

# KOMATSU

## PC490LC-11/PC490LCi-11

Hydraulic excavator



### Net horsepower

359 HP (268 kW) @ 1,900 rpm

### Operating weight

105,670–110,220 lbs. (47,930–49,995 kg)

### Bucket capacity

1.47–4.15 yd<sup>3</sup> (1.12–3.17 m<sup>3</sup>)

 **intelligent** / 2.0  
MACHINE CONTROL

## Intelligent Machine Control (IMC)

## Give your operators the power of advanced automation



Innovation



Performance



Efficiency



## Command the latest technology with IMC 2.0

Empower your operators to work more efficiently than they ever could with conventional aftermarket machine guidance or manual operation. The PC490LCi-11 with Intelligent Machine Control (IMC) offers the ability to work smart, from rough digging to finish grading. Incorporating a host of advanced, proprietary machine technology, IMC puts sophisticated, productivity-enhancing automation and cutting-edge job site design at your command.

- Semi-automatic for trenching, slope work and high-production applications
- Minimize over-excavation and make every pass count

## Perform finish grading using only arm input

Your operators can finish grade quickly and accurately with a bucket angle hold control that automatically holds the bucket angle to the design surface during arm operation, enabling operators to perform finish grading using only arm input.

## Quick specs

- Weight: 105,670–110,220 lbs. (47,930–49,995 kg)
- Horsepower: 359 HP @ 1,900 rpm (268 kW @ 1,900 rpm)
- Bucket capacity: 1.47–4.15 yd<sup>3</sup> (1.12–3.17 m<sup>3</sup>)



## Make every pass count

## Improve your efficiency

IMC means fast excavation to finish grade.

## Semi-automatic operation

New features such as bucket angle hold control provide high levels of accuracy and comfort.



## Innovative

- Enable precise results with the IMC excavator's semi-automatic operation of work equipment
- Compact 10.4-in (26.4-cm) IMC monitor with increased memory capacity, processing speed and pinch-to-zoom capability

## Integrated

- Operators can focus on moving material efficiently with a factory-installed 3D and guidance system designed for the machine – no more “bolt-on” components. The fully integrated package comes with stroke-sensing hydraulic cylinders, a multiple global navigation satellite system (multi-GNSS) and an inertial measurement unit (IMU) sensor
- Advance job site flexibility with multi-band UHF/915SS radio
- Fast, reliable job site connectivity with 4G LTE connectivity

## Intelligent

- Operators can minimize over-excavation and move material efficiently by semi-automatically tracing the target surface.
- Excellent ease of operation and bucket positioning with intelligent facing compass, light bar and sound guidance
- Outstanding efficiency, productivity and ease of operation with bucket angle hold control



## Intelligent Machine Control (IMC)



Photo may include optional equipment.

### Intelligent Machine Control

Komatsu's unique sensor package includes stroke sensing hydraulic cylinders, an IMU sensor and GNSS antennas, which can help minimize over-excavation and damage to the design surface. 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.

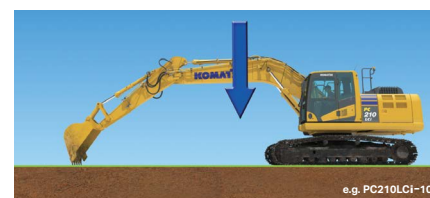
If the operator turns off auto mode, the machine can be operated with highly accurate, responsive machine guidance, with the machine only providing indication guidance.



e.g. PC210LCi-10

### Auto grade assist

With the auto grade assist function, the operator moves the arm and 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.



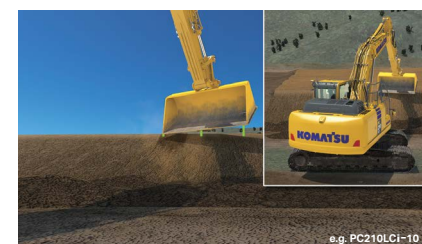
e.g. PC210LCi-10



e.g. PC210LCi-10

### Auto stop control

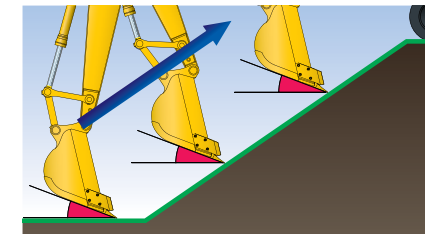
During boom or bucket operation, the work equipment automatically stops when the bucket edge reaches the design surface, thus minimizing damage to the design surface.



e.g. PC210LCi-10

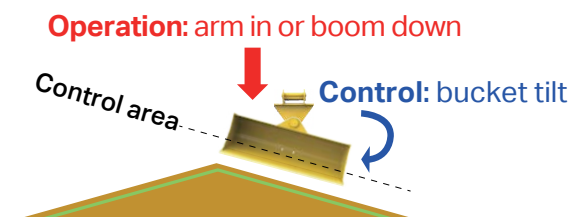
### Minimum distance control

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.



### Bucket angle hold control

Operator sets desired bucket angle and the system automatically maintains bucket angle throughout the grading pass. Angle hold control increases ease of operation and improves final grading accuracy.



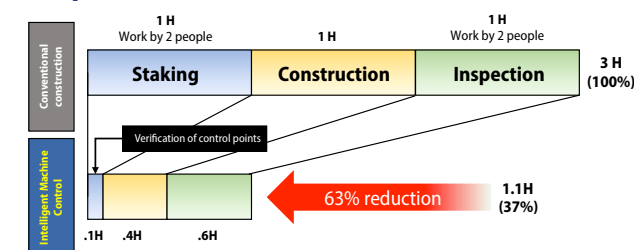
### Auto tilt control

Automatically tilts bucket to design surface and returns it to horizontal to unload. Using auto tilt control with the existing minimum distance control and auto grade assist makes complex grading quicker and easier.

### Improve construction efficiency

Staking, survey and final inspection (which are 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 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\*

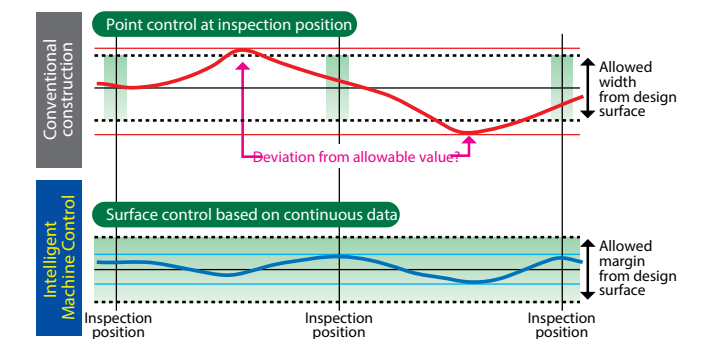


\* When used by a qualified IMC operator, the Komatsu Intelligent Machine Control system increases construction efficiency (compared to conventional machine).  
\* The above data does not include design time or working data creation time.  
The above data is based on in-house construction tests, performed by Komatsu, whose conditions may differ from actual construction.

### Improve work accuracy

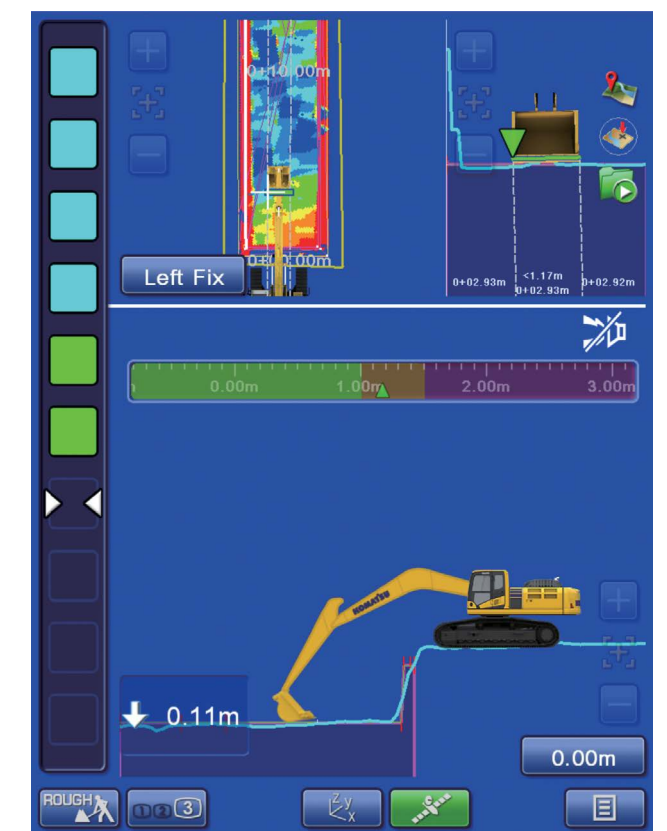
The bucket edge/tip position is instantly displayed on the control box, eliminating the wait time for display on the monitor during construction. The large and easy-to-view control box displays information clearly, aiding in high work accuracy. With manual operation and conventional machine guidance, finish grade quality and excavation accuracy depend 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 mapping

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



## Intelligent Machine Control (IMC)

**Control box**

The monitor of the Komatsu Intelligent Machine Control (control box) uses a compact 10.4-in (26.4-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.

- Facing angle compass**
- Light bar**
- Bucket edge position selection button**  
Used to select the bucket edge position (left/middle/right/minimum distance) to determine the distance from the design surface
- Distance from design surface**
- Mode selection button**  
Driving, rough digging and fine digging modes
- Screen selection button**  
Use to change the screen layout
- Auto/manual switch**
- Pop-up map button**  
Displays a wide-area map
- Edge position recording button**
- Sound guidance on/off**
- Bucket edge position check button**
- GNSS signal reception status check button**  
Used to check signal reception from the GNSS
- Design surface offset**  
The design surface can be offset in the vertical direction
- Main menu button**  
For various settings

### Preset elevation offset quick button

Pre-determined offsets can be stored in the monitor to allow an operator to easily switch between preset grades.

Offset preset	0.000'	Apply
	0.500'	Apply
	1.500'	Apply
Button switch mode	Offset preset	

### Quick bucket swap button

Allows users to quickly swap between various buckets without having to enter main menu. This lessens the time a user takes to change out a bucket on the monitor.

## 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

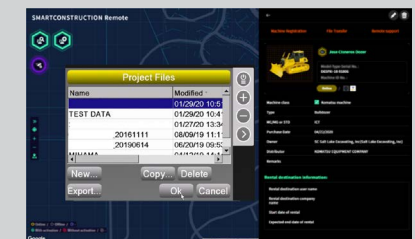
- Control box**  
A large, easy-to-view monitor designed for Komatsu Intelligent Machine Control.
- Proportional control levers**
- multi-GNSS antenna**
- Stroke-sensing hydraulic cylinder**  
A stroke sensor is built into the cylinder. This sensor provides real-time bucket position which is immediately displayed on the control box, helping to speed up your work.
- Inertial measurement unit (IMU)**  
High accuracy in the finishing work is supported by the IMU detecting the machine posture.
- GNSS receiver**

## Smart Construction Remote

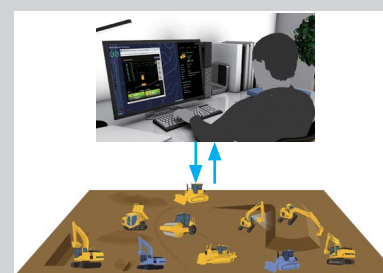
## Customers can quickly send design files to intelligent machines and provide support to operators



Users can log in to Smart Construction Remote to locate machines by job site to upload or download design files at any time.



View the machine monitor to troubleshoot or add new files in the machine without the time requirements of traditional methods.



Capable of connecting to mixed-fleet customers.



View or navigate machine monitor live with operator.

## Intelligent Machine Control (IMC)

# Working smarter in every way

## Benefits of IMC 2.0



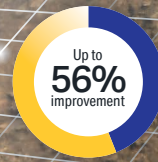
### Save money

Frees GPS dozer from need to achieve final grade so it can work elsewhere on the site.



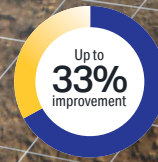
### Save time

Reduce staking, grading and inspection with 3D design data and semi-automatic grading.



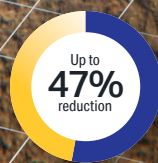
### Less time grade checking

Monitor performance and stay on grade from the cab: operators spend time working, not grade checking.



### Improve accuracy

Continuously monitor grade and semi-automatics to dig precisely to grade.



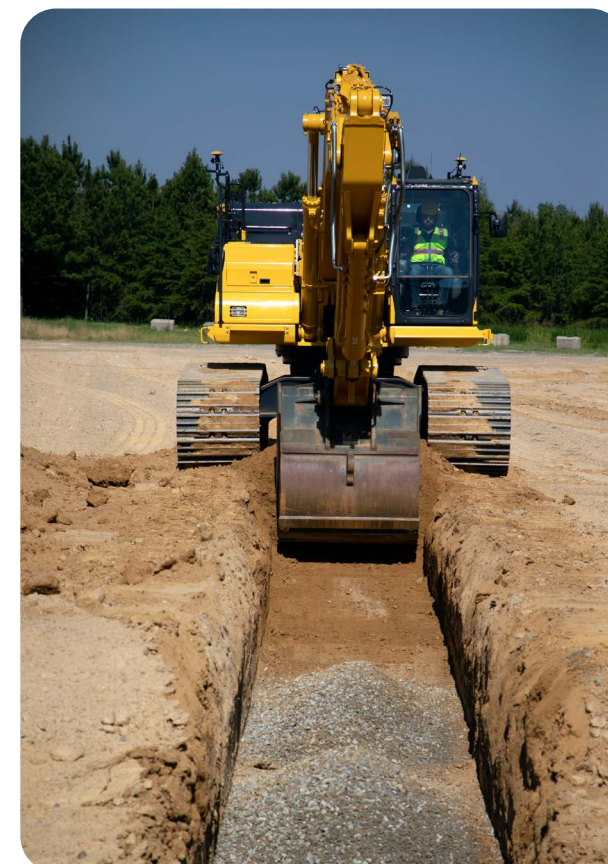
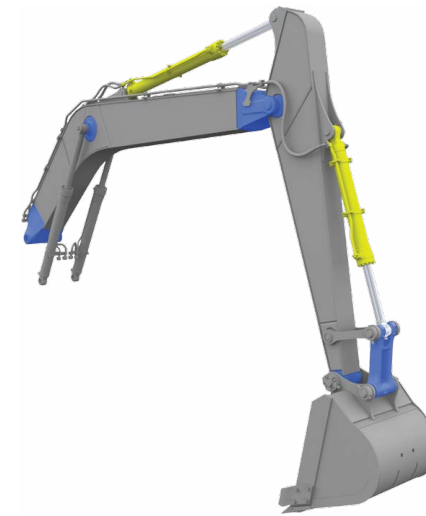
### Reduce base aggregate

Greatly reduce over-digging and the amount of costly base aggregate needed for applications like utilities.

*\*All savings, improvements, and reductions are compared to traditional grading methods.*

## High-rigidity work equipment

Designed for long-term durability and reliability, with booms and arms 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. A standard HD book design provides strength and reliability.

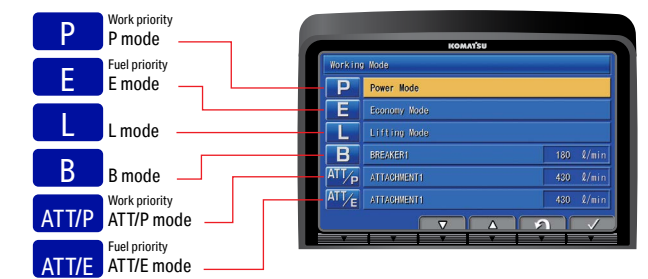


## Performance features

### Working mode selection

The PC390LC/LCi-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 PC390LC/LCi-11 features an attachment mode (ATT/E) that allows operators to run attachments while in economy mode.

Working mode	Application	Advantage
P	Power mode	<ul style="list-style-type: none"> <li>Maximum production/power</li> <li>Fast cycle times</li> </ul>
E	Economy mode	<ul style="list-style-type: none"> <li>Good cycle times</li> <li>Exceptional fuel economy</li> </ul>
L	Lifting mode	<ul style="list-style-type: none"> <li>Increases hydraulic pressure</li> </ul>
B	Breaker mode	<ul style="list-style-type: none"> <li>Optimum engine rpm, hydraulic flow for breaking</li> </ul>
ATT/P	Attachment Power mode	<ul style="list-style-type: none"> <li>Optimum engine rpm, hydraulic flow, 2-way</li> <li>Power mode</li> </ul>
ATT/E	Attachment economy mode	<ul style="list-style-type: none"> <li>Optimum engine rpm, hydraulic flow, 2-way</li> <li>Economy mode</li> </ul>



### Increase work efficiency

Functional digging force can be increased with use of the one-touch Power Max function (up to 8.5 seconds of operation).

#### Maximum arm crowd force (ISO)

20.4 t (200 kN) 21.8 t (214 kN) **7% UP**  
(with Power Max)

#### Maximum bucket digging force (ISO)

26.1 t (256 kN) 28.0 t (275 kN) **7% UP**  
(with Power Max)

Measured with Power Max function, 125 in (3,185 mm) arm and ISO rating

## Performance features

### Komatsu-integrated attachment control (optional)

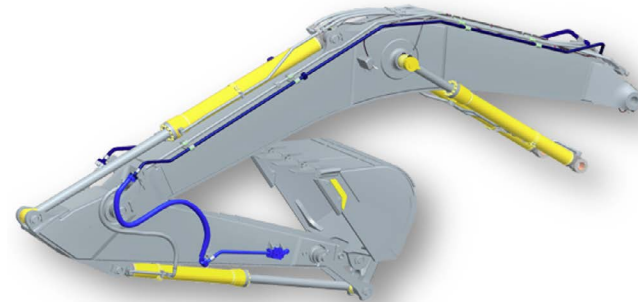
Factory-integrated auxiliary hydraulic attachment control with programmable pressure and flow settings for up to 15 different tools. Settings can be easily changed from the machine monitor, optimizing attachment control and performance. Proportional joysticks help expand versatility by giving the operator precise hydraulic attachment control.

\*Not available on PC490LC-11



### +1 Attachment piping (optional)

Factory-engineered auxiliary attachment circuit piping is designed and sized to work efficiently with the excavator's main hydraulic system. Constructed of large-diameter steel tubing with four bolt flange connections and robust mounting points, the auxiliary hydraulic piping is designed for durable, reliable use.

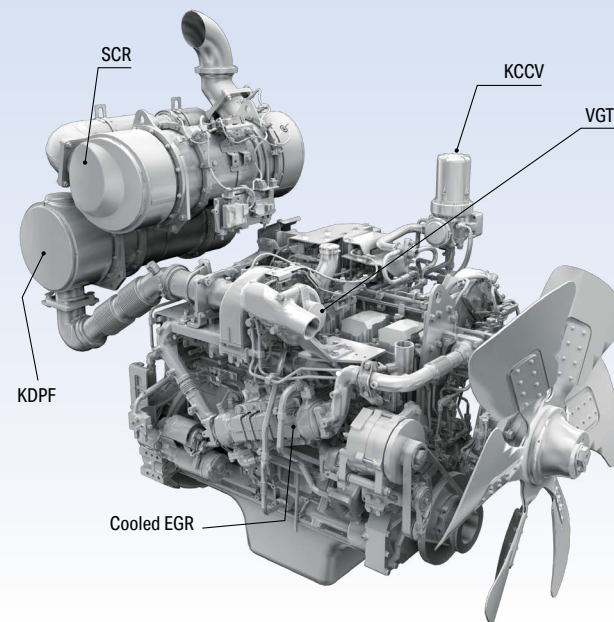


PC210LCi-11 shown.

## Komatsu innovative engine technology

### Latest Tier 4 Final engine

The Komatsu SAAD125E-7 engine is EPA Tier 4 Final emissions certified and provides exceptional performance and efficiency. 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.



## Comfortable working space

### Wide, spacious cabin

The cabin includes a seat with reclining backrests and a pull-up lever to easily adjust seat height and tilt angle. You can set the appropriate operational posture of the armrest together with the console. Reclining the seat further enables you to place it into the fully flat state with the headrest attached.

### Armrest with simple height adjustment function

The addition of a knob and a plunger to the armrest permits the height of the armrest to be easily adjusted 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 speakers installed in the cab.



## Standard equipment

Sliding window glass (left side)



ISO/BH pattern change valve



Remote intermittent wiper with windshield washer



Easy-to-access AC controls



Opening and closing skylight



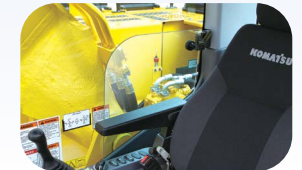
Magazine box and cup holder



Defroster (conforms to the ISO standard)



One-touch storable front window lower glass



## General features

### ROPS cab structure

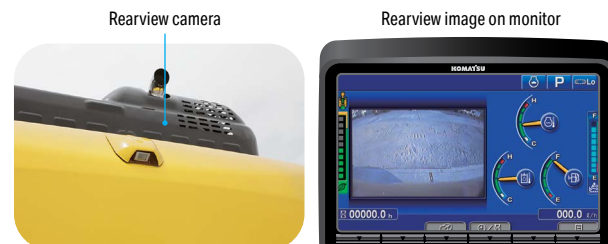
#### ISO 12117-2

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).



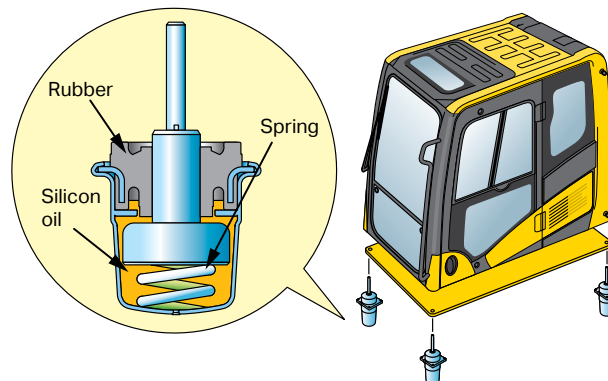
### Rearview monitoring system

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



### Low vibration with viscous cab mounts

The PC390LC/LCi-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 helps reduce vibration at the operator's seat.



### General features

Secondary engine shutdown switch at base of seat to shutdown the engine



Left and right side handrails



Seat belt caution indicator



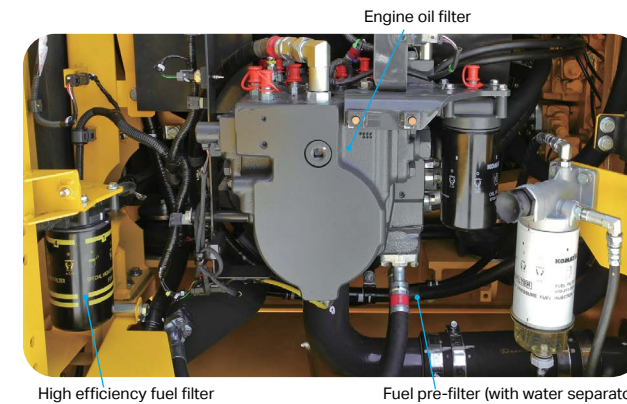
- Lock lever
- Seat belt retractable
- Tempered and tinted glass
- Large mirrors
- Slip-resistant plates
- Thermal and fan guards
- Pump/engine room partition
- Travel alarm
- Large cab entrance step
- Large, easy-open hood for engine and aftertreatment access



## 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.



### Tie-off points standard (ISO 14567)

When working in elevated positions on the boom and track frame tie-off points provide anchors for technician harness lanyards.



### Easy-to-access air conditioner filter

### Washable cab floormat

### Sloping track frame

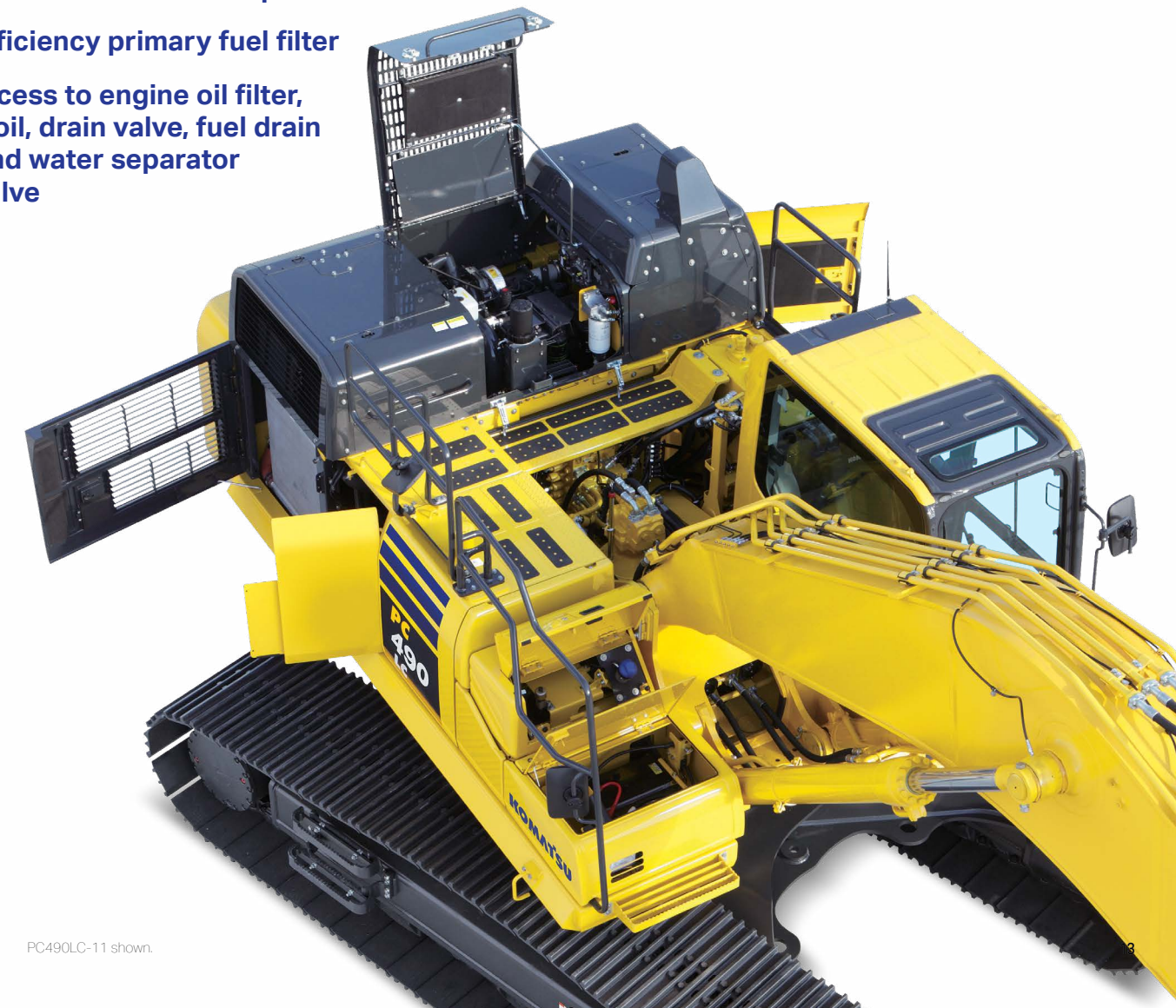
### Utility space

### Easy cleaning of cooling unit

### Fuel pre-filter with water separator

### High-efficiency primary fuel filter

### 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 and engine oil filter every **500 hours**

Hydraulic oil every **5,000 hours**

Hydraulic oil filter every **1,000 hours**

### Large-capacity air cleaner

The larger air cleaner can extend air cleaner life during long-term operation, helping prevent early clogging and resulting power loss. A radial seal design helps improve reliability.

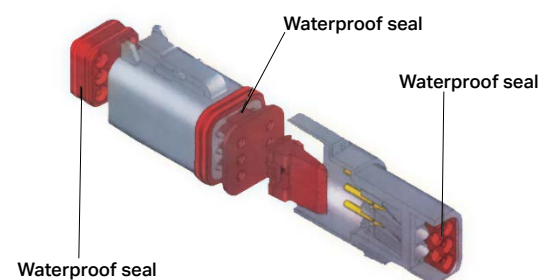
### Diesel exhaust fluid (DEF) tank

A large tank volume extends operating time before refilling and is installed on the right front platform for easy access. DEF tank and pump are separated for improved service access.



### DT-type connectors

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



### 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.

**Manual stational 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 KDPF.

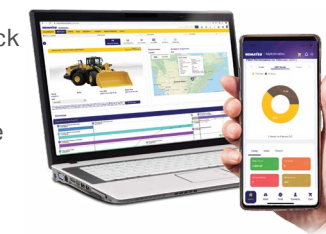
**Soot level indicator**

**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.

## Get the most out of your fleet on My Komatsu

We've designed a portal that makes it easy to collect, visualize and monitor data for both Komatsu machines and other OEM machines. My Komatsu also gives you one easy source for accessing manuals and purchasing parts for your machines.

- Quickly collect, view and manage intuitive data displays in one location
- Help keep costs under control
- Benchmark machine performance and track fuel consumption
- Monitor for theft and unauthorized use
- Receive timely maintenance alerts



My Komatsu, our comprehensive portal, analyzes telematics data from your on-machine technology — Komtrax and Komtrax Plus, or from other OEMs — and displays it on easy-to-read dashboards. Now you can get the powerful analytics you need to manage your costs and enhance your fleet's efficiency without a complicated process or expensive third-party solutions.



### Data

Telematics data is generated by on-machine technology.

### Storage

Telematics data flows into data storage. ISO 15143-3 (AEMP 2.0) facilitates the extraction and raw data to your choice of databases.



### Connection

Choose how you want to connect and view your data. Go to multiple systems, send to a third party, or easily connect it all through My Komatsu.

### Analytics

My Komatsu connects telematics data from Komatsu and non-Komatsu equipment and creates powerful analytics dashboard views.



[mykomatsu.komatsu](http://mykomatsu.komatsu)

## Komatsu helps you bring it all together

### Connect your machines to Smart Construction to optimize your job sites

Your projects depend on robust data that is easily shared, replicated, updated and — most important of all — correct.



Take a step toward a digital transformation of your job sites with Komatsu's suite of Smart Construction solutions, where advanced automation and integrated technologies intersect to help you:

- Track costs of labor, machines and materials
- Receive real-time insights straight from the field
- Enhance workflow with fully integrated data
- Visualize your data for actionable results
- Quickly map your job site
- Attract and retain talent



Not sure where to begin? Komatsu-certified solution experts are available on the phone, online or at your job site to help you navigate and thrive along your digitalization journey.

[komatsu.com/smart-construction](http://komatsu.com/smart-construction)

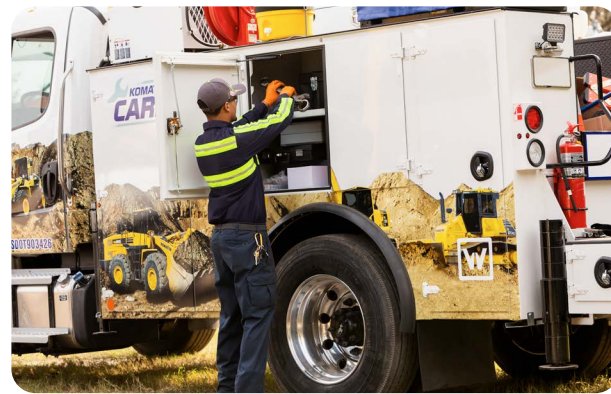


## Komatsu helps you bring it all together

### Komatsu maintenance and repair programs

Simplify the complexities of machine owning and operating costs and enhance the value of your equipment with Komatsu's tiered maintenance and repair offerings. Manage your active coverage programs through the My Komatsu customer interface and take advantage of attractive financing options.

- Solutions that fit your needs and ease your mind
- Fixed maintenance and repair costs for the life of the contract
- National coverage



### Komatsu Care Complimentary

#### Complimentary maintenance

Our complimentary scheduled maintenance program for the first three years or 2,000 hours, whichever occurs first.

### Komatsu Care Plus

#### Extended maintenance

A continuation of the Komatsu Care program. Along with regularly scheduled maintenance and national distributor coverage, you get a variety of added benefits.

### Komatsu Care Plus II

#### Extended maintenance and repair

Everything in the Komatsu Care Plus program bundled with comprehensive repair coverage for qualifying repairs.

### Komatsu Care Plus III

#### Extended maintenance, repair and consumables

A comprehensive program that simplifies your equipment's total cost of ownership with a fixed cost per hour for qualifying repairs and replacements.

### Komatsu Care Advantage Warranty

#### Extended warranty

Protect your equipment in the event a covered component fails due to a defect in material or workmanship. Repairs are performed by Komatsu-trained experts using Komatsu genuine parts.

[komatsu.com/maintenance-repair](http://komatsu.com/maintenance-repair)

### Komatsu Financial

Financial services built for your business success.

[komatsu.com/financing](http://komatsu.com/financing)

### Komatsu Genuine Parts

Engineered to help extend the life of your Komatsu machine. Now available on the My Komatsu parts store.

[komatsu.com/parts](http://komatsu.com/parts)

### Komatsu training

Comprehensive training support — virtually, at our facility or where most convenient.

[komatsu.com/training](http://komatsu.com/training)



### Engine\*

Model	Komatsu SAA6D125E-7*		
Type	Water-cooled, 4-cycle, direct injection		
Aspiration	Variable Geometry Turbocharger with air-to-air aftercooled EGR		
Number of cylinders	6		
Bore x stroke	125 mm x 150 mm 4.92" x 5.91"		
Piston displacement	11.04 L 674 in <sup>3</sup>		
Horsepower			
SAE J1995	Gross	270 kW	362 HP
ISO 9249 / SAE J1349	Net	268 kW	359 HP
	Rated rpm	1,900	
Fan drive method for radiator cooling	Hydraulic		
Governor	All-speed control, electronic		

\*EPA Tier 4 Final emissions certified

### Hydraulics

Type	HydrauMind (Hydraulic Mechanical Intelligence) system, closed-center system with load sensing valve and pressure compensated valves			
Number of selectable working modes	6			
Main pump				
Pumps for	Boom, arm, bucket, swing, and travel circuits			
Type	Variable displacement axial piston type			
Maximum flow	780 L/min 206 gal/min			
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	27.9 MPa	285 kg/cm <sup>2</sup>	4,050 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	2-160 mm x 1570 mm x 110 mm	6.3" x 61.8" x 4.3"		
Arm	1-185 mm x 1820 mm x 120 mm	7.3" x 71.7" 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	329 kN	33,510 kg	73,880 lbf.
Gradeability	70%, 35°		
Maximum travel speed (auto shift)			
High	5.5 km/h 3.4 mph	Mid 4.2 km/h 2.6 mph	Low 3.0 km/h 1.9 mph
Service brake	Hydraulic lock		
Parking brake	Mechanical disc		

### Swing system

Drive method	Hydraulic motor		
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		
Swing torque	13,414 kg·m	97,024 ft. lbs.	

### Undercarriage

Center frame	X-frame	
Track frame	Box-section	
Track type	Sealed	
Track adjuster	Hydraulic	
Number of shoes (each side)	49	
Number of carrier rollers (each side)	2	
Number of track rollers (each side)	8	

### Coolant and lubricant capacity (refilling)

Fuel tank	650 L	172 U.S. gal
Radiator	47 L	12.4 U.S. gal
Engine	37 L	9.77 U.S. gal
Final drive (each side)	11 L	2.9 U.S. gal
Swing drive	20 L	5.3 U.S. gal
Hydraulic tank	248 L	65.5 U.S. gal
Diesel Exhaust Fluid (DEF) tank	39 L	10.3 U.S. gal

### Sound performance

Exterior – ISO 6395	105 dB(A)
Interior – ISO 6396	76 dB(A)

### Operating weight (approximate)\*

Operating weight includes 7,060 mm 23'2" one-piece HD boom, 3,380 mm 11'1" arm, SAE heaped 2.25 m<sup>3</sup> 2.94 yd<sup>3</sup> bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Triple-grouser shoes	Fixed gauge		Variable gauge	
	Operating weight	Ground pressure ISO 16754	Operating weight	Ground pressure ISO 16754
700 mm 28"	47,930 kg 105,670 lbs.	0.73 kg/cm <sup>2</sup> 10.33 psi	49,005 kg 108,040 lbs.	0.74 kg/cm <sup>2</sup> 10.57 psi
800 mm 31.5"	48,430 kg 106,770 lbs.	0.64 kg/cm <sup>2</sup> 9.14 psi	49,505 kg 109,140 lbs.	0.66 kg/cm <sup>2</sup> 9.34 psi
900 mm 35.5"	48,920 kg 107,850 lbs.	0.58 kg/cm <sup>2</sup> 8.2 psi	49,995 kg 110,220 lbs.	0.59 kg/cm <sup>2</sup> 8.38 psi

### Working forces

	Arm length	3,380 mm 11'1"	4,000 mm 13'1"
SAE rating	Bucket digging force	275 kN 28,000 kg / 61,730 lbs.	275 kN 28,000 kg / 44,970 lbs.
	Arm crowd force	214 kN 21,800 kg / 48,060 lbs.	190 kN 19,400 kg / 42,770 lbs.
ISO rating	Bucket digging force	239 kN 24,400 kg / 53,790 lbs.	239 kN 24,400 kg / 53,790 lbs.
	Arm crowd force	205 kN 20,900 kg / 46,080 lbs.	184 kN 18,800 kg / 41,450 lbs.

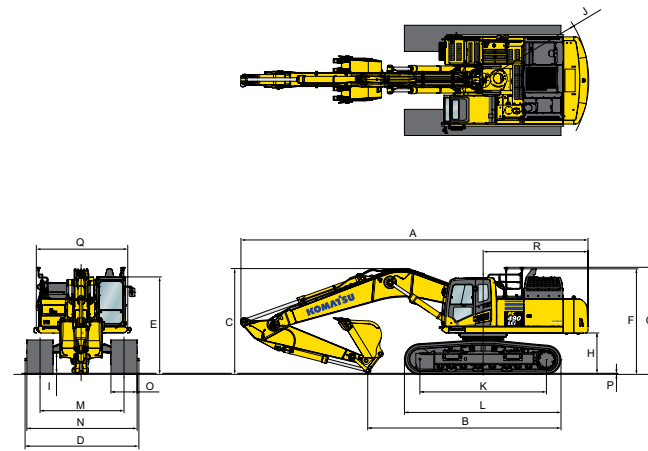
### Component weights

Arm including bucket cylinder and linkage	
3,380 mm 11'1" arm assembly	2,141 kg 4,720 lbs.
4,000 mm 13'1" arm assembly	2,408 kg 5,309 lbs.
4,800 mm 15'9" arm assembly	2,645 kg 5,831 lbs.
One piece HD boom including arm cylinder	
7,060 mm 23'2" boom assembly	4,017 kg 8,856 lbs.
Boom cylinders x 2	366 kg 807 lbs.
Counterweight (standard)	9,573 kg 21,105 lbs.
Counterweight (for removal system)	8,700 kg 19,180 lbs.
2.25 m <sup>3</sup> 2.94 yd <sup>3</sup> bucket - 54" width	1,867 kg 4,117 lbs.

## General specification

### Dimensions

Arm Length	3,380 mm 11'1"	4,000 mm 13'1"
<b>A</b> Overall length	11,930 mm 39'2"	11,950 mm 39'2"
<b>B</b> Length on ground (transport)	6,660 mm 21'10"	6,330 mm 20'9"
<b>C</b> Overall height (to top of boom)*	3,635 mm 11'11"	3,885 mm 12'9"
<b>D</b> Overall width	3,765 mm 12'4"	
<b>E</b> Overall height (to top of cab)*	3,360 mm 11'0"	
<b>F</b> Overall height (to top of handrail)*	3,630 mm 11'11"	
<b>G</b> Overall height (to top of GNSS antenna)*	3,705 mm 12'2"	
<b>H</b> Ground clearance, counterweight	1,385 mm 4'7"	
<b>I</b> Ground clearance, minimum	568 mm 1'10"	
<b>J</b> Tail swing radius	3,645 mm 12'0"	
<b>K</b> Track length on ground	4,350 mm 14'3"	
<b>L</b> Track length	5,385 mm 17'8"	
<b>M</b> Track gauge	2,740 mm 9'0"	
<b>N</b> Width of crawler	700 mm 28" shoe	3,440 mm 11'2"
	800 mm 31.5" shoe	3,540 mm 11'6"
	900 mm 35.5" shoe	3,640 mm 11'11"
<b>O</b> Shoe width	900 mm 35.5"	
<b>P</b> Grouser height	37 mm 1.5"	
<b>Q</b> Machine upper width**	3,145 mm 10'4"	
<b>R</b> Distance, swing center to rear end	3,605 mm 11'10"	



\*Including grouser height \*\*Including handrail

### Backhoe bucket, arm and boom combination

Bucket type	Capacity		Teeth	Bucket		Weight		Tip radius	7,060 mm (23'2") Boom		
	m³	yd³		Width	Depth	kg	lbs.		3.4 m (11'1")	4.0 m (13'1")	
Komatsu TL	1.12	1.47	3	762	30"	1,287	2,838	1,826	72"	●	●
	1.35	1.76	4	914	36"	1,441	3,176	1,826	72"	●	●
	1.64	2.15	4	1,067	42"	1,561	3,442	1,826	72"	●	●
	1.94	2.54	5	1,219	48"	1,714	3,779	1,826	72"	●	○
	2.25	2.94	6	1,372	54"	1,867	4,117	1,826	72"	●	○
	2.55	3.34	6	1,524	60"	1,988	4,382	1,826	72"	○	□
	2.87	3.75	7	1,676	66"	2,141	4,720	1,826	72"	□	⊙
3.17	4.15	7	1,829	72"	2,261	4,985	1,826	72"	⊙	⊙	
Komatsu HP	1.12	1.47	3	762	30"	1,508	3,324	1,826	72"	●	●
	1.35	1.76	4	914	36"	1,663	3,667	1,826	72"	●	●
	1.64	2.15	4	1,067	42"	1,835	4,046	1,826	72"	●	●
	1.94	2.54	5	1,219	48"	1,978	4,360	1,826	72"	●	●
	2.25	2.94	6	1,372	54"	2,151	4,741	1,826	72"	○	□
	2.55	3.34	6	1,524	60"	2,293	5,056	1,826	72"	□	□
	2.87	3.75	7	1,676	66"	2,466	5,437	1,826	72"	⊙	⊙
3.17	4.15	7	1,829	72"	2,609	5,752	1,826	72"	⊙	X	
Komatsu HPS	1.12	1.47	3	762	30"	1,632	3,597	1,826	72"	●	●
	1.35	1.76	4	914	36"	1,806	3,981	1,826	72"	●	●
	1.64	2.15	4	1,067	42"	2,003	4,416	1,826	72"	●	●
	1.94	2.54	5	1,219	48"	2,172	4,789	1,826	72"	●	○
	2.25	2.94	6	1,372	54"	2,371	5,228	1,826	72"	○	□
	2.55	3.34	6	1,524	60"	2,540	5,600	1,826	72"	□	⊙
	2.87	3.75	7	1,676	66"	2,739	6,039	1,826	72"	⊙	X
Komatsu HPX	1.12	1.47	3	762	30"	1,759	3,877	1,826	72"	●	●
	1.35	1.76	4	914	36"	1,933	4,261	1,826	72"	●	●
	1.64	2.15	4	1,067	42"	2,130	4,696	1,826	72"	●	●
	1.94	2.54	5	1,219	48"	2,299	5,069	1,826	72"	●	○
	2.25	2.94	6	1,372	54"	2,498	5,508	1,826	72"	○	□
	2.55	3.34	6	1,524	60"	2,667	5,880	1,826	72"	□	⊙
	2.87	3.75	7	1,676	66"	2,866	6,319	1,826	72"	⊙	X

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

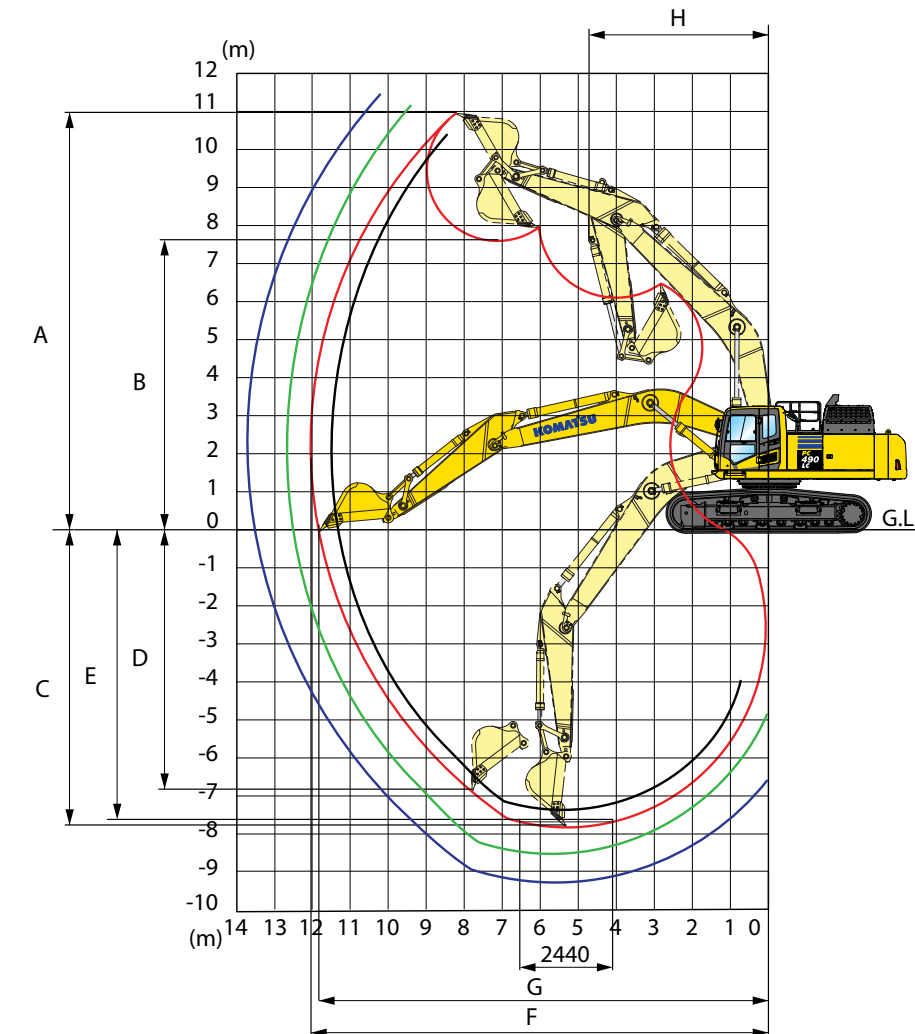
- 3,350 kg 7,385 lbs. maximum for 3,380 mm 11' 1" standard arm assembly
- 3,200 kg 7,054 lbs. maximum for 4,000 mm 13' 1" standard arm assembly

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

- - Used with material weights up to 3,500 lbs./yd³ - Quarry/rock/high abrasion applications
- - Used with material weights up to 2,000 lbs./yd³ - Light materials applications
- - Used with material weights up to 2,500 lbs./yd³ - General construction
- X - Not useable
- - Used with material weights up to 3,000 lbs./yd³ - Tough digging applications

Komatsu recommends the use of buckets sized to machine capacity. Buckets listed in the table above are sized appropriate to the specified material densities. Buckets exceeding recommended sizes may result in reduced performance.

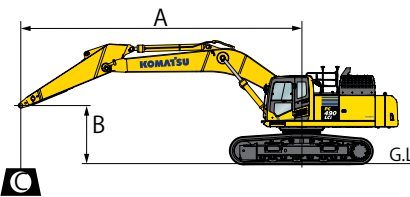
### Working range



	Arm Length	2900 mm 9'6"	3380 mm 11'1"	3380 mm 11'1"	4000 mm 13'1"	4800 mm 15'9"
<b>A</b> Max. digging height		10,350 mm 34'0"	10,980 mm 36'0"	10,547 mm 34'7"	11,090 mm 36'5"	11,550 mm 37'11"
<b>B</b> Max. dumping height		7,145 mm 23'5"	7,630 mm 25'0"	7,306 mm 24'0"	7,780 mm 25'6"	8,210 mm 26'11"
<b>C</b> Max. digging depth		7,280 mm 23'11"	7,755 mm 25'5"	7,748 mm 25'5"	8,380 mm 27'6"	9,190 mm 30'2"
<b>D</b> Max. vertical wall digging depth		5,635 mm 18'6"	6,805 mm 22'4"	6,996 mm 22'11"	7,220 mm 23'8"	8,085 mm 26'6"
<b>E</b> Max. digging depth for 8' level bottom		7,090 mm 23'3"	7,615 mm 25'0"	7,590 mm 24'11"	8,250 mm 27'0"	9,080 mm 29'10"
<b>F</b> Max. digging reach		11,445 mm 37'7"	12,030 mm 39'6"	11,876 mm 39'0"	12,565 mm 41'3"	13,365 mm 43'10"
<b>G</b> Max. digging reach at ground level		11,230 mm 36'10"	11,810 mm 38'9"	11,654 mm 38'3"	12,365 mm 40'7"	13,180 mm 43'3"
<b>H</b> Min. swing radius		4,810 mm 15'9"	4,735 mm 15'6"	4,871 mm 16'0"	4,800 mm 15'9"	4,885 mm 16'0"
<b>SAE rating</b>	Bucket digging force at power max	239 kN 24,400 kg / 53,790 lbs.	239 kN 24,400 kg / 53,790 lbs.	238 kN 24,300 kg / 53,570 lbs.	239 kN 24,400 kg / 53,790 lbs.	239 kN 24,400 kg / 53,790 lbs.
	Arm crowd force at power max	245 kN 25,000 kg / 55,120 lbs.	205 kN 20,900 kg / 46,080 lbs.	223 kN 22,700 kg / 50,040 lbs.	184 kN 18,800 kg / 41,450 lbs.	162 kN 16,500 kg / 36,400 lbs.
<b>ISO rating</b>	Bucket digging force at power max	275 kN 28,000 kg / 61,730 lbs.	275 kN 28,000 kg / 61,730 lbs.	274 kN 27,900 kg / 61,510 lbs.	275 kN 28,000 kg / 61,730 lbs.	275 kN 28,000 kg / 61,730 lbs.
	Arm crowd force at power max	257 kN 26,200 kg / 57,760 lbs.	214 kN 21,800 kg / 48,060 lbs.	233 kN 23,800 kg / 52,470 lbs.	190 kN 19,400 kg / 42,770 lbs.	167 kN 17,000 kg / 37,500 lbs.

# General specification

## Lifting capacity

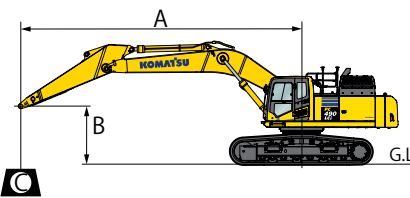


- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ⊕ Rating at maximum reach

- Conditions:
- Boom length: 7,060 mm 23' 2"
  - Bucket: None
  - Undercarriage: Fixed gauge
  - Lifting mode: On

Arm: 2,900 mm 9'6"      Shoes: 900 mm 35.5" triple grouser      Unit: kg lbs.

B	A		3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		Max ⊕	
	Max		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m 25'	7.9 m 26'													
6.1 m 20'	8.8 m 29'													
4.6 m 15'	9.3 m 31'													
3.0 m 10'	9.6 m 31'													
1.5 m 5'	9.6 m 31'													
0 m 0'	9.3 m 31'													
-1.5 m -5'	8.8 m 29'													
-3.0 m -10'	8.0 m 26'													
-4.6 m -15'	6.7 m 22'													



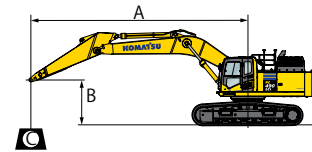
- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ⊕ Rating at maximum reach

- Conditions:
- Boom length: 7,060 mm 23' 2"
  - Bucket: None
  - Undercarriage: Fixed gauge
  - Lifting mode: On

HD Arm: 3,380 mm 11'1"      Shoes: 900 mm 35.5" triple grouser      Unit: kg lbs.

B	A		3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		Max ⊕	
	Max		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
9.1 m 30'	7.5 m 24'													
7.6 m 25'	8.6 m 28'													
6.1 m 20'	9.4 m 31'													
4.6 m 15'	9.9 m 33'													
3.0 m 10'	10.1 m 33'													
1.5 m 5'	10.1 m 33'													
0 m 0'	9.9 m 33'													
-1.5 m -5'	9.4 m 31'													
-3.0 m -10'	8.7 m 28'													
-4.6 m -15'	7.5 m 25'													

## Lifting capacity

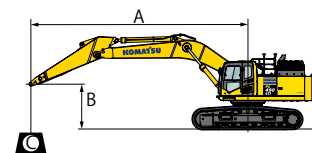


- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ⊕ Rating at maximum reach

- Conditions:
- Boom length: 7,060 mm 23' 2"
  - Bucket: None
  - Undercarriage: Fixed gauge
  - Lifting mode: On

Arm: 4,000 mm 13'1"      Shoes: 900 mm 35.5" triple grouser      Unit: kg lbs.

B	A		3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		Max ⊕	
	Max		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
9.1 m 30'	8.2 m 27'													
7.6 m 25'	9.3 m 30'													
6.1 m 20'	10.0 m 33'													
4.6 m 15'	10.5 m 34'													
3.0 m 10'	10.7 m 35'													
1.5 m 5'	10.7 m 35'													
0 m 0'	10.5 m 34'													
-1.5 m -5'	10.0 m 33'													
-3.0 m -10'	9.3 m 30'													
-4.6 m -15'	8.2 m 27'													
-6.1 m -20'	6.6 m 22'													



- 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:
- Boom length: 7,060 mm 23' 2"
  - Bucket: None
  - Undercarriage: Fixed gauge
  - Lifting mode: On

Arm: 4,800 mm 15'9"      Shoes: 900 mm 35.5" triple grouser      Unit: kg lbs.

B	A		3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		Max ⊕	
	Max		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
9.1 m 30'	9.2 m 30'													
7.6 m 25'	10.2 m 33'													
6.1 m 20'	10.9 m 36'													
4.6 m 15'	11.3 m 37'													
3.0 m 10'	11.5 m 38'													
1.5 m 5'	11.5 m 38'													
0 m 0'	11.3 m 37'													
-1.5 m -5'	10.9 m 36'													
-3.0 m -10'	10.2 m 33'													
-4.6 m -15'	9.2 m 30'													
-6.1 m -20'	7.8 m 26'													

\*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.

\*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.



## Equipment

Cab	PC490LC	PC490LCi	Electrical system	PC490LC	PC490LCi
ROPS cab (ISO12117-2)	●	●	Batteries, large capacity (2 x 12 Volt)	●	●
High back air suspension seat, with heat	●	●	Battery master disconnect switch with lockout tagout	●	●
Operator Protective Guard (OPG) Level 1 top guard	●	●	Alternator (90 Amp, 24 Volt)	●	●
177.8 mm (7") LCD high resolution color monitor	●	●	Starter motor (11 kW)	●	●
Automatic climate control	●	●	Secondary engine shut off switch	●	●
Retractable seat belt (76 mm width) with indicator	●	●	Working lights (1 front RH side / 1 boom LH side)	●	●
(2) 12V accessory outlet	●	●			
Rearview mirrors, right hand and left hand side	●	●	<b>Booms and arms</b>	<b>PC490LC</b>	<b>PC490LCi</b>
Rearview monitoring system (1 camera)	●	●	7000 mm (23'2") HD boom assembly	●	●
Travel alarm	●	●	7000 mm (23'2") HD boom assembly with +1 attach piping	○	○
Proportional joystick control levers	○	●	3380 mm (11'1") arm assembly	●	●
Operator identification system	●	●	3380 mm (11'1") arm assembly with +1 attach piping	○	○
Hydraulic lock lever	●	●	3380 mm (11'1") SD arm assembly	○	-
Skylight	●	●	3380 mm (11'1") SD arm assembly with +1 attach piping	○	-
Sunvisor	○	○	4000 mm (13'1") arm assembly	○	○
Rainvisor	○	○	4800 mm (15'9") arm assembly	○	○
Working lights, two additional cab mounted	○	○	Super long front arrangement (65')	○	-
Straight travel pedal	□	□	Boom foot, boom nose, and arm end steel castings	●	●
<b>Engine</b>	<b>PC490LC</b>	<b>PC490LCi</b>	<b>Undercarriage and work equipment</b>	<b>PC490LC</b>	<b>PC490LCi</b>
Komatsu SAA6D125E-7 tier 4 final	●	●	900 mm (35.5") triple grouser track shoes	●	●
Dry type air cleaner, double element	●	●	800 mm (31.5") single grouser track shoes	○	○
Fuel pre-filter with water separator	●	●	700 mm (28") triple grouser track shoes	○	○
Fuel high efficiency filter	●	●	8 track / 2 carrier rollers (each side)	●	●
Automatic engine warm up system	●	●	Hydraulic track adjusters (each side)	●	●
Programmable auto-idle shut down	●	●	Track guiding guards, center section (each side)	●	●
Overheat prevention system	●	●	Track roller guards, full length (each side)	○	○
Turbocharger protection system	●	●	Counterweight, 9573 kg (21,105 lbs.)	●	●
High altitude arrangement	○	○	Counterweight removal system, 8700 kg (19,180 lbs.)	○	-
			Counterweight, 11500 kg (25,353lbs.)*2	○	-
<b>Hydraulic controls</b>	<b>PC490LC</b>	<b>PC490LCi</b>	Object handling H-link	●	●
Pattern change control valve (ISO to BH control)	●	●	Fixed gauge track frame	●	●
Working mode selection system (6 modes)	●	●	Variable gauge track frame (113")	○	○
Dual pump, Closed Center Load Sensing System (CLSS)	●	●			
Hydraulically driven variable speed fan	●	●	<b>Guards and covers</b>	<b>PC490LC</b>	<b>PC490LCi</b>
Auto-deceleration system	●	●	Revolving frame deck guards	●	●
Power Max system	●	●	Revolving frame undercovers - standard duty	●	●
Boom and arm holding valves	●	●	Track frame swivel guard	●	●
Two boom pressure mode settings	●	●	Pump / engine room partition	●	●
"One way/two way flow hydraulic control unit Variable pressure, return filter, and accumulator"	○	-	Turbocharger exhaust manifold cover	●	●
"One way/two way flow hydraulic control unit Variable pressure and flow, return filter, and accumulator"	-	○	Dust net for radiator and hydraulic oil cooler	●	●
			Slip resistant foot plates	●	●
<b>Technology</b>	<b>PC490LC</b>	<b>PC490LCi</b>	Tool free access to engine and aftertreatment	●	●
Komtrax level 5.0	●	●	Left and right side hand rails	●	●
Intelligent Machine Control (IMC)	-	●	Cab full front guard, OPG Level 1	○	○
264 mm (10.4") IMC color monitor with USB	-	●	Cab full front guard, OPG Level 2	○	○
Multi-band UHF/915SS radio	-	●	Cab top guard, OPG Level 2	○	○
Auto grade assist	-	●	Revolving frame undercovers - heavy duty	○	○
Auto stop control	-	●	Revolving frame undercovers - severe duty	○	○
Minimum distance control	-	●			
Bucket angle hold control	-	●	<b>Drive and brake system</b>	<b>PC490LC</b>	<b>PC490LCi</b>
Komvison (4 camera system)	-	○□	Three speed travel with auto shift	●	●
In field design - 2D simple surface	-	●	Double reduction type final drive	●	●
			Triple labyrinth final drive seals	●	●

\*With revolving frame reinforcements. Only available with super long fronts.

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

Standard equipment	●
Optional equipment	○
Optional (field install)	□
Not applicable	-

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