addition, these structures are designed with large cross sectional areas and large one piece castings in the boom foot, the boom tip, and the arm tip. The result is work equipment that exhibits long term durability and high resistance to bending and torsional stress. A standard HD boom design provides increased strength and reliability.



# WORKING ENVIRONMENT



# WORKING ENVIRONMENT



Photo may include optional equipment.

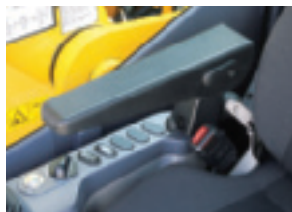
## Comfortable Working Space

### Wide spacious cab

The wide spacious cab includes a heated air suspension seat with reclining backrest. The seat height and position are easily adjusted using a pull-up lever. The armrest position is easily adjusted together with the console.

### Arm rest with simple height adjustment function

A knob and plunger on the armrests allows easy height adjustment without the use of tools.



### Low vibration with cab damper mounting

### Automatic climate control

### Pressurized cab

### Auxiliary input jack

Connecting a regular audio device to the auxiliary jack allows the operator to hear the sound from the stereo speakers installed in the cab.



## Standard Equipment

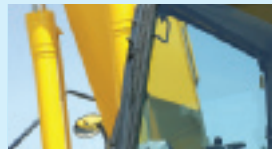
Sliding window glass (left side)



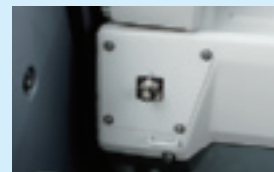
Radio, ashtray



Remote intermittent wiper with windshield washer



Cigarette lighter



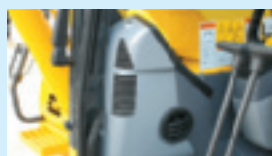
Opening & closing skylight



Magazine box & cup holder



Defroster (conform to the ISO standard)



One-touch storable front window lower glass



**LARGE HIGH RESOLUTION LCD MONITOR**



**New Monitor Panel Interface Design**

An updated large high resolution LCD color monitor enables accurate and smooth work. The interface has been redesigned to display key machine information in a new user friendly interface. A rear view camera and an DEF level gauge display have been added to the default main screen. The interface has a function that enables the main screen mode to be switched, thus enabling the optimum screen information for the particular work situation to be displayed.

**Indicators**

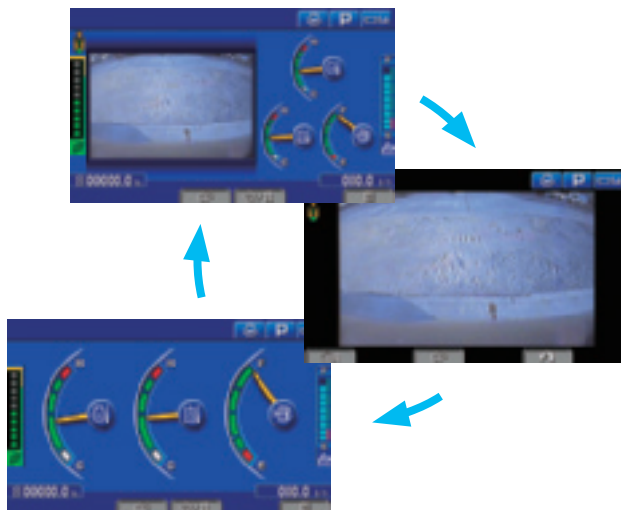
- |                                    |                             |
|------------------------------------|-----------------------------|
| 1 Auto-decelerator                 | 8 Fuel gauge                |
| 2 Working mode                     | 9 DEF level gauge           |
| 3 Travel speed                     | 10 Service meter, clock     |
| 4 Ecology gauge                    | 11 Fuel consumption gauge   |
| 5 Camera display                   | 12 Guidance icon            |
| 6 Engine coolant temperature gauge | 13 Function switches        |
| 7 Hydraulic oil temperature gauge  | 14 Camera direction display |
|                                    | 15 DEF level caution lamp   |

**Basic operation switches**

- |                         |                         |
|-------------------------|-------------------------|
| 1 Auto-decelerator      | 4 Buzzer cancel         |
| 2 Working mode selector | 5 Wiper                 |
| 3 Travel speed selector | 6 Window washer         |
|                         | 7 Auto climate controls |

**Switchable Display Modes**

The main screen display mode can be changed by pressing the F3 key.



**Visual user menu**

Pressing the F6 key on the main screen 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 easily.



- |                                       |                    |
|---------------------------------------|--------------------|
| 1 Energy saving guidance              | 2 Machine settings |
| 3 Aftertreatment devices regeneration | 4 SCR information  |
| 5 Maintenance                         | 6 Monitor setting  |
|                                       | 7 Message check    |

# WORKING ENVIRONMENT

## Support Efficiency Improvement

### Ecology guidance

While the machine is operating, ecology guidance pops up on the monitor screen to notify the operator of the status of the machine in real time.

### Ecology gauge & fuel consumption gauge

The monitor screen is provided with an ecology gauge and also a fuel consumption gauge which is displayed continuously. In addition, the operator can set any desired target value of fuel consumption (within the range of the green display), enabling the machine to be operated with better fuel economy.



Ecology gauge Ecology guidance Fuel consumption gauge

## Operator Identification Function

An operator identification ID can be set up for each operator, and used to manage operation information of individual machines using KOMTRAX data. Data sent from KOMTRAX can be used to analyze operation status by operator as well as by machine.



## Operation record, fuel consumption history, and ecology guidance record

The ecology guidance menu enables the operator to check the operation record, fuel consumption history and ecology guidance record from the ecology guidance menu, with a single touch.



Operation record



Fuel consumption history



Ecology guidance record

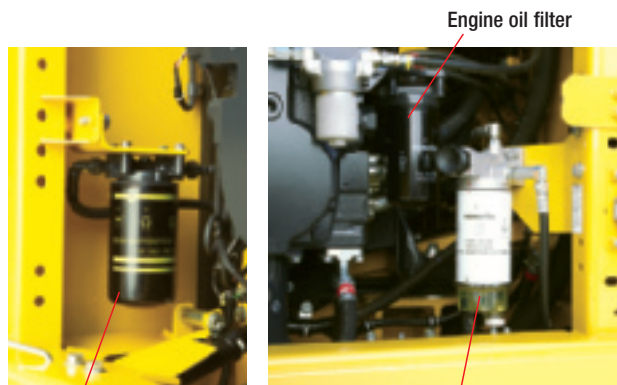


# MAINTENANCE FEATURES



## Centralized engine check points

Locations of the engine oil check and filters are integrated into one side to allow easy maintenance and service.



Engine oil filter

High efficiency fuel filter

Fuel pre-filter (with water separator)

## Battery disconnect switch

A standard battery disconnect switch allows a technician to disconnect the power supply and lock out before servicing the machine.



## Easy to access air conditioner filter

## Washable cab floor mat

## Sloping track frame

## Utility space

## Easy cleaning of coolers

Side by side panel engine and hydraulic oil coolers simplify maintenance.

## Fuel pre-filter with water separator

## Electric fuel priming pump

## High efficiency fuel filter with water separator

## Easy access to engine oil filter, engine oil, drain valve, fuel drain valve and water separator drain valve



# MAINTENANCE FEATURES

## Long-life oils, filters

High performance filters are used in the hydraulic circuit and engine. By increasing the oil and filter replacement intervals, maintenance costs can be significantly reduced.



Hydraulic oil filter  
(Ecology-white element)

Engine oil & Engine oil filter	every 500 hours
Hydraulic oil	every 5000 hours
Hydraulic oil filter	every 1000 hours
DEF pump filter	every 2000 hours

## 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 helps prevent early clogging, and resulting power loss. A radial seal design is used for reliability.

## Diesel Exhaust Fluid (DEF) tank

A large tank volume extends operating time before refilling and is installed on the right front stairway for ease of access.



## Maintenance Information

### “Maintenance time caution lamp” display

When the remaining time to maintenance becomes less than 30 hours\*, a maintenance time monitor appears. Pressing the F6 key switches the monitor to the maintenance screen.

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



Maintenance screen

### Manual Stationary Regeneration

Under most conditions, active regeneration will occur automatically with no effect on machine operation. In case the operator needs to disable active regeneration or initiate a manual stationary regeneration, this can be easily accomplished through the monitor panel. A soot level indicator is displayed to show how much soot is trapped in the DPF.



Soot level indicator

Aftertreatment device regeneration screen

### Supports the DEF level and refill timing

The DEF level gauge is displayed continuously on the right side of the monitor screen. In addition, when DEF level is low, DEF low level guidance messages appear in pop up displays to inform the operator in real time.

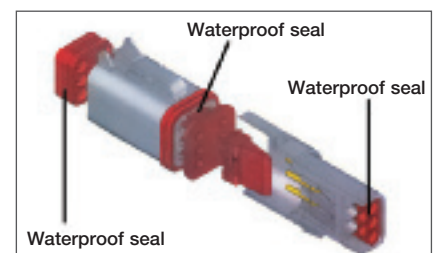


DEF level gauge

DEF low level guidance

## DT-type connectors

Sealed DT-type electrical connectors provide high reliability, water and dust resistance.





# GENERAL FEATURES

## ROPS CAB STRUCTURE

### ROPS Cab (ISO 12117-2)

The machine is equipped with a ROPS cab that conforms to ISO 12117-2 for excavators as standard equipment. It also satisfies the requirements for Level 1 Operator Protective Guard (OPG) and top guard (ISO 10262).



## Rear View Monitoring System

A new rear view monitoring system display has a rear view camera image that is continuously displayed together with the gauges and important vehicle information. This enables the operator to carry out work while easily checking the surrounding area.

Rear view camera

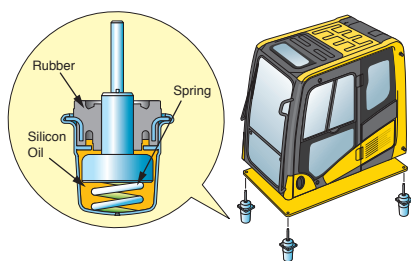


Rear view image on monitor



## Low Vibration with Viscous Cab Mounts

The PC210LC-11 uses viscous mounts for the cab that incorporate a longer stroke and the addition of a spring. The cab damper mounting combined with a high rigidity deck reduces vibration at the operator's seat.



## General Features

**Secondary engine shut down switch** at base of seat to shutdown the engine.



**Lock lever**

**Seat belt retractable**

**Tempered & tinted glass**

**Large mirrors**

**Slip-resistant plates**

**Thermal and fan guards**

**Pump/engine room partition**

**Travel alarm**

**Large cab entrance step**

**Left and right side handrails**



**Seat belt caution indicator**



# KOMATSU PARTS & SERVICE SUPPORT



## KOMATSU CARE

### Program Includes:

\*The PC210LCi-11 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 DPF Exchange

The PC210LCi-11 comes standard with 2 Complimentary DPF Exchange units for the first 5 Years or 9000 hours whichever comes first. The suggested DPF Exchange unit service intervals are 4500 hours & 9000 hours. End user must have authorized Komatsu distributor perform the removal & installation of the DPF.

### Complimentary SCR System Maintenance

The PC210LCi-11 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.

## 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



Interval PM	500	1000	1500	2000
KOWA SAMPLING – (Engine, Hydraulics, Swing Circle, L & R Final Drives)	✓	✓	✓	✓
LUBRICATE MACHINE	✓	✓	✓	✓
LUBRICATE SWING CIRCLE	✓	✓	✓	✓
CHECK SWING PINION GREASE LEVEL AND ADD, WHEN NECESSARY	✓	✓	✓	✓
CHANGE ENGINE OIL	✓	✓	✓	✓
REPLACE ENGINE OIL FILTER	✓	✓	✓	✓
REPLACE FUEL PRE-FILTER	✓	✓	✓	✓
REPLACE AC FRESH & RECIRC AIR FILTERS	✓	✓	✓	✓
CLEAN AIR CLEANER ELEMENT	✓	✓	✓	✓
DRAIN 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 HYDRAULIC TANK BREATHER ELEMENT		✓		✓
REPLACE DEF TANK BREATHER ELEMENT		✓		✓
REPLACE FUEL MAIN FILTER		✓		✓
REPLACE HYDRAULIC OIL FILTER ELEMENT		✓		✓
CHANGE SWING MACHINERY OIL		✓		✓
CHECK DAMPER CASE OIL LEVEL, ADD WHEN NECESSARY		✓		✓
CHANGE FINAL DRIVE OIL				✓
CLEAN HYDRAULIC TANK STRAINER				✓
REPLACE KCCV FILTER ELEMENT				✓
REPLACE DEF PUMP FILTER				✓
FACTORY TRAINED TECHNICIAN LABOR	✓	✓	✓	✓
2 DPF Exchanges at 4,500 Hrs and 9,000 Hrs.				
2 SCR System Maintenance Services at 4,500 Hrs. and 9000 Hrs.				

## 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 2017 Komatsu America Corp.

PC210LCi-11

# 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

## ✓ WHO

- KOMTRAX is **standard** equipment on all Komatsu construction products



Photo may include optional equipment.

## ✓ 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



**KOMTRAX**<sup>®</sup>

For construction and compact equipment.

**KOMTRAX Plus**<sup>®</sup>

For production and mining class machines.

# SPECIFICATIONS



## ENGINE

Model..... Komatsu SAA6D107E-3\*  
 Type..... Water-cooled, 4-cycle, direct injection  
 Aspiration..... Variable Geometry Turbocharged, aftercooled, cooled EGR  
 Number of cylinders..... 6  
 Bore..... 107 mm **4.21"**  
 Stroke..... 124 mm **4.88"**  
 Piston displacement..... 6.69 ltr **408 in<sup>3</sup>**  
 Horsepower  
 ISO 9249 / SAE J1349..... Net 122.8 kW **165 HP**  
 Fan at maximum speed..... Net 118.6 kW **159 HP**  
 Rated rpm..... 2000 rpm  
 Fan drive method for cooling radiator..... Mechanical with viscous fan clutch  
 Governor..... All-speed control, electronic  
 \*EPA Tier 4 Final emissions certified



## HYDRAULICS

Type..... HydrauMind (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..... 475 ltr/min **125.5 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 kg/cm<sup>2</sup> **5,400 psi**  
 Travel circuit..... 37.3 MPa 380 kg/cm<sup>2</sup> **5,400 psi**  
 Swing circuit..... 28.9 MPa 295 kg/cm<sup>2</sup> **4,190 psi**  
 Pilot circuit..... 3.2 MPa 33 kg/cm<sup>2</sup> **470 psi**  
 Hydraulic cylinders:  
 (Number of cylinders – bore x stroke x rod diameter)  
 Boom .. 2–130 mm x 1334 mm x 90 mm **5.1" x 52.5" x 3.5"**  
 Arm ..... 1–135 mm x 1490 mm x 95 mm **5.3" x 58.7" x 3.7"**  
 Bucket.. 1–115 mm x 1105 mm x 80 mm **4.5" x 43.5" x 3.2"**



## DRIVES AND BRAKES

Steering control..... Two levers with pedals  
 Drive method..... Hydrostatic  
 Maximum drawbar pull..... 202 kN 20570 kg **45,349 lb**  
 Gradeability..... 70%, 35°  
 Maximum travel speed: High..... 5.5 km/h **3.4 mph**  
 (Auto-Shift) Mid..... 4.1 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..... 12.4 rpm  
 Swing torque..... 6900 kg•m **49,907 ft lbs**



## UNDERCARRIAGE

Center frame..... X-frame  
 Track frame..... Box-section  
 Seal of track..... Sealed track  
 Track adjuster..... Hydraulic  
 Number of shoes (each side)..... 49  
 Number of carrier rollers (each side)..... 2  
 Number of track rollers (each side)..... 9



## COOLANT & LUBRICANT CAPACITY (REFILLING)

Fuel tank..... 400 ltr **105.7 U.S. gal**  
 Coolant..... 30.7 ltr **8.1 U.S. gal**  
 Engine..... 23.1 ltr **6.1 U.S. gal**  
 Final drive, each side..... 5.0 ltr **1.3 U.S. gal**  
 Swing drive..... 6.5 ltr **1.7 U.S. gal**  
 Hydraulic tank..... 132 ltr **34.9 U.S. gal**  
 Hydraulic system..... 234 ltr **61.8 U.S. gal**  
 DEF tank..... 23.1 ltr **6.1 U.S. gal**



## SOUND PERFORMANCE

Exterior – ISO 6395..... 100 dB(A)  
 Interior – ISO 6396..... 66 dB(A)



## OPERATING WEIGHT (APPROXIMATE)

Operating weight includes 5700 mm **18'8"** one-piece boom, 2925 mm **9'7"** arm, SAE heaped 1.19 m<sup>3</sup> **1.57 yd<sup>3</sup>** bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Triple-Grouser Shoes	Operating Weight	Ground pressure (ISO 16754)
800 mm <b>31.5"</b>	23400 kg <b>51,588 lb</b>	0.37 kg/cm <sup>2</sup> <b>5.29 psi</b>

### Component Weights

**Arm including bucket cylinder and linkage**  
 2900 mm **9'7"** HD arm assembly..... 1136 kg **2,505 lb**  
 2900 mm **9'7"** HD arm assembly w/piping..... 1200 kg **2,646 lb**

**One piece boom including arm cylinder**  
 5700 mm **18'8"** boom assembly..... 1885 kg **4,156 lb**  
 5700 mm **18'8"** HD boom assembly w/piping.. 1953 kg **4,306 lb**

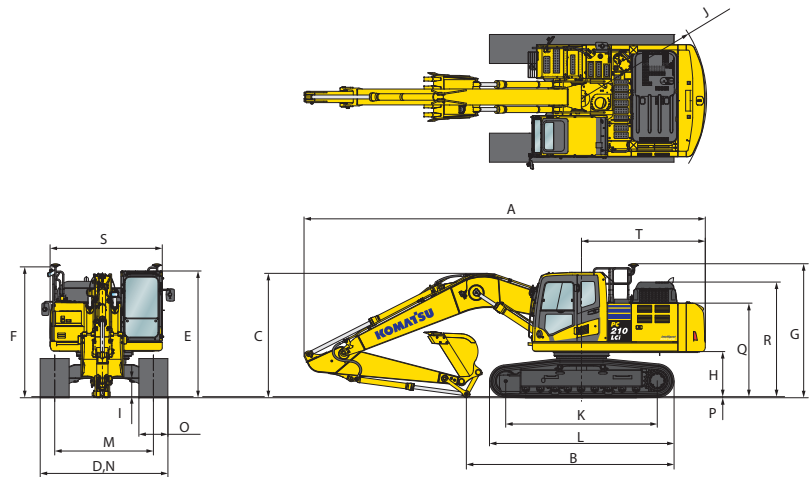
Boom cylinders x 2..... 205 kg **452 lb**  
 Counterweight (standard)..... 4370 kg **9,634 lb**  
 1.19 m<sup>3</sup> **1.57 yd<sup>3</sup>** bucket - 48" width..... 949 kg **2,092 lb**



**DIMENSIONS**

	Arm Length	2925 mm	9'7"
A	Overall length	9705 mm	31'10"
B	Length on ground (transport)	5000 mm	16'5"
C	Overall height (to top of boom)*	2995 mm	9'10"
D	Overall width	3080 mm	10'1"
E	Overall height (to top of cab)*	3045 mm	10'0"
F	Overall height (to top of handrail)*	3135 mm	10'3"
G	Overall height (to top of GNSS antenna)*	3205 mm	10'6"
H	Ground clearance, counterweight	1085 mm	3'7"
I	Ground clearance, minimum	440 mm	1'5"
J	Tail swing radius	3020 mm	9'11"
K	Track length on ground	3655 mm	12'0"
L	Track length	4450 mm	14'7"
M	Track gauge	2380 mm	7'10"
N	Width of crawler	3080 mm	10'1"
O	Shoe width	700 mm	28"
P	Grouser height	26 mm	1"
Q	Machine cab height	2250 mm	7'5"
R	Machine height to top of engine cover	2765 mm	9'1"
S	Machine upper width	2705 mm	8'10"
T	Distance, swing center to rear end	2990 mm	9'10"

\* : Including grouser height



**BACKHOE BUCKET, ARM AND BOOM COMBINATION**

Bucket Type	Bucket			5.7 m (18'8") Boom	
	Capacity	Width	Weight	2.9 m (9'7")	
Komatsu TL	0.50 m <sup>3</sup>	0.66 yd <sup>3</sup>	610 mm 24"	605 kg 1,334 lb	●
	0.67 m <sup>3</sup>	0.88 yd <sup>3</sup>	762 mm 30"	689 kg 1,518 lb	●
	0.85 m <sup>3</sup>	1.11 yd <sup>3</sup>	914 mm 36"	780 kg 1,719 lb	●
	1.02 m <sup>3</sup>	1.34 yd <sup>3</sup>	1067 mm 42"	857 kg 1,890 lb	○
	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>	1219 mm 48"	949 kg 2,092 lb	□
Komatsu HP	0.50 m <sup>3</sup>	0.66 yd <sup>3</sup>	610 mm 24"	652 kg 1,437 lb	●
	0.67 m <sup>3</sup>	0.88 yd <sup>3</sup>	762 mm 30"	763 kg 1,681 lb	●
	0.85 m <sup>3</sup>	1.11 yd <sup>3</sup>	914 mm 36"	868 kg 1,913 lb	●
	1.02 m <sup>3</sup>	1.34 yd <sup>3</sup>	1067 mm 42"	950 kg 2,095 lb	○
	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>	1219 mm 48"	1066 kg 2,349 lb	⊙
Komatsu HPS	0.50 m <sup>3</sup>	0.66 yd <sup>3</sup>	610 mm 24"	724 kg 1,597 lb	●
	0.67 m <sup>3</sup>	0.88 yd <sup>3</sup>	762 mm 30"	840 kg 1,851 lb	●
	0.85 m <sup>3</sup>	1.11 yd <sup>3</sup>	914 mm 36"	962 kg 2,120 lb	●
	1.02 m <sup>3</sup>	1.34 yd <sup>3</sup>	1067 mm 42"	1061 kg 2,339 lb	□
	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>	1219 mm 48"	1193 kg 2,630 lb	⊙
Komatsu HPX	0.50 m <sup>3</sup>	0.66 yd <sup>3</sup>	610 mm 24"	824 kg 1,817 lb	●
	0.67 m <sup>3</sup>	0.88 yd <sup>3</sup>	762 mm 30"	939 kg 2,071 lb	●
	0.85 m <sup>3</sup>	1.11 yd <sup>3</sup>	914 mm 36"	1061 kg 2,340 lb	○
	1.02 m <sup>3</sup>	1.34 yd <sup>3</sup>	1067 mm 42"	1161 kg 2,559 lb	□
	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>	1219 mm 48"	1293 kg 2,850 lb	⊙

For best semi-automatic machine control performance, observe maximum attachment weight:

- 1600 kg **3,528 lb** maximum for 2925 mm **9'7"** standard arm assembly

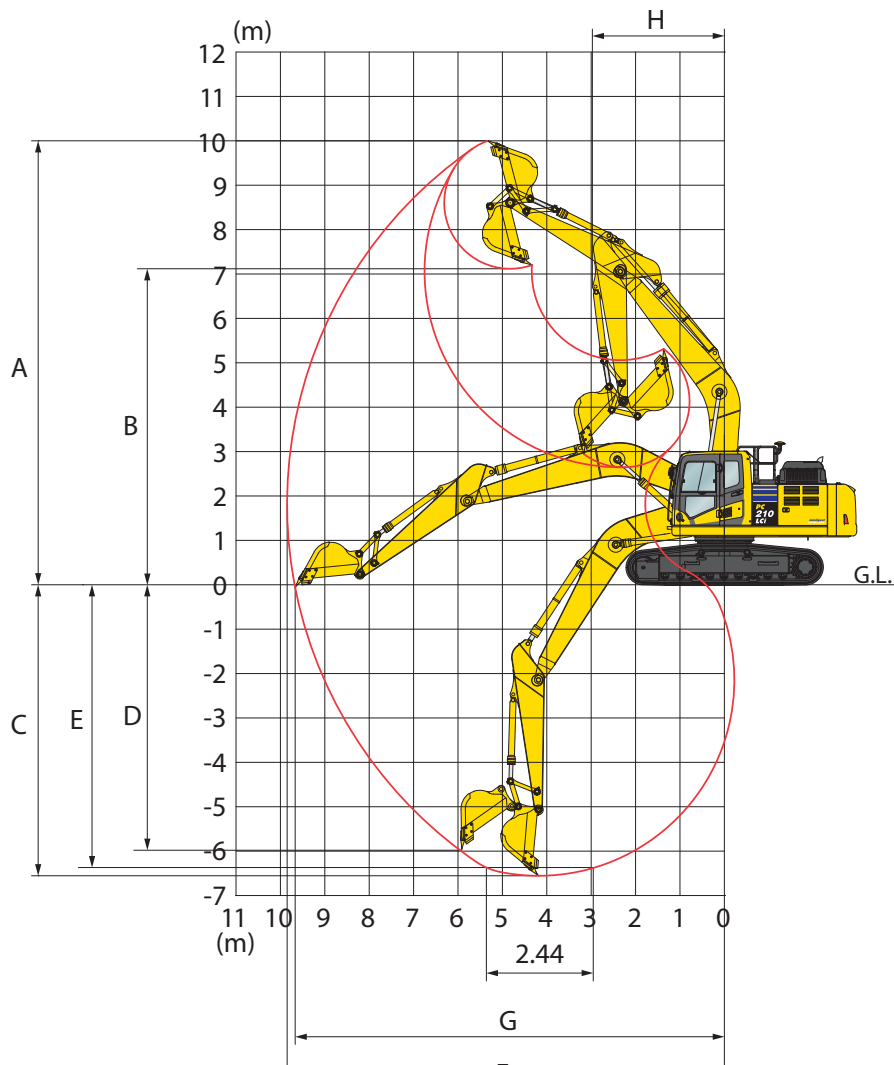
Exceeding recommended attachment weights may negatively impact performance and accuracy of semi-automatic function.

- - Used with material weights up to 3,500 lb/yd<sup>3</sup> - Quarry/rock/high abrasion applications
- - Used with material weights up to 3,000 lb/yd<sup>3</sup> - Tough digging applications
- - Used with material weights up to 2,500 lb/yd<sup>3</sup> - General construction
- ⊙ - Used with material weights up to 2,000 lb/yd<sup>3</sup> - Light materials applications
- X - Not useable

# SPECIFICATIONS



## WORKING RANGE

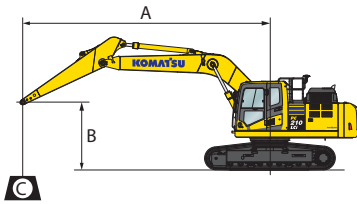


	Arm Length	2925 mm	9'7"
<b>A</b>	Max. digging height	9970 mm	32'9"
<b>B</b>	Max. dumping height	7110 mm	23'4"
<b>C</b>	Max. digging depth	6620 mm	21'9"
<b>D</b>	Max. vertical wall digging depth	5980 mm	19'7"
<b>E</b>	Max. digging depth for 8' level bottom	6370 mm	20'11"
<b>F</b>	Max. digging reach	9875 mm	32'5"
<b>G</b>	Max. digging reach at ground level	9700 mm	31'10"
<b>H</b>	Min. swing radius	3040 mm	10' 0"
<b>SAE rating</b>	Bucket digging force at power max.	132 kN 13500 kg / <b>29,762 lb</b>	
	Arm crowd force at power max.	103 kN 10500 kg / <b>23,149 lb</b>	
<b>ISO rating</b>	Bucket digging force at power max.	149 kN 15200 kg / <b>33,510 lb</b>	
	Arm crowd force at power max.	108 kN 11000 kg / <b>24,251 lb</b>	

# LIFT CAPACITIES



## 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

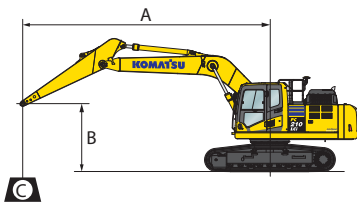
- Conditions:
- 5700 mm 18' 8" one-piece boom
  - Counterweight: 4370 kg 9,634 lb
  - Bucket: None
  - Lifting mode: On

Arm: 2900 mm 9'7" HD		Bucket: None				Shoes: 700 mm 28"				Unit: kg lb			
B	A MAX	1.5 m 5'		3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		⊗ MAX	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m 25'	6.0 m 20'											* 4100	* 4100
6.1 m 20'	7.2 m 24'							* 6550	6100			* 3850	* 3850
4.6 m 15'	7.9 m 26'							* 14400	13500			* 8500	* 8500
3.0 m 10'	8.3 m 27'			* 12850	* 12850	* 10350	8650	* 7200	5950	* 5250	4300	* 3800	* 3800
1.5 m 5'	8.4 m 27'			* 28300	* 28300	* 22850	19100	* 15850	13200	* 11600	9500	* 8450	* 8450
0 m 0'	8.1 m 27'			* 12550	8150	8400	5550	* 8250	5750	6200	4200	* 4200	3600
-1.5 m -5'	7.6 m 25'			* 27700	18050	18500	12200	* 16500	13200	* 11600	9500	* 9350	8000
-3.0 m -10'	6.7 m 22'			* 7450	* 7450	12850	7900	* 15850	13200	* 11600	9500	* 4750	3700
-4.6 m -15'	5.3 m 17'			* 16500	* 16500	28300	17450	* 12000	11700	* 5850	4000	* 10500	8150
				* 26500	* 26500	28100	17300	* 12000	8150	* 5850	4000	* 5650	4000
				* 40850	33000	28250	17400	* 11700	5350	* 12950	8850	* 12550	8800
				* 18500	14950	12800	7900	* 11700	5350			7100	4700
				* 40850	33000	28250	17400	* 11700	5350			* 15650	10400
				* 14950	* 14950	* 10650	8100					* 8900	6650
				* 32950	* 32950	* 23500	17850					* 19700	14700

\*Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. 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:
- 5700 mm 18' 8" one-piece boom
  - Counterweight: 4370 kg 9,634 lb
  - Bucket: None
  - Lifting mode: On

Arm: 2900 mm 9'7" HD		Bucket: None				Shoes: 800 mm 31.5"				Unit: kg lb			
B	A MAX	1.5 m 5'		3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		⊗ MAX	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m 25'	6.0 m 20'											* 4100	* 4100
6.1 m 20'	7.2 m 24'							* 6550	6150			* 3850	* 3850
4.6 m 15'	7.9 m 26'							* 14400	13650			* 8500	* 8500
3.0 m 10'	8.3 m 27'			* 12850	* 12850	* 10350	8750	* 7200	6050	* 5250	4350	* 3800	* 3800
1.5 m 5'	8.4 m 27'			* 28300	* 28300	* 22850	19250	* 15850	13300	* 11600	9600	* 8450	* 8450
0 m 0'	8.1 m 27'			* 12550	8250	8500	5600	* 8250	5800	6250	4250	* 4200	3650
-1.5 m -5'	7.6 m 25'			* 27700	18250	18700	12350	* 16500	13350	* 11600	9600	* 9350	8050
-3.0 m -10'	6.7 m 22'			* 7450	* 7450	12950	8000	* 15850	13350	* 11600	9600	* 4750	3700
-4.6 m -15'	5.3 m 17'			* 16500	* 16500	28600	17650	* 12000	8200	* 5850	4050	* 10500	8250
				* 26500	* 26500	28400	17450	* 11700	5350	* 12950	8950	* 5650	4050
				* 40850	33350	28550	17600	* 11700	5400			* 12550	8900
				* 18500	15100	12950	7950	* 11700	5400			7150	4750
				* 40850	33350	28550	17600	* 11700	5400			* 15850	10500
				* 14950	* 14950	* 10650	8150					* 8900	6700
				* 32950	* 32950	* 23500	18050					* 19700	14850

\*Load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



## STANDARD EQUIPMENT

- 3 Speed travel with Auto shift
- Alternator, 90 Ampere, 24V
- AM/FM radio
- Automatic engine warm-up system
- Automatic air conditioner/heater
- Auto idle
- Auto Idle Shutdown (programmable)
- Lever lock Auto-lock
- Auxiliary input (3.5 mm jack)
- Batteries, large capacity
- Battery disconnect switch
- Boom and arm holding valves
- Carrier rollers (2 each side)
- Converter, (2) x 12V
- Counterweight, 4370 kg **9,634 lb**
- Dry type air cleaner, double element
- Electric horn
- EMMS monitoring system
- Engine, Komatsu SAA6D107E-3
- Extended work equipment grease interval
- Fan guard structure
- Fuel system pre-cleaner 10 micron
- High back air suspension seat, with heat
- Hydraulic track adjusters
- KOMTRAX® Level 5.0
- Large LCD color monitor, high resolution
- Lock lever
- Mirrors, (LH and RH)
- Operator Protective Top Guard (OPG), Level 1
- Operator Identification System
- Pattern change valve (ISO to BH control)
- Power maximizing system
- PPC hydraulic control system
- Pump/engine room partition cover
- Radiator and oil cooler dustproof net
- Rear reflectors
- Rearview monitoring system (1 camera)
- Revolving frame deck guard
- Revolving frame undercovers
- ROPS cab
- Seat belt, retractable, 76 mm **3"**
- Seat belt indicator
- Secondary engine shutoff switch
- Service valve
- Shoes, triple grouser, 800 mm **31.5"**
- Skylight
- Slip resistant foot plates
- Starter motor, 5.5kW/24V x 1
- Suction fan
- Thermal and fan guards
- Track frame undercover
- Track frame swivel guard
- Travel alarm
- Working lights, 2 (boom and RH front)
- Working mode selection system



## OPTIONAL EQUIPMENT

- Additional front working lights, 2 cab roof lights
- Arm
  - 2925 mm **9'7"** HD arm assembly with piping
- Boom
  - 5700 mm **18'8"** HD boom assembly with piping
- Cab guards
  - Full front guard, OPG Level 1
  - Full front guard, OPG Level 2
  - Bolt-on top guard, OPG Level 2
  - Lower front window guard
- Hydraulic control unit, 1 actuator
- Rain visor
- Sun visor



## ATTACHMENT OPTIONS

- Hydraulic couplers
- Hydraulic kits, field installed

**For a complete list of available attachments, please contact your local Komatsu distributor.**



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# KOMATSU®

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