

**STANDARD EQUIPMENT**

**ENGINE**

- Engine, HINO P11C-UP, diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12V - 112Ah)
- Starting motor (24V - 6 kW), 60 amp alternator
- Automatic engine shut-down for low engine oil pressure
- Engine oil pan drain cock
- Double element air cleaner
- Battery shut down
- Pre air cleaner
- Emergency engine shut-off switch

**CONTROL**

- Working mode selector (H-mode, S-mode and ECO-mode)
- Power Boost

**SWING SYSTEM & TRAVEL SYSTEM**

- Swing rebound prevention system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- 600 mm triple grouser shoe
- Travel alarm
- Automatic swing brake
- Straight propel system

**HYDRAULIC**

- Arm interflow system
- Auto warm up system
- Aluminum hydraulic oil cooler
- Hydraulic fluid filter clog detector
- N8B piping
- Boom & Arm safety valve
- Multi control valve

**MIRRORS, LIGHTS & CAMERAS**

- Two Rearview mirrors
- Five front working lights (Two for boom, one for right storage box, Two for Cab)

**CAB & CONTROL**

- Two control levers, pilot-operated
- Horn, electric
- Cab light (interior)
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- Headrest
- Handrails
- Intermittent windshield wiper with double-spray washer
- Skylight
- Tinted safety glass
- Pull-up type front window and removable lower front window
- Easy-to-read multi-display color monitor
- Automatic air conditioner
- Emergency escape hammer
- KOMEXS
- Suspension seat
- Radio, AM/FM stereo with speaker
- 24v outlet
- Top Guard

**OPTIONAL EQUIPMENT**

- Refueling pump
- 600 mm HD triple grouser shoe
- Front guard
- Additional truck guide

- Rear view camera
- Yellow rotating warning light
- Lower Under Cover (t=9mm)

Note: Standard and optional equipment may vary. Consult your KOBELCO dealer for specifics.

Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. Please consult your nearest KOBELCO distributor for those items you require. Specialist equipment is needed to use this machine in demolition work. Before using it please contact your KOBELCO dealer. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice. Copyright by **KOBELCO CONSTRUCTION MACHINERY CO., LTD.** No part of this catalog may be reproduced in any manner without notice.

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# Power Meets Efficiency

Higher fuel  
efficiency  
means  
"Efficiency"

Increase in  
productivity  
means  
"Power"

To urban centers, and to mines around the world. Kobelco's all-out innovation brings you durable earth-friendly construction machinery that's equal to any task, at sites all over the planet. Increased power and even greater fuel economy bring higher efficiency to any project. Kobelco SK500LC machines are also more durable than ever, able to withstand the rigors of the toughest job sites. It all adds up to new levels of value that are a step ahead of the times. While focusing on the global environment of the future, Kobelco offers next-generation productivity to meet the need for lower life cycle costs and exceed the expectations of customers the world over.



# SK500<sub>LC</sub>

# Evolution Continues, with Improved Fuel Efficiency.

Higher fuel efficiency means "Efficiency"

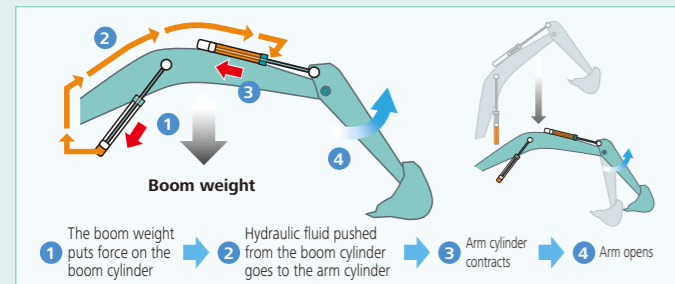


The new arm interflow system more efficiently controls hydraulic fluid flow, and significant reduction of in-line resistance and pressure loss boosts fuel efficiency. The electronic-control common-rail engine features high-pressure fuel injection and multiple injection with improved precision. It is fitted with an EGR cooler which greatly reduce PM and NOx emissions and meets TIERIII Standards.

## Hydraulic System: Revolutionary Technology Saves Fuel

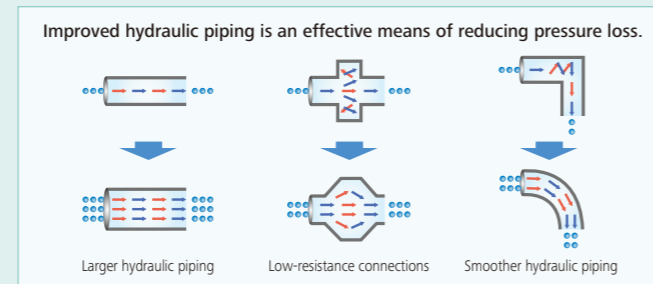
### Arm Interflow System NEW

When lowering the boom, this system uses the downward force generated by the boom's weight to push fluid to the shovel arm. This greatly reduces the need to apply power from outside the system.



### Hydraulic Circuit Reduces Energy Loss

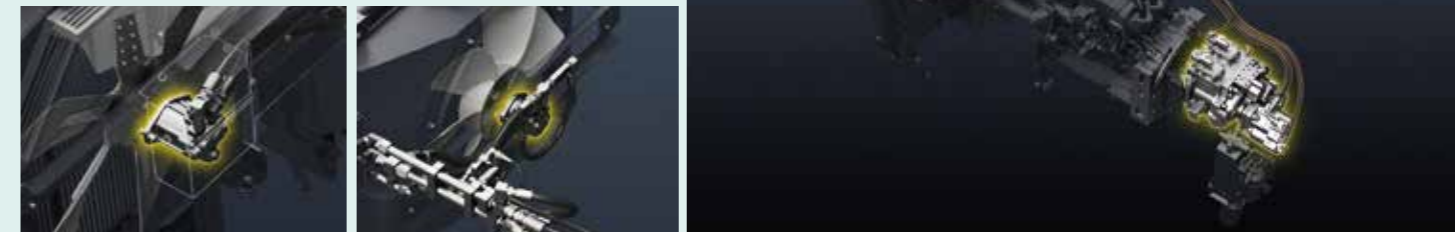
We have made every effort to enhance fuel efficiency by minimizing hydraulic pressure resistance, improving the hydraulic line layout to control friction resistance loss and minimizing valve resistance.



## Built to operate in tough working environment

### Hydraulic Drive for Engine Cooling Fan; NEW Independent Oil Cooler Fan

Hydraulic drive optimizes the cooling fan rotation speed to improve fuel economy and reduce noise. Also, the independent oil cooler fan better matches cooling to the hydraulic oil temperature, for optimal oil temperature control.

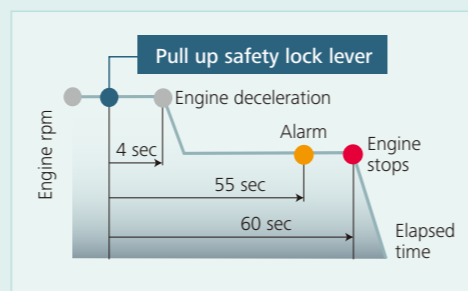
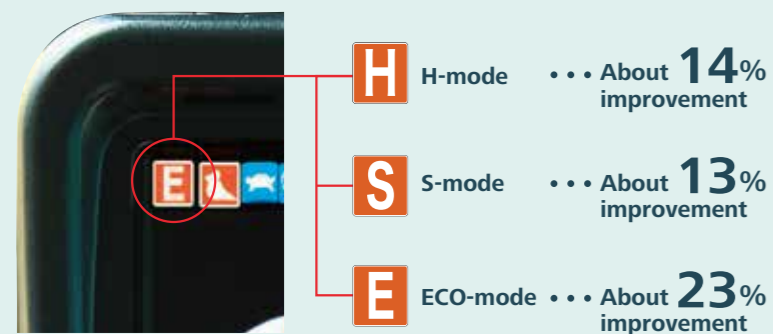


## In Pursuit of Improved Fuel Efficiency

### Operation Mode

Fuel consumption is lower in H-mode/S-mode/ECO-mode in comparison with the previous model (Generation 8).

■ Compared to previous models



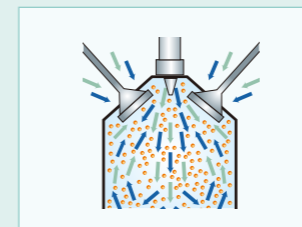
### AIS (Auto Idle Stop)

If the boarding/disembarking lever is left up, the engine will stop automatically. This eliminates wasteful idling during standby, saving fuel and reducing CO<sub>2</sub> emissions as well.

## Pursuing maximum fuel efficiency

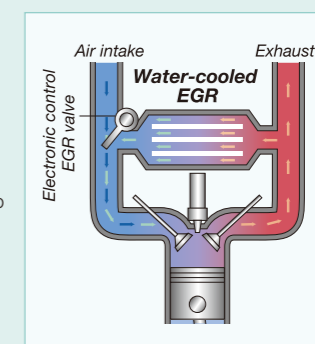
### Common rail system

High-pressure injection atomizes the fuel, and more precise injection improves combustion efficiency. This also contributes to better fuel economy.



### EGR cooler

While ensuring sufficient oxygen for combustion, cooled emission gases are mixed with the intake air and recirculated into the engine. This reduces oxygen content and lowers combustion temperature.



# More Power and Higher Efficiency

The highly efficient hydraulic system minimizes fuel consumption while maximizing power. With nimble movement and ample digging power, this excavator promises to improve your job productivity.

## Superior Digging Force

■ Max. Bucket Digging Force

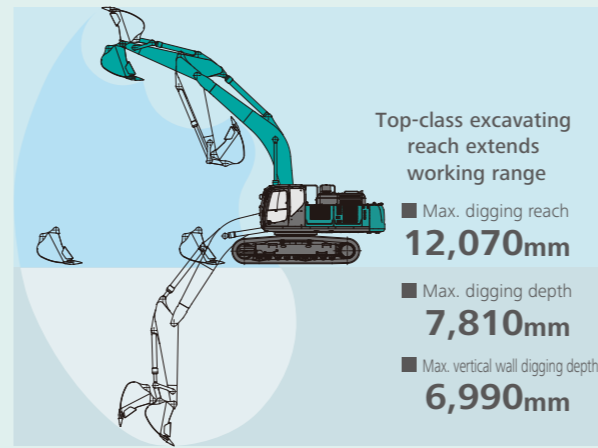
Normal: **268 kN**  
With power boost: **293 kN**

■ Max. Arm Crowding Force

Normal: **203 kN**  
With power boost: **222 kN**

\*Values are for HD arm (3.45m)

## Get More Done Faster with Superior Operability



Top-class excavating reach extends working range

■ Max. digging reach  
**12,070mm**

■ Max. digging depth  
**7,810mm**

■ Max. vertical wall digging depth  
**6,990mm**

\*Values are for HD arm (3.45m)

## A Light Touch on the Lever Means Smoother, Less Tiring Work NEW

It takes 38%\* less effort to work the operation lever, which reduces fatigue over long working hours or continued operations.

\*Compared to SK480LC-8



## Top Class Traveling Force

Powerful traveling force and pulling force deliver plenty of speed when climbing slopes or negotiating bad roads, and the agility to change direction swiftly and smoothly.



## Operator-friendly Features Include Controls that Are Easy to See, Easy to Use



### Multi-Display in Color

Brilliant colors and graphic displays are easy to recognize on the LCD multi-display in the console. The display shows fuel consumption, maintenance intervals, and more.

- 1 Analog gauge provides an intuitive reading of fuel level and engine water temperature
- 2 Green indicator light shows low fuel consumption during operation
- 3 PM accumulation display (left)/Urea level gauge (right)
- 4 Fuel consumption/Switch indicator for rear camera images
- 5 Digging mode switch
- 6 Monitor display switch

### One-Touch Attachment Mode Switch

A simple flick of a switch converts the hydraulic circuit and flow amount to match attachment changes. Icons help the operator to confirm the proper configuration at a glance.



PM accumulation display  
Urea level gauge



Fuel consumption



Maintenance

\*Hydraulic piping for attachments may vary in your area.  
Detail of bucket may vary in your area.

# Increased Power, with Enhanced Durability to Maintain the Machine's Value

Increase in productivity means "Power"

Structural design increases strength, while eliminating hydraulic problems. Enhanced durability takes productivity to a new level.



## Improved Filtration System Reliability

Clean, contaminant-free fuel and hydraulic fluid are essential to stable performance. The improved filtration systems reduce the risk of mechanical trouble and enhance longevity and durability.

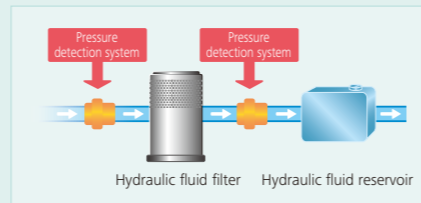
### Hydraulic Fluid Filter **NEW**

Recognized as the best in the industry, our premium fine filter separates out even the smallest particles. New cover prevents contamination when changing filters.



### Hydraulic Fluid Filter Clog Detector **NEW**

Pressure sensors at the inlet and outlet of the hydraulic fluid filter monitor differences in pressure to determine the degree of clogging. If the difference in pressure exceeds a predetermined level, a warning appears on the multi-display, so any contamination can be removed from the filter before it reaches the hydraulic fluid reservoir.



### Increased Filtering Capacity for Hydraulic Oil **NEW**

Two filters are installed for returning hydraulic oil, to curb clogging and increase the durability and reliability of the hydraulic equipment.



### Pump Drain Filter **NEW**

Newly installed pump drain filter boosts pump reliability.



### Pilot Filter

A new cartridge-type pilot filter simplifies maintenance.



\*Hydraulic piping for attachments may vary in your area. Detail of bucket may vary in your area.

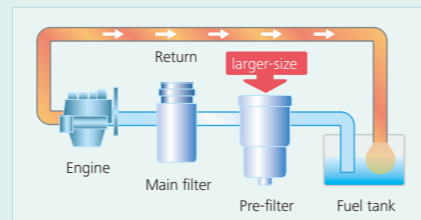
### Double-Element Air Cleaner

The large-capacity element features a double-filter structure that keeps the engine running clean even in industrial environments.



### Fuel Filter **NEW**

The pre-filter, with built-in water separator maximizes filtering performance.



# Comfortable Cab Is Now Safer than Ever.

A work environment that is quieter and more comfortable. A cab that puts the operator first is key to improved safety.



## Comfort

### Super-Airtight Cab



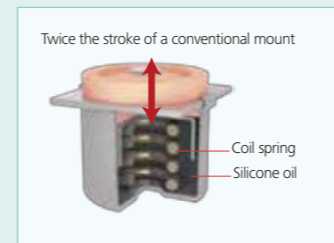
The high level of air-tightness keeps dust out of the cab.

### Quiet Inside

The high level of air-tightness ensures a quiet, comfortable cabin interior.

### Low Vibration

Coil springs absorb small vibrations, and high suspension mounts filled with silicone oil reduce heavy vibration. The long stroke achieved by this system provides excellent protection from vibration.

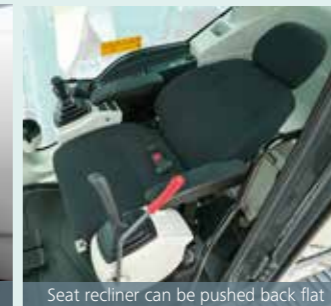


### Air Conditioner Louvers behind the Seat NEW

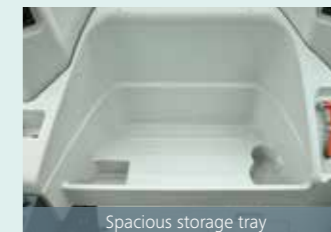


The large air-conditioner has louvers on the back pillars that blow from behind and to the right and left of the operator's seat. They can be adjusted to put a direct flow of cool/warm air on the operator, which means a more comfortable operating environment.

### More Comfortable Seat Means Higher Productivity



### Interior Equipment Adds to Comfort and Convenience



### Large Cab Is Easy to Get in and Out of

The expanded cab provides plenty of room for a large door, more headroom and smoother entry and exit.



## Safety

### Expanded Field of View for Greater Safety



Greater safety assured by rearview mirrors on left and right.



Rear view shows the area directly behind the cab.



### Broad View Liberates the Operator

The front window features one large piece of glass without a center pillar on the right side for a wide, unobstructed view.



A rear view camera is installed as option to simplify checking for safety behind the machine. The picture appears on the color monitor.

# Efficient Maintenance Keeps the Machine in Peak Operating Condition



\*Hydraulic piping for attachments may vary in your area.  
Detail of bucket may vary in your area.



## Machine Information Display Function

- Displays only the maintenance information that's needed, when it's needed
- Self-diagnostic function provides early-warning detection and display of electrical system malfunctions
- Service-diagnostic function makes it easier to check the status of the machine
- Record function for previous breakdowns including irregular and transient malfunction

Examples of displaying maintenance information

## Easy, On-the-Spot Maintenance NEW

There is ample space in the engine compartment for a mechanic to do maintenance work inside. The distance between steps are lower so entry and exit is easier. And the mechanic can work in comfort, without contortions or unnatural body positions. Finally, the hood is lighter and easier to raise and lower.



Step/Hand rail



Double-element air cleaner

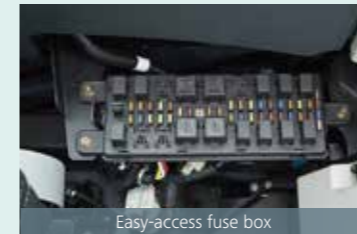
## Ground Level Access

Laid out for easy access to radiator and cooling system elements.



Left side

## More Efficient Maintenance Inside the Cab



Easy-access fuse box

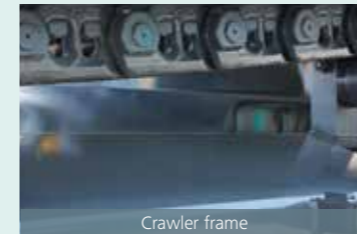
More finely differentiated fuses make it easier to locate malfunctions.



Air conditioner filters

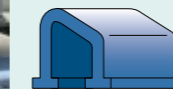
Internal and external air conditioner filters can be easily removed without tools for cleaning.

## Easy Cleaning



Crawler frame

Special sloped crawler side frame design is easily cleaned of mud.



## Maintenance Work, Daily Checks, Etc., Can Be Done from Ground Level

The layout allows for easy access from the ground for many daily checks and regular maintenance tasks.



Engine oil filter



Pilot filter



Pump drain filter



Right side



Pre-filter with water separator


- 1 Engine oil filter
- 2 Pilot filter
- 3 Pump drain filter
- 4 Pre-filter with water separator

Long-life hydraulic oil:  
**5,000** hours

**Long-Interval Maintenance**  
Long-life hydraulic oil reduces cost and labor.

Replacement cycle:  
**1,000** hours

**Highly Durable Premium-fine Filter**  
The high-capacity hydraulic oil filter incorporates glass fiber with superior cleaning power and durability.



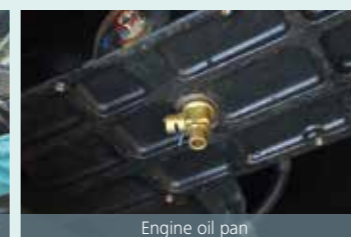

## Remote Monitoring for Peace of Mind

KOMEXS uses satellite communication and internet to relay data, and therefore can be deployed in areas where other forms of communication are difficult. When a hydraulic excavator is fitted with this system, data on the machine's operation, such as operating hours, location, fuel consumption, and maintenance status can be obtained remotely.



Detachable two-piece floor mat

Detachable two-piece floor mat with handles for easy removal. A floor drain is located under the floor mat.



Engine oil pan

Engine oil pan equipped with drain valve.

## Engine

Model	HINO P11C-UP
Type	For-stoke liquid-cooled direct injection diesel turbo charged with intercooler
No. of cylinders	6
Bore and stroke	122 mm x 150 mm
Displacement	10.52 L
Rated power output	Net 257 kW/1,850 min <sup>-1</sup> (ISO 14396 : without fan)
Max. torque	Net 1,400 N·m/1,400 min <sup>-1</sup> (ISO 14396 : without fan)

## Hydraulic System

<b>Pump</b>	
Type	Variable displacement piston pumps + gear pump
Max. discharge flow	2 x 370 L/min
<b>Relief valve setting</b>	
Excavating circuits (main)	31.4 Mpa
Power boost	34.3 Mpa
Travel circuit	34.3 Mpa
Swing circuit	26.0 Mpa
Pilot control circuit	5.0 Mpa
Pilot control pump	Gear type
Main control valve	8-spool
Oil cooler	Air cooled type

## Swing System

Swing motor	Axial piston motor
Brake	Hydraulic; locking automatically when the swing control lever is in neutral position
Swing speed	7.6 min <sup>-1</sup> {rpm}
Swing torque	185 kN·m

## Attachments

Backhoe bucket and combination

Use	Backhoe bucket	
	ISO heaped	Heavy digging
Bucket capacity	ISO heaped	m <sup>3</sup> 1.90
	Struck	m <sup>3</sup> 1.40
Opening width	With side cutters	mm 1,470
	Without side cutters	mm 1,440
No. of teeth		5
Bucket weight		kg 2,370
Combination	3.45m standard arm	☉

© Standard

## Travel System

Travel motors	Variable displacement piston pump
Travel brakes	Hydraulic
Parking brakes	Wet multiple plate
Travel shoes	50 each side
Travel speed (high/low)	5.4/3.4 km/h
Gradeability	70 % (35 deg)

## Cab & Control

<b>Cab</b>	
All-weather, sound-suppressed steel cab mounted on the high suspension mounts filled with silicone oil and equipped with a heavy, insulated floor mat.	
<b>Control</b>	
Two hand levers and two foot pedals for travel	
Two hand levers for excavating and swing	
Electric rotary-type engine throttle	

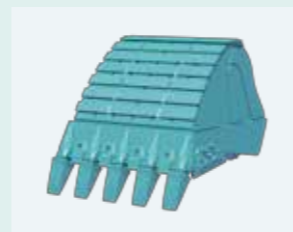
## Boom, Arm & Bucket

Boom cylinders	170 mm x 1,590 mm
Arm cylinder	190 mm x 1,970 mm
Bucket cylinder	160 mm x 1,410 mm

## Refilling Capacities & Lubrications

Fuel tank	638 L
Cooling system	47.4 L
Engine oil	42.5 L
Travel reduction gear	2x15 L
Swing reduction gear	2x5 L
Hydraulic oil tank	371 L tank oil level
	631 L hydraulic system

1.9m<sup>3</sup> bucket for heavy digging



## Working Ranges

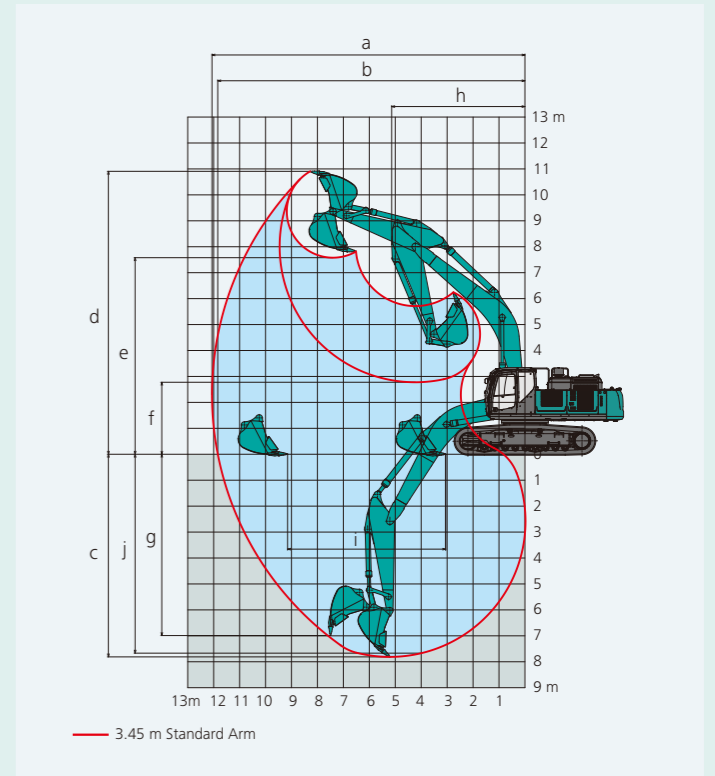
Unit: m	
Boom	7.0 m
Arm	3.45 Arm
<b>Range</b>	
a- Max. digging reach	12.07
b- Max. digging reach at ground level	11.84
c- Max. digging depth	7.81
d- Max. digging height	10.91
e- Max. dumping clearance	7.58
f- Min. dumping clearance	2.78
g- Max. vertical wall digging depth	6.99
h- Min. swing radius	5.14
i- Horizontal digging stroke at ground level	6.09
j- Digging depth for 2.4 m (8') flat bottom	7.67
Bucket capacity ISO heaped m <sup>3</sup>	1.90

## Digging Force (ISO 6015)

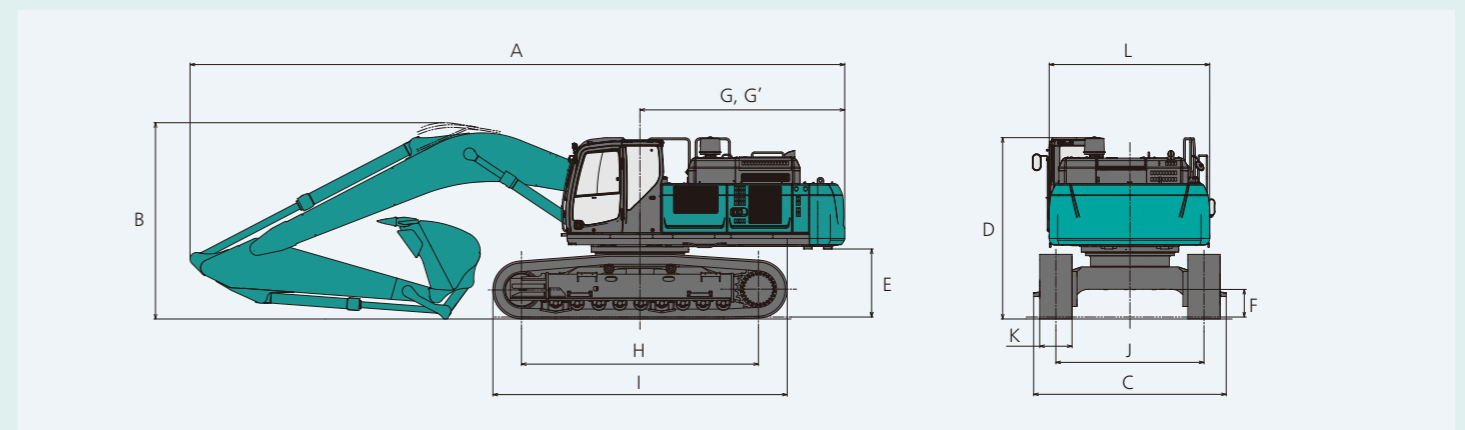
Unit: kN	
Arm length	3.45 Arm
Bucket digging force	268/293*
Arm crowding force	203/222*
*Power Boost engaged.	

## Dimensions

Unit: mm	
Arm length	3.45 Arm
A Overall length	12,160
B Overall height (to top of boom)	3,640
C Overall width	3,580
D Overall height (to top of cab)	3,370
E Ground clearance of rear end*	1,260*
F Ground clearance*	510*



Unit: mm	
G Tail swing radius	3,800
G' Distance from center of swing to rear end	3,800
H Tumbler distance	4,400
I Overall length of crawler	5,460
J Track gauge	2,750
K Shoe width	600
L Overall width of upperstructure	2,980
*Without including height of shoe lug.	



## Operating Weight & Ground Pressure

In standard trim, with standard boom, 3.45 m arm, and 1.9 m<sup>3</sup> ISO heaped bucket

Shaped	Triple grouser shoes (even height)	
	standard	HD
Shoe width	mm 600	600
Overall width of crawler(Without including width of step)	mm 3,350	3,350
Ground pressure	kPa 85.1	85.5
Operating weight	kg 49,700	49,930