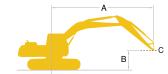
# **Lift Capacities**





Rating over side or 360 degrees

- A Reach from swing centerline
- B Height above/below ground

SK390L	SK390LC Standard Arm:10'10" (3.30 m), Without bucket, 27.6" (700mm) track shoes												EAVY LIFT	
		10'{3.0 m}		15'{4	.6 m}	20'{6	.1 m}	25'{7	.6 m}	30'{9	.1 m}	At Max	. Reach	
В		L	<del>#-</del>	1	<del>#-</del>		<del></del>		<del></del>		<del></del>	L	<del></del>	Radius
30'{9.1 m}	lb{kg}											*13,890{6,300}	*13,890{6,300}	22'1"{6.74m}
25'{7.6 m}	lb{kg}							*18,120{8,210}	*18,120{8,210}			*12,830{5,810}	*12,830{5,810}	26'3"{8.00m}
20'{6.1 m}	lb{kg}					*22,620{10,260}	*22,620{10,260}	*21,010{9,520}	19,170{8,690}			*12,470{5,650}	*12,470{5,650}	28'11"{8.81m}
15'{4.6 m}	lb{kg}			*32,490{14,730}	*32,490{14,730}	*25,910{11,750}	*25,910{11,750}	*22,570{10,230}	18,570{8,420}	*16,200{7,340}	13,930{6,310}	*12,560{5,690}	*12,560{5,690}	30'6"{9.31m}
10'{3.0 m}	lb{kg}			*40,330{18,290}	37,740{17,110}	*29,710{13,470}	24,690{11,190}	24,510{11,110}	17,850{8,090}	18,570{8,420}	13,610{6,170}	*13,030{5,910}	12,740{5,770}	31'3"{9.54m}
5'{1.5 m}	lb{kg}			*45,540{20,650}	35,590{16,140}	*32,860{14,900}	23,510{10,660}	23,800{10,790}	17,200{7,800}	18,230{8,260}	13,290{6,020}	*13,960{6,330}	12,540{5,680}	31'3"{9.52m}
Ground Level	lb{kg}	*22,430{10,170}	*22,430{10,170}	*47,020{21,320}	34,710{15,740}	32,480{14,730}	22,790{10,330}	23,320{10,570}	16,760{7,600}	18,020{8,170}	13,100{5,940}	*15,530{7,040}	12,900{5,850}	30'4"{9.25m}
-5'{-1.5 m}	lb{kg}	*38,350{17,390}	*38,350{17,390}	*45,670{20,710}	34,600{15,690}	32,200{14,600}	22,530{10,210}	23,150{10,500}	16,600{7,520}			*18,220{8,260}	13,970{6,330}	28'6"{8.70m}
-10'{-3.0 m}	lb{kg}	*56,500{25,620}	*56,500{25,620}	*41,680{18,900}	35,000{15,870}	*31,830{14,430}	22,710{10,300}	23,400{10,610}	16,830{7,630}			22,570{10,230}	16,290{7,380}	25'8"{7.82m}
-15'{-4.6 m}	lb{kg}	*44,510{20,180}	*44,510{20,180}	*33,830{15,340}	*33,830{15,340}	*25,110{11,380}	23,470{10,640}					*22,670{10,280}	21,650{9,820}	21'3"{6.48m}

SK390L	SK390LC Long Arm:13'7" {4.15 m}, Without bucket, 27.6" {700mm} track shoes HEAVY LIF												AVY LIFT			
		5'{1.	.5 m}	10'{3	3.0 m}	15'{4	.6 m}	20'{6	i.1 m}	25'{7	.6 m}	30'{9	.1 m}	At Max	. Reach	
В		-	<del></del>	-	<del></del>		<del>#-</del> -	-	<del>#</del>		<del>#-</del> -	-	<del>;</del>		<del>#-</del> -	Radius
30'{9.1 m}	lb{kg}									*11,570{5,240}	*11,570{5,240}			*10,490{4,750}	*10,490{4,750}	25'4"{7.72m
25'{7.6 m}	lb{kg}									*17,510{7,940}	*17,510{7,940}			*9,870{4,470}	*9,870{4,470}	29'0"{8.84m
20'{6.1 m}	lb{kg}									*18,450{8,360}	*18,450{8,360}	*14,280{6,470}	14,270{6,470}	*9,670{4,380}	*9,670{4,380}	31'5"{9.58m
15'{4.6 m}	lb{kg}							*22,730{10,310}	*22,730{10,310}	*20,240{9,180}	18,720{8,490}	*18,520{8,400}	13,950{6,320}	*9,780{4,430}	*9,780{4,430}	32'11"{10.04m
10'{3.0 m}	lb{kg}					*35,380{16,040}	*35,380{16,040}	*26,810{12,160}	25,000{11,330}	*22,470{10,190}	17,870{8,100}	18,490{8,380}	13,510{6,120}	*10,170{4,610}	*10,170{4,610}	33'7"{10.25m
5'{1.5 m}	lb{kg}			*20,800{9,430}	*20,800{9,430}	*42,150{19,110}	35,980{16,320}	*30,580{13,870}	23,540{10,670}	23,700{10,750}	17,070{7,740}	18,020{8,170}	13,060{5,920}	*10,880{4,930}	*10,880{4,930}	33'7"{10.23m
Ground Level	lb{kg}			*26,280{11,920}	*26,280{11,920}	*45,620{20,690}	34,390(15,590)	32,250{14,620}	22,520{10,210}	23,030{10,440}	16,450{7,460}	17,650{8,000}	12,720{5,760}	*12,040{5,460}	11,230{5,090}	32'9"{9.98m
-5'{-1.5 m}	lb{kg}	*24,920{11,300}	*24,920{11,300}	*36,130(16,380)	*36,130{16,380}	*46,030{20,870}	33,820{15,340}	31,670{14,360}	22,000{9,970}	22,660{10,270}	16,100{7,300}	17,500{7,930}	12,570{5,700}	*13,950{6,320}	11,990{5,430}	31'1"{9.48m
-10'{-3.0 m}	lb{kg}	*35,740{16,210}	*35,740{16,210}	*49,240{22,330}	*49,240{22,330}	*43,760{19,840}	33,920(15,380)	31,610{14,330}	21,950{9,950}	22,640{10,260}	16,090{7,290}			*17,340{7,860}	13,580{6,150}	28'5"{8.68m
-15'{-4.6 m}	lb{kg}			*53,070(24,070)	*53,070{24,070}	*38,340{17,390}	34,590{15,680}	*28,970{13,140}	22,360{10,140}					*21,890{9,920}	16,910{7,670}	24'7"{7.49m
-20'{-6.1 m}	lb{kg}					*27,400{12,420}	*27,400{12,420}							*21,070{9,550}	*21,070{9,550}	18'7"{5.66m
5'{1.5 m} Ground Level -5'{-1.5 m} -10'{-3.0 m} -15'{-4.6 m}	Ib{kg} Ib{kg} Ib{kg} Ib{kg} Ib{kg}	*24,920{11,300} *35,740{16,210}	, , , ,	*26,280{11,920} *36,130{16,380} *49,240{22,330}	*26,280{11,920} *36,130{16,380} *49,240{22,330}	*42,150{19,110} *45,620{20,690} *46,030{20,870} *43,760{19,840} *38,340{17,390}	35,980{16,320} 34,390{15,590} 33,820{15,340} 33,920{15,380} 34,590{15,680}	*30,580{13,870} 32,250{14,620} 31,670{14,360} 31,610{14,330} *28,970{13,140}	23,540{10,670} 22,520{10,210} 22,000{9,970} 21,950{9,950}	23,700{10,750} 23,030{10,440} 22,660{10,270} 22,640{10,260}	17,070{7,740} 16,450{7,460} 16,100{7,300}	18,020{8,170} 17,650{8,000}	13,060{5,920} 12,720{5,760}	*10,880{4,930} *12,040{5,460} *13,950{6,320} *17,340{7,860} *21,890{9,920}	*10,880{4,930} 11,230{5,090} 11,990{5,430} 13,580{6,150} 16,910{7,670}	33° 31° 31° 28° 24°

SK390LC Standard Arm:10'10" {3.30 m}, Without bucket, 31.5" {800mm} track shoes												EAVY LIFT		
		10'{3	.0 m}	15'{4	.6 m}	20'{6	.1 m}	25'{7	'.6 m}	30'{9	.1 m}	At Max	. Reach	
В		-	<b>;</b>	-	<del>#-</del>	-	<b>;;</b> -		<del>  -</del>	l l	<del>  -</del> -	ŀ	<del></del>	Radius
30'{9.1 m}	lb{kg}											*13,890{6,300}	*13,890{6,300}	22'1"{6.74m}
25'{7.6 m}	lb{kg}							*18,120{8,210}	*18,120{8,210}			*12,830{5,810}	*12,830{5,810}	26'3"{8.00m}
20'{6.1 m}	lb{kg}					*22,620{10,260}	*22,620{10,260}	*21,010{9,520}	19,360{8,780}			*12,470{5,650}	*12,470{5,650}	28'11"{8.81m}
15'{4.6 m}	lb{kg}			*32,490{14,730}	*32,490{14,730}	*25,910{11,750}	*25,910{11,750}	*22,570{10,230}	18,760{8,500}	*16,200{7,340}	14,080{6,380}	*12,560{5,690}	*12,560{5,690}	30'6"{9.31m}
10'{3.0 m}	lb{kg}			*40,330{18,290}	38,120{17,290}	*29,710{13,470}	24,930{11,300}	*24,540{11,130}	18,040{8,180}	18,780{8,510}	13,760{6,240}	*13,030{5,910}	12,880{5,840}	31'3"{9.54m}
5'{1.5 m}	lb{kg}			*45,540{20,650}	35,970{16,310}	*32,860{14,900}	23,750{10,770}	24,070{10,910}	17,390{7,880}	18,440{8,360}	13,440{6,090}	*13,960{6,330}	12,680{5,750}	31'3"{9.52m}
<b>Ground Level</b>	lb{kg}	*22,430{10,170}	*22,430{10,170}	*47,020{21,320}	35,090{15,910}	32,850{14,900}	23,040{10,450}	23,590{10,700}	16,940{7,680}	18,230{8,260}	13,250{6,010}	*15,530{7,040}	13,040{5,910}	30'4"{9.25m}
-5'{-1.5 m}	lb{kg}	*38,350{17,390}	*38,350{17,390}	*45,670{20,710}	34,970{15,860}	32,570{14,770}	22,780{10,330}	23,410{10,610}	16,780{7,610}			*18,220{8,260}	14,130{6,400}	28'6"{8.70m}
-10'{-3.0 m}	lb{kg}	*56,500{25,620}	*56,500{25,620}	*41,680{18,900}	35,370{16,040}	*31,830{14,430}	22,960{10,410}	23,660{10,730}	17,010{7,710}			22,830{10,350}	16,470{7,470}	25'8"{7.82m}
-15'{-4.6 m}	lb{kg}	*44,510{20,180}	*44,510{20,180}	*33,830{15,340}	*33,830{15,340}	*25,110{11,380}	23,710{10,750}					*22,670{10,280}	21,870{9,920}	21'3"{6.48m}

SK390L	SK390LC Long Arm:13'7" {4.15 m}, Without bucket, 31.5" {800mm} track shoes HEAVY LIFT											AVY LIFT				
	Α	5'{1.	5 m}	10'{3	.0 m}	15'{4	.6 m}	20'{6	.1 m}	25'{7	.6 m}	30'{9	.1 m}	At Max	. Reach	
В		-	<b></b>	-	<b></b>	-	<b></b>	-	<b></b>	-	<del>#</del>	-	<del>  -</del> -	-	<del></del>	Radius
30'{9.1 m}	lb{kg}									*11,570{5,240}	*11,570{5,240}			*10,490{4,750}	*10,490{4,750}	25'4"{7.72m}
25'{7.6 m}	lb{kg}									*17,510{7,940}	*17,510{7,940}			*9,870{4,470}	*9,870{4,470}	29'0"{8.84m}
20'{6.1 m}	lb{kg}									*18,450{8,360}	*18,450{8,360}	*14,280{6,470}	*14,280{6,470}	*9,670{4,380}	*9,670{4,380}	31'5"{9.58m}
15'{4.6 m}	lb{kg}							*22,730{10,310}	*22,730{10,310}	*20,240{9,180}	18,910{8,570}	*18,520{8,400}	14,100{6,390}	*9,780{4,430}	*9,780{4,430}	32'11"{10.04m}
10'{3.0 m}	lb{kg}					*35,380{16,040}	*35,380{16,040}	*26,810{12,160}	25,250{11,450}	*22,470{10,190}	18,060{8,190}	18,700{8,480}	13,660{6,190}	*10,170{4,610}	*10,170{4,610}	33'7"{10.25m}
5'{1.5 m}	lb{kg}			*20,800{9,430}	*20,800{9,430}	*42,150{19,110}	36,350{16,480}	*30,580{13,870}	23,790{10,790}	23,970{10,870}	17,250{7,820}	18,230{8,260}	13,210{5,990}	*10,880{4,930}	*10,880{4,930}	33'7"{10.23m}
Ground Level	lb{kg}			*26,280{11,920}	*26,280{11,920}	*45,620{20,690}	34,770{15,770}	32,620{14,790}	22,770{10,320}	23,300{10,560}	16,630{7,540}	17,860{8,100}	12,870{5,830}	*12,040{5,460}	11,370{5,150}	32'9"{9.98m}
-5'{-1.5 m}	lb{kg}	*24,920{11,300}	*24,920{11,300}	*36,130{16,380}	*36,130{16,380}	*46,030{20,870}	34,200{15,510}	32,040{14,530}	22,250{10,090}	22,930{10,400}	16,290{7,380}	17,710(8,030)	12,720{5,760}	*13,950{6,320}	12,130{5,500}	31'1"{9.48m}
-10'{-3.0 m}	lb{kg}	*35,740{16,210}	*35,740{16,210}	*49,240{22,330}	*49,240{22,330}	*43,760{19,840}	34,300{15,550}	31,980{14,500}	22,200{10,060}	22,910{10,390}	16,280{7,380}			*17,340{7,860}	13,740{6,230}	28'5"{8.68m}
-15'{-4.6 m}	lb{kg}			*53,070{24,070}	*53,070{24,070}	*38,340{17,390}	34,960{15,850}	*28,970{13,140}	22,610{10,250}					*21,890{9,920}	17,110{7,760}	24'7"{7.49m}
-20'{-6.1 m}	lb{kg}					*27,400{12,420}	*27,400{12,420}							*21,070{9,550}	*21,070{9,550}	18'7"{5.66m}

- Notes:

  1. Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.

  2. Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.

  3. Arm bucket pin, without bucket is defined as lift point.

  4. The above lift capacities are in compliance with SAE J/ISO 10567. They do not exceed 87 % of hydraulic lift capacity or 75 % of tipping load. Lift capacities marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.

  5. Operator should be fully acquainted with the Operator's and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.

  6. Lift capacities apply to only machines as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

Note: This document may contain attachments and optional equipment that are not available in your area. It may also contain photographs of machines with specifications that differ from those sold in your area. Please contact your nearest KOBELCO dealer for items you require.

Due to our policy of continuous product improvement, all designs and specifications are subject to change without advance notice.

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### **KOBELCO CONSTRUCTION MACHINERY U.S.A. INC.**

22350 Merchants Way, Katy, Texas 77449 http://www.kobelco-usa.com/







# More power and higher efficiency.





Power to do more, faster

### **Digging Volume**

The SK390LC offers dynamic digging force even as it minimizes fuel consumption, achieving class-leading work volume.

Heavy Lift

#### **Heavy Lift**

High hydraulic pressure (Heavy Lift) means greater lifting power, at close radius, allowing for smooth and steady operation while moving heavy objects.

#### **Independent Travel**

Selecting Independent Travel dedicates one hydraulic pump to travel and one to the attachment on a continuous basis, allowing for a smooth and constant movement speed even while swinging or using the boom or attachment. With Independent Travel, safely carrying a large pipe across a job site is a breeze.

#### **Swing Priority**

Our exclusive system automatically and instantly delivers full swing power during combined operations. There's no need to mode-switch to make quick work of jobs like side-digging and back-filling.



#### **Power Boost**

When you need more power instantly, engage Power Boost to get 10 % more power with no time limit.

■ Max. Bucket Digging Force (ISO 6015)

With Power Boost: **56,200** lbs {250 kN}

■ Max. Arm Crowding Force (ISO 6015)

With Power Boost: 40,700 lbs {181 kN}

# **Drawbar Pulling Force (SAE J1309)**

Excellent drawbar force lets you conquer rough terrain and slopes.

70,600 lbs {314 kN}

#### **Conforms to Tier IV Final exhaust emissions standards**

# Reduces fuel consumption and minimizes exhaust emissions

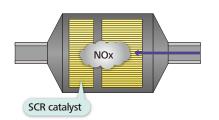
The HINO engine, (a subsidiary of Toyota) is renowned for fuel efficiency and environmental performance, and KOBELCO has tuned them specifically for construction machinery.

The high-pressure common rail fuel injection system, the variable-geometry (VG) turbocharger, reduce particulate matter (PM) while the large EGR cooler greatly reduces the formation of nitrogen oxide (NOx) gases.



# SCR System with DEF WWW

Engine exhaust system utilizes Selective Catalytic Reduction (SCR) to convert NOx\* into harmless nitrogen and water emissions. SCR combined with a Diesel Particulate Filter (DPF) makes a much cleaner machine meeting US EPA regulations for Tier IV final.

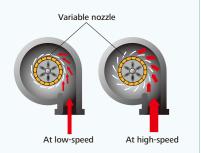


NOx reduction rate
(Compared to previous models)



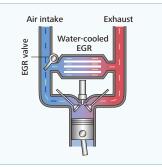
#### **VG** turbo reduces PM

The variable-geometry turbocharger adjusts air intake to maximize combustion efficiency. At low engine speeds the nozzles are closed, the turbo speed increased and air intake is boosted. This helps lower fuel consumption.



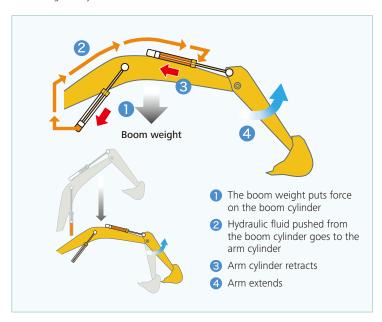
#### EGR cooler reduces NOx

Cooled exhaust gases from the EGR cooler are mixed with fresh air in the intake. The recirculated air lowers the combustion temperature which reduces NOx.



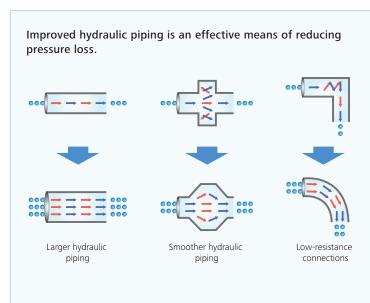
# Boom to Arm Regeneration System VEV

Innovative engineering uses the downward movement of the boom to push fluid to the arm. Gravity and kinetic energy greatly reduce the amount of power needed to move fluid through the system.



# Hydraulic circuit reduces energy loss

Improved hydraulic line layout minimizes hydraulic pressure resistance from turbulence and valve restrictions. Fuel efficiency is increased because it takes less energy to move fluid through a circuit with low flow resistance.

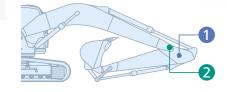


Increased power with enhanced durability to maintain the machine's value

Smart system design increases strength and eliminates hydraulic problems. Enhanced reliability and durability takes productivity to a new level.

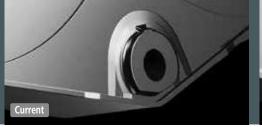
# Built to operate in tough working environments

Reinforced and redesigned boom and arm offers excellent durability during demanding work conditions to reliably handle higher work volume.



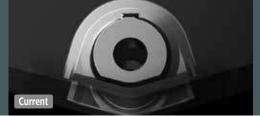
1 Enlarged reinforcement of the arm

Arm: Base plate thickness has been increased.





2 Modified foot boss shape





#### **500 Hour Attachment Lubrication Interval**

The self lubrication bushings are used at the attachment pins and the bushings with high abrasion resistant property are used at the pins around the bucket. The lubrication cycle of the lubrication points around the bucket is 250

hours and that of other lubrication points is 500 hours.

\* Additionally the two piece bucket bushings protect the side of the arm from contact and then wear from the bucket ears. Should the bucket bushings need replacement, they can be replaced separately from the larger main bushing, reducing costs.



#### **Three Track Guides**

Three heavy-duty track guides installed on each crawler side frame assure stability in the most demanding situations.



#### 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

Recognized as the best in the industry, our super-fine filter separates out even the smallest particles. A new cover prevents contamination when changing filters.

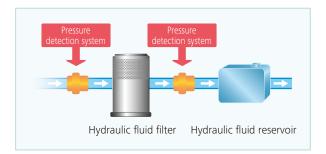






# Hydraulic fluid filter restriction indicator

Detects clogging by measuring the difference in pressure between incoming and outgoing hydraulic fluid. Detecting contaminants before they can get into the hydraulic fluid reservoir reduces the risk of damage to the hydraulic system.



#### **Double-element air cleaner**

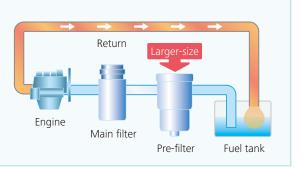
The large-capacity element features a double-filter structure that keeps the engine running clean even in industrial environments.



# Fuel filter **NEW**

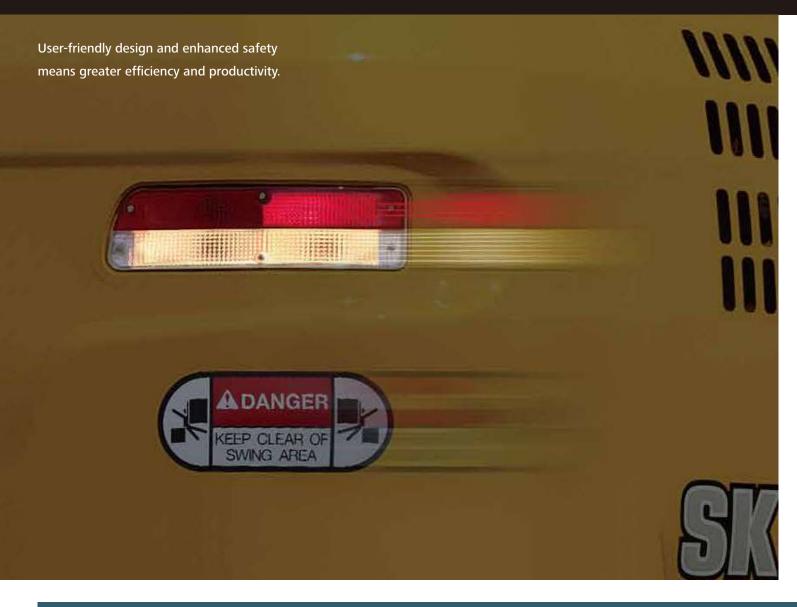
Pre-filter with built-in water-separator maximizes filtering performance.





5

# **Comprehensive safety and intuitive operation**



### Safety

#### **ROPS / FOPS CAB\***

ROPS (Roll-Over-Protective Structure)-compliant cab complies with ISO standards (ISO-12117-2: 2008) and ensures greater operator safety in the event of a roll-over. KOBELCO encourages operators to wear their seat belt during operation.





The standard FOPS guard can be tilted open for easy window cleaning. Meets standard FOPS, Top Guard Level II requirements. (ISO10262)



Mounting brackets for vandalism guards are standard equipment (contact your KOBELCO dealer to fit vandalism or front rock guards).

# **Expanded field of view for greater safety**











Standard rear-view camera eases safety checks behind the machine. Color video displays on cab monitor.



\*If the operating mass exceeds MAX. MASS (maximum operating mass) described on ROPS CERTIFICATION with the special attachment or others installed, It will cause insufficient protective function, resulting in serious accidents or death should the machine tip/ roll over.

#### Operator-friendly features that are easy to see, easy to use



#### **Color Multi-display**

Brilliant colors differentiate multiple graphics on cab LCD. Graphics indicate fuel consumption, maintenance intervals and more.

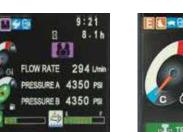
- Analog-style gauges provide an intuitive reading of fuel level and engine temperature.
- Q Green indicates ECO mode selected or efficient operation in other modes
- 3 PM accumulation (left)/DEF level (right)
- 4 Fuel consumption/Rear-view camera
- **5** Digging mode switch
- 6 Monitor display switch

## One-touch attachment mode switch

A simple flick of switch converts the hydraulic circuit and flow amount to match attachments. Helpful icons let the operator confirm the proper configuration at a glance.



PM accumulation/DEF level



Nibbler mode





Independent Travel mode



Maintenance



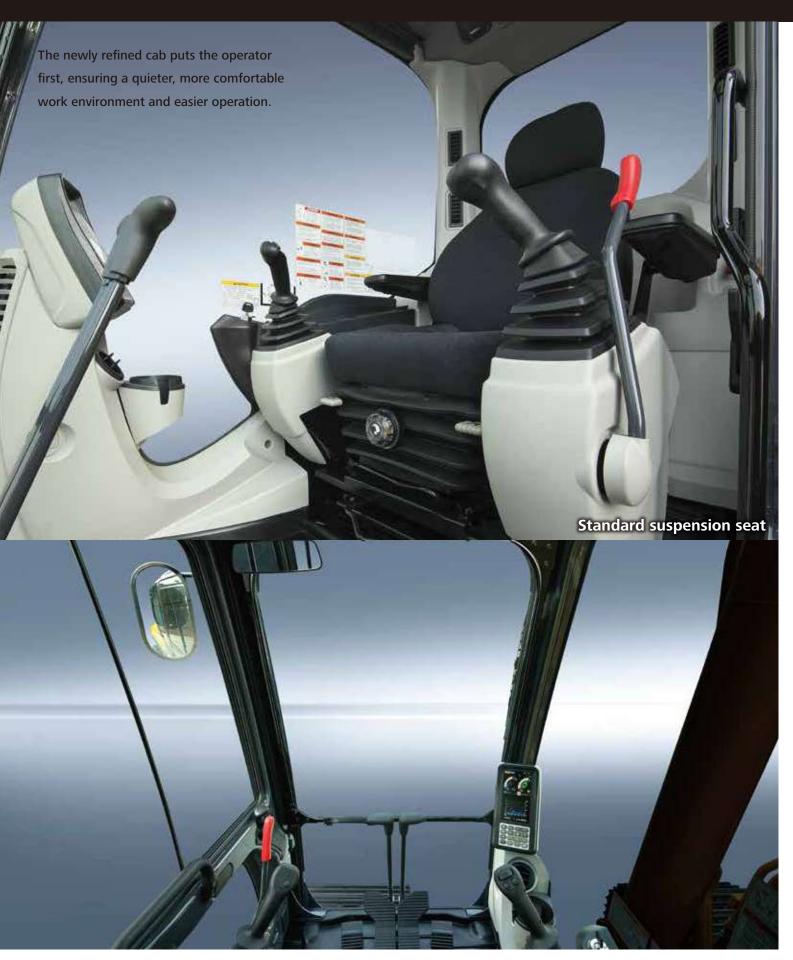


Breaker mode



Rear-view camera

# Cab comfort takes a step ahead



### Comfort

# Climate control outlets behind the seat **WW**



# A light touch on the lever means smoother, less tiring work





It takes 25 % less effort to work the operation lever, which reduces fatigue over long working hours or continuous operations. \*Compared to SK350LC-9 model

# More comfortable seat means higher productivity

Five air outlets deliver warm or cool air directly to the operator.







## **Quiet Inside**



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

# Interior equipment adds to comfort and convenience







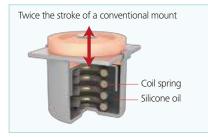
# **Large door allows** easy access in and out of the cab

The expanded cab provides plenty of room for a large door, more headroom



#### **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 vibration protection.



# Wide, Open View Provides **Excellent Visibility**

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



#### Easy, on-the-spot maintenance VEW



Ample space in the engine compartment allows service staff to comfortably perform maintenance in a natural body position. The distance between access steps is smaller so getting to and from the engine compartment is easier. The hood is lighter and easier to raise and lower.





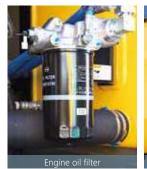




The DEF fill is located inside the convenient storage compartment.

#### **Ground-level Access**

Design allows for easy access at ground level for daily checks and maintenance work.





Laid out for easy access to radiator and cooling system elements



1 Main fuel filter with integrated water separator

2 Pre-fuel filter with integrated water separator 3 Engine oil filter

### **Easy Access to In-cab Maintenance Features**





Air conditioner filter can be easily removed

One for outside air and one for inside air

without tools for cleaning.



Special sloped crawler side frame design is Detachable two-piece floor mat with easily cleaned of mud.

**Easy Cleaning** 

handles for easy removal.

Fuel tank features bottom flange and large drain valve for easy

# **KOMEXS** Total Support for Machines with Network Speed and Accuracy

KOMEXS is a satellite-based system for receiving machine information. Manage your machines anywhere in the world using the Internet. Location, workload and diagnostic data aid business operations.



#### **Direct Access to Operational Status**

#### **Location Data**

Easy-access fuse box.

Accurate location data can be obtained even from sites where communications are difficult.

#### **Operating Hours**

A comparison of operating times of machines at multiple locations shows which locations are busier and more profitable Operating hours on site can be accurately recorded, for running time calculations needed for rental machines, etc.

#### **Fuel Consumption Data**

Data on fuel consumption and idling times can be used to indicate improvements in fuel consumption.

#### **Graph of Work Content**

The graph shows how working hours are divided among different operating categories, including digging, idling, traveling, and optional operations (N&B).



# Maintenance Data and Warning Alerts

## **Machine Maintenance Data**

Provides maintenance status of separate machines operating at multiple sites. Maintenance data is also relayed to KOBELCO service personnel, for more efficient planning of periodic servicing.

#### **Engine Start Alarm**

Sends a notification if the engine is started outside of pre-defined hours.

#### Area Alarm

Sends a notification if the machine leaves a pre-defined area.



#### Engine

Model	HINO J08EVV					
Туре	Water-cooled, 4cycle 6cylinder direct injection type diesel engine with intercooler turbo-charger (complies with EU (NRMM) Stage IV, EPA Tier IV Final)					
No. of cylinders	6					
Bore and stroke	4.41" {112 mm} x 5.12" {130 mm}					
Displacement	468.9 cu.in {7.684 L}					
Dated navyay autnut	270 hp {201 kW} / 2,100 rpm (SAE NET)					
Rated power output	286 hp {213 kW} / 2,100 rpm (Without fan)					
May torque	729 lb-ft {989 N·m} / 1,600 rpm (SAE NET)					
Max. torque	750 lb-ft {1,017 N·m} / 1,600 rpm (Without fan)					

#### ■ Hydraulic System

i nyuraulic system							
Pump							
Туре	Two variable displacement pumps + One gear pump						
Max. discharge flow	2 × 77.7 U.S.gpm {2 × 294 L/min} 1 × 5.5 U.S.gpm {1 × 21 L/min}						
Relief valve setting							
Boom, arm and bucket	4,970 psi {34.3 Mpa}						
Power Boost	5,480 psi {37.8 Mpa}						
Travel circuit	4,970 psi {34.3 Mpa}						
Swing circuit	4,210 psi {29.0 Mpa}						
Control circuit	725 psi {5.0 Mpa}						
Pilot control pump	Gear type						
Main control valves	8-spool						
Oil cooler	Air cooled type						

# Swing System

Swing motor	Axial piston motor
Parking brake	Oil disc brake, hydraulic operated automatically
Swing speed	10 rpm {10 min <sup>-1</sup> }
Swing torque	88,212.43lb-ft[119.6kNm](SAE)
Tail swing radius	11'10" {3,600 mm}
Min. front swing radius	13'7" {4,140mm}

#### ■ Travel System

Travel motors	2 × Axial piston, two speed motors					
Parking brakes	Oil disc brake per motors					
Travel shoes	48 each side					
Travel speed	3.6 / 2.2 mph {5.8 / 3.6 km/h}					
Drawbar pulling force	70,600 lbs {314 kN}(SAE J 1309)					
Gradeability	70 % {35 deg}					
Ground clearance	30.9" {785 mm}					

#### Cab & Control

All-weather, sound-suppressed steel cab mounted on the silicon-sealed suspension mounts and equipped with a heavy, insulated floor mat.

'		,,	
Control			
Two hand levers and tv	vo foot pedals fo	r travel	
Two hand levers for exc	cavating and swir	ng	
Electric rotary-type eng	ine throttle		

#### ■ Boom, Arm & Bucket

Boom cylinder	2-5.9" {150 mm} x 5'1" {1,542 mm}				
Arm cylinder	1-6.7" {170 mm} x 5'10" {1,788 mm}				
Bucket cylinder	1-5.9" {150 mm} x 3'11" {1,193 mm}				

### **■** Refilling Capacities & Lubrications

Fuel tank	132.9 U.S.gal {503 L}					
Cooling system	9.2 U.S.gal {35 L}					
Engine oil	7.5 U.S.gal {28.5 L}					
Travel reduction gear	2X 2.0 U.S.gal {2X 7.5L}					
Swing reduction gear	2.0 U.S.gal {7.4 L}					
Hydraulic oil tank	64.7 U.S.gal {245 L} tank oil level					
nyuraulic oli talik	108.3 U.S.gal {410 L} hydraulic system					
DEF/AdBlue tank	21.9 U.S.gal {83 L}					

#### ■ Hydraulic P.T.O

Output	PSI {Mpa}	US gal {L} / min			
Hydraulic P.T.O	r 31 (IVIPa)	2,100 rpm			
N&B	3,550 {24.5}	155.3 {588}			
Rotary	2,990 {20.6}	11.3 {42.6}			

#### ■ Bucket Selection Chart

Bucket type	Capacity (SAE)	Width Inches {m}	Bucket Weight lb {kg}	Arm ft-in {m}	
bucket type	Cubic Yard {m³}	vviatii iliches (ili)	Bucket Weight ib (kg)	10'10"{3.30}	13'7"{4.15}
	0.875 {.669}	24" {.609}	1,925 {873}	Н	Н
	1.25 {.956}	30" {.762}	2,105 {955}	Н	Н
	1.50 {1.146}	36" {.914}	2,365 {1,073}	Н	M
General Purpose	1.75 {1.337}	42" {1.066}	2,550 {1,157}	Н	L
	2.0 {1.529}	48" {1.219}	2,700 {1,225}	M	Χ
	2.375 {1.815}	54" {1.371}	3,825 {1,735}	L	X
	2.75 {2.10}	54" {1.371}	4,050 {1,837}	L	Χ
Heavy Duty	0.875 {.669}	24" {.609}	2,070 {939}	Н	Н
	1.25 {.956}	30" {.762}	2,265 {1,027}	Н	Н
	1.50 {1.146}	36" {.914}	2,545 {1,154}	Н	М
	1.75 {1.337}	42" {1.066}	2,740 {1,243}	M	L
	2.0 {1.529}	48" {1.219}	2,905 {1,318}	L	X
	2.375 {1.815}	54" {1.371}	3,040 {1,379}	L	Χ
	1.00 {.764}	27" {.685}	2,330 {1,057}	Н	Н
	1.25 {.956}	33" {.762}	2,585 {1,172}	Н	Н
evere Duty	1.50 {1.146}	36" {.914}	2,690 {1,220}	Н	M
	1.75 {1.337}	42" {1.066}	2,945 {1,336}	М	L
	2.0 {1.529}	48" {1.219}	3,160 {1,433}	L	X

H - Used with material weight up to 3,000 lbs/cu yd {1,780 kg/m³} M - Used with material weight up to 2,500 lbs/cu yd {1,483 kg/m³} L - Used with material weight up to 2,000 lbs/cu yd {1,186 kg/m³} X - Not recommended

#### ■ Working Ranges

<b>Working Ranges</b>		Unit: ft-in {m}	
Boom	21' 3" {6.50}		
Arm Range	Standard 10'10" {3.30 m}	Long 13'7" {4.15 m}	
a- Max. digging reach	36' 11" {11.26}	39' 3" {11.97}	
b- Max. digging reach at ground level	36' 1" {11.00}	38' 6" {11.73}	
c- Max. digging depth	23' 1" {7.04}	25' 11" {7.89}	
d- Max. digging height	36' 5" {11.10}	36' 11" {11.25}	
e- Max. dumping clearance	25' 10" {7.87}	26' 5" {8.05}	
f - Min. dumping clearance	9' 11" {3.03}	7' 2" {2.18}	
g- Max. vertical wall digging depth	20' 7" {6.27}	22' 9" {6.94}	
h- Min. swing radius	13' 7" {4.14}	13' 11" {4.25}	
i - Horizontal digging stroke at ground level	19' 3" {5.87}	23' 11" {7.28}	
j - Digging depth for 8 feet flat bottom	22' 7" {6.89}	25' 6" {7.76}	
Bucket capacity SAE heaped cu.vd.{m³}	1.83 {1.40}	1.57 {1.20}	

#### Dimensions

J Track gauge K Shoe Width. In {mm}

L Overall width of upperstructure

Arm length		Standard 10'10" {3.30 m}	Long 13' 7" {4.15 m}	
Α	Overall length	36' 8" {11,180}	36' 9" {11,210}	
В	Overall heigth (to top of boom)	11' 2" {3,410}	11' 4" {3,450}	
C	Overall width	11'11.7" {3,650}** / 12'4" {3,750}***		
D	Overall height (to top of cab)	11' 7" {3,520}		
Ε	Ground clearance of rear end*	4' 11" {1,510}		
F	Ground clearance*	30.9" {785}		
G	Tail swing radius	11' 10" {3,600}		
G'	Distance from center of swing to rear end	11' 10" {3,600}		
Н	Tumbler distance	13' 3" {4,050}		
1	Overall length of crawler	16' 4" {4,980}		

\*Without including height of shoe lug \*\*Shoe width: 27.6" {700} \*\*\*Shoe width: 31.5" {800}

### Digging Force

Unit: lbs {kN}

Arm length		Standard 10'10" {3.30 m}	Long 13'7" {4.15 m}
Bucket digging force	SAE	45,900 {204} (50,600 {225})	45,900 {204} (50,600 {225})
(Power boost)	ISO	51,000 {227} (56,200 {250})	51,000 {227} (56,200 {250})
Arm crowding force	SAE	36,000 {160} (39,600 {176})	30,800 {137} (33,700 {150})
(Power boost)	ISO	37,100 {165} (40,700 {181})	31,500 {140} (34,600 {154})

#### ■ Operating Weight & Ground Pressure

In standard trim, with standard boom, 10'10" {3.30 m} arm, and 1.83 cu.yd. {1.40 m³} SAE heaped bucket

9' 8" {2,950}

27.6" {700} / 31.5" {800}

10' 3" {3,120}

Shaped		Triple grouser shoes {even height}		
Shoe width	ft-in {mm}	27.6" {700}	31.5" {800}	
Overall width of crawler	ft-in {mm}	11'11.7" {3,650}	12'4" {3,750}	
Ground pressure	psi {kPa}	8.8 (60)	7.8 {53}	
Operating weight	lbs {kg}	83,600 {37,900}	84,400 {38,300}	

#### STANDARD EQUIPMENT

#### **ENGINE**

- Turbocharged and inter-cooled HINO J08EVV Tier IV Final Diesel engine
- Automatic engine deceleration
- Two 12 V, 112 Ah batteries
- 24 V, 5 kW starting motor
- 60-amp alternator ■ Removable radiator clean-out screen
- Automatic engine shut-down if low engine oil pressure
- Side by side oil, hydraulic and engine radiators
- Double-element air cleaner

#### CONTROL

- Working mode selector
- (H-mode, S-mode and ECO-mode)
- Heavy Lift and Power Boost "without time limit"

#### SWING SYSTEM & TRAVEL SYSTEM

- Swing rebound prevention system
- Independent travel system Two-speed travel with automatic down shift
- Sealed & lubricated track links
- 27.6" {700mm} shoes are standard
- Grease-type track adjusters
- Automatic swing brakeLower track guides

#### HYDRAULIC

- Exclusive boom to arm regeneration systems
- Auto warm-up systemHydraulic oil cooler

Unit: ft-in {mm}

#### **MIRRORS & LIGHTS**

- Three rearview mirrors plus rear-view camera Two front working lights
- Swing flashers

#### **CAB & CONTROL**

- ROPS / FOPS cab
- Two pilot-operated control levers
- Electric horn
- Integrated left-right slide-type control box

  All-weather, sound-insulated cab
- Interior cab light
- Coat hook
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
   7-way adjustable suspension seat
- Headrest
- Handrails
- Heater and defroster

- Intermittent windshield wiper with double-spray washer
- Skylight FOPS top guard
- Tinted safety glass
- Pull-type front window and removable lower front window
- Easy to read multi-display monitor Automatic climate control Emergency escape hammer
- Bluetooth installed radio (AM/FM Stereo with speakers)
- Travel alarm
- Attachment pressure release switch
- Manual DPF regeneration switch
- 12 V converter
- Two-way control pattern changer

#### **OPTIONAL EQUIPMENT**

- 31.5" {800mm} shoes are optional.
   Boom & arm load (lock) holding valve
   CAB two light Front-guard protective structures
- Additional hydraulic circuits
- Vandal Guards available via KOBELCO Parts department
- Right side camera
- Single pedal for travel control