KOBELCO

SK140LC-11

Performance X Design

SK140LC

- **Bucket capacity:**
  0.50 – 0.57 m^3
- **Engine power:**
  73.0 kW / 2,000 min^{-1}
- **Operating weight:**
  13,900 – 14,800 kg

We Save You Fuel
Achieving a Low-Carbon Society

Performance X Design

SK140LC of KOBELCO has realised a completely new value by harmonising PERFORMANCE – greater efficiency and productivity with an increased power and speed and DESIGN – operator-based operability and comfort, refusing to accept any compromises. In pursuit of unique and matchless machines which are unforgettable once you use them, KOBELCO will continue to rise to meet every challenge.

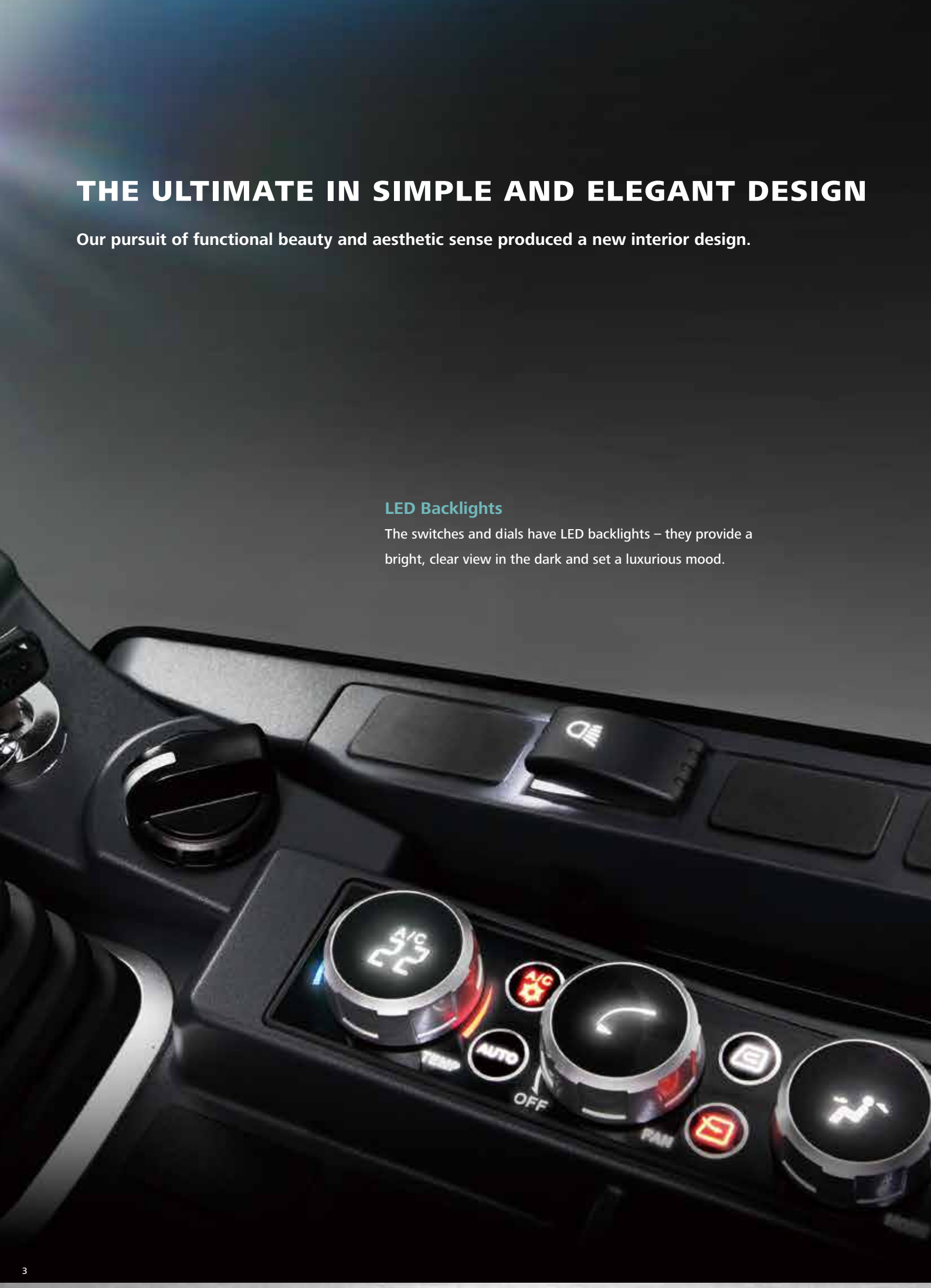
Machines representative of global product. Options may not be available in your markets.

THE ULTIMATE IN SIMPLE AND ELEGANT DESIGN

Our pursuit of functional beauty and aesthetic sense produced a new interior design.

LED Backlights

The switches and dials have LED backlights – they provide a bright, clear view in the dark and set a luxurious mood.



Left Side Console

Flip up left console, with integrated pilot control lock lever, tilts for easy entry and exit from the cab.

Optimum operability for various sites

New hydraulic system

The operating hydraulic system is designed to respond with a shorter lever stroke than former models, it allows excellent responsiveness.
Beside this, it achieves the enhancement of the ability to pull the arm in horizontal towing operation and to climb hills while pulling the arm.

Greatly improved digging performance

New bucket shape

The shape of the bucket has been redesigned to improve digging performance and productivity.

Bucket Digging Force

105 kN ISO6015

Increased by 17 %

(Compared to SK140LC-8 model)

Digging volume per hour

Increased by 6 %

(Compared to SK140LC-8 at H mode)

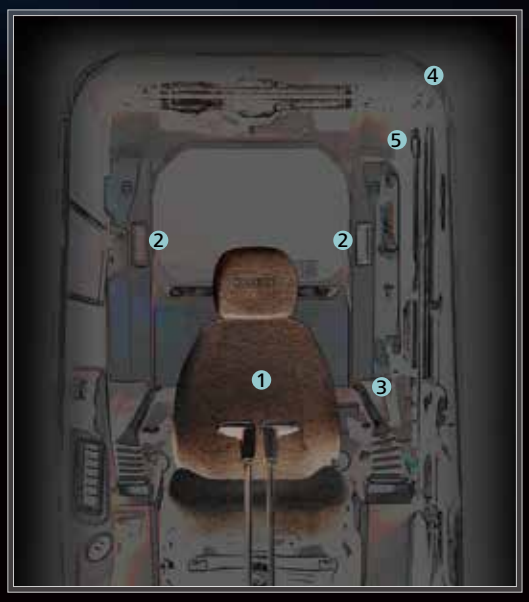
Model: ISUZU 4JJ1XDJA

Engine output

73.0 kW/2,000 min^{-1}


KOBELCO

UNFORGETTABLE COMFORT



❶ Suspension seat

A suspension seat is installed as standard equipment, which achieves excellent shock absorption and superior ride comfort.

❷ Air conditioner blowing from the rear

Air is blown against the operator's waist and the back of their head, offering more comfortable operation.

❸ Lever angles allow for comfortable operations

The operator can move the levers horizontally without twisting their wrist, which reduces the fatigue caused by the operations.

❹ ROPS Cab NEW

ROPS (Roll-Over-Protective Structure)-compliant cab clears ISO standards (ISO-12117-2: 2008) and ensures greater safety for the operator should the machine tip over.

❺ LED door light NEW

The LED interior light automatically turns on when the door is opened or when the ignition is set to OFF.
This ensures easy entry and exit at nighttime.

Color Multi-display

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

1. Analog-style gauges provide an intuitive reading of fuel level and engine temperature
2. Green indicates ECO mode selected or efficient operation in other modes
3. Fuel consumption/Rear-view camera
4. Digging mode switch
5. 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.

KOMEXS KOBELCO MONITORING EXCAVATOR SYSTEM


Customer


KOBELCO office


KOBELCO service personnel

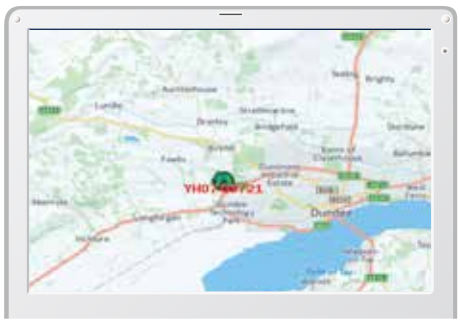
Remote Monitoring for Peace of Mind

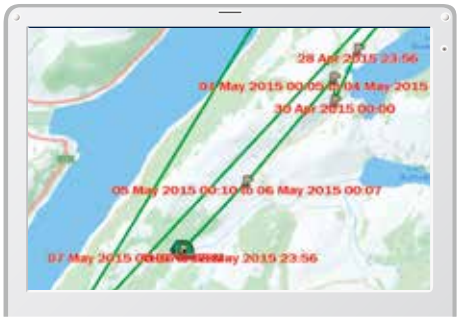
KOMEXS (Kobelco Monitoring Excavator System) uses satellite communication and internet to relay data, and therefore can be deployed in areas where other forms of communication are difficult. When a hydraulic excavator is fitted with this system, data on the machine's operation, such as operating hours,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

Direct Access to Operational Status

Location Data

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


Latest location

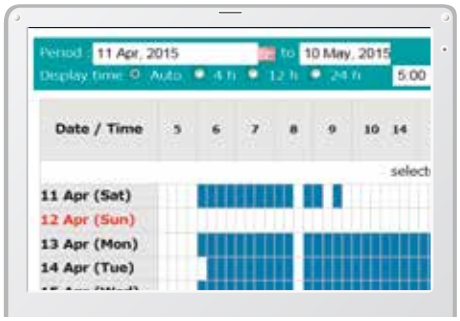


Location records

Work data

Operating Hours

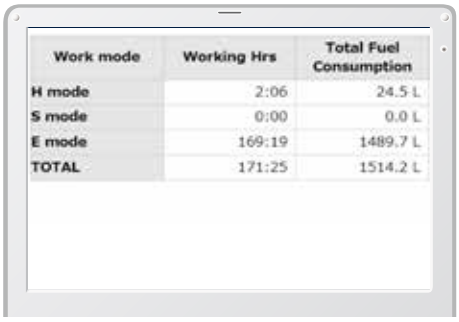
•A comparison of operating times of machines at multiple locations shows which locations are busier and more profitable.
•Operating hours on site can be accurately recorded, for running time calculations needed for rental machines, etc.



Daily report

Fuel Consumption Data

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

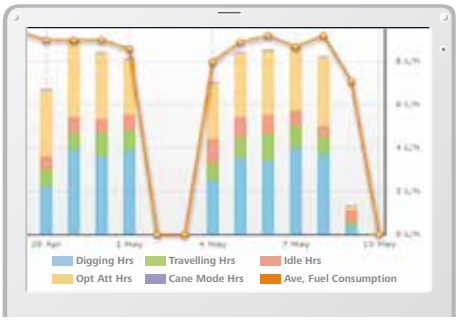


Work mode	Working Hrs	Total Fuel Consumption
H mode	2:06	24.5 L
S mode	0:00	0.0 L
E mode	169:19	1489.7 L
TOTAL	171:25	1514.2 L

Fuel consumption

Graph of Work Content

•The graph shows how working hours are divided among different operating categories, including digging, idling, travelling and optional operations.

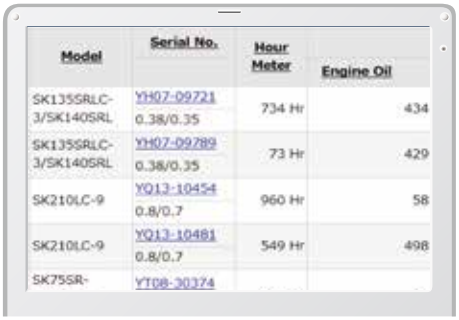


Work status

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.



Model	Serial No.	Hour Meter	Engine Oil
SK135SRLC-3/SK140SRL	YH07-09721 0.38/0.35	734 Hr	434
SK135SRLC-3/SK140SRL	YH07-09789 0.38/0.35	73 Hr	429
SK210LC-9	YQ13-10454 0.8/0.7	960 Hr	58
SK210LC-9	YQ13-10481 0.8/0.7	549 Hr	498
SK75SR-	YT08-30374		

Maintenance

Warning Alerts

•This system warns an alert if an anomaly is sensed, preventing damage that could result in machine downtime.

Alarm Information Can Be Received through E-mail

•Alarm information or maintenance notice can be received through E-mail, using a computer or cell phone.

Alarm messages can be received on mobile device.

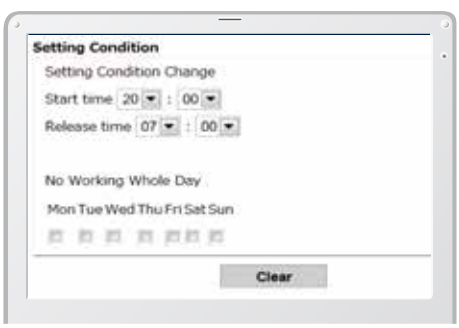
Daily/Monthly Reports

•Operational data downloaded onto a computer helps in formulating daily and monthly reports.

Security System

Engine Start Alarm

•The system can be set an alarm if the machine is operated outside designated time.



Engine start alarm outside prescribed work time

Area Alarm

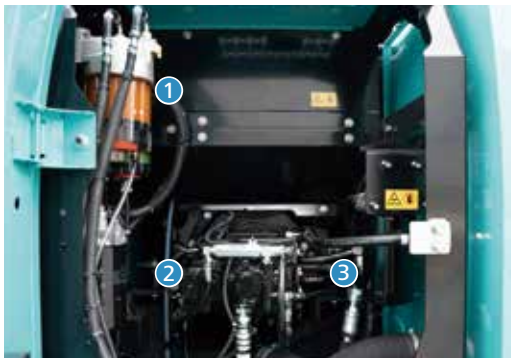
•It can be set an alarm if the machine is moved out of its designated area to another location.

Alarm for outside of reset area

Expanded Field of View for Greater Safety

Rear View Camera (optional)
A rear view camera is installed as option to simplify checking for safety behind the machine. The picture appears on the color monitor.

EASY MAINTENANCE



Right side

Pre-filter with integrated water separator

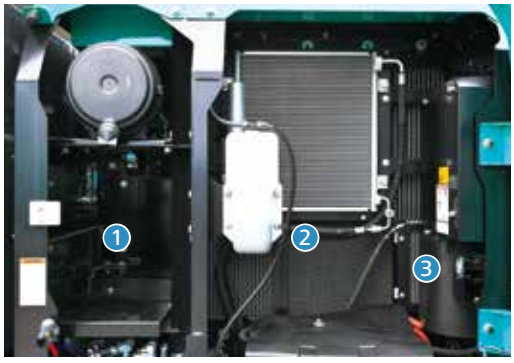
Fuel filter

Engine oil filter

Engine maintenance
A wide-opening engine bonnet enables to access the engine unit easily.

Two-stage air filter

Pre air cleaner



Left side (radiator and toolbox space cooling system elements)
Laid out for easy access to radiator and cooling system.

Wide storage space for toolbox

Openable air conditioner condenser
Easy to clean inside

Battery shut-off switch

Specifications

SK140LC

SK140LC-11

Engine

Model	ISUZU 4JJ1XDJA
Type	Four cycles, water cooled, overhead camshaft, vertical in-line, direct injection type, with turbocharger
No. of cylinders	4
Bore and stroke	95.4 mm x 104.9 mm
Displacement	2,999 ml
Power output	65.4 kW/2,000 min^{-1} (ISO 9249: with fan)
	73.0 kW/2,000 min^{-1} (ISO 14396: without fan)
Max. torque	341 N·m/1,600 min^{-1} (ISO 9249: with fan)
	365 N·m/1,600 min^{-1} (ISO 14396: without fan)

Hydraulic system

Pump	
Type	Two variable displacement axial piston pumps + one gear pump
Max. discharge flow	2 x 130 L/min 1 x 20 L/min
Relief valve setting	
Boom, arm and bucket	34.3 MPa
Travel circuit	34.3 MPa
Swing circuit	28.0 MPa
Control circuit	5.0 MPa
Main control valves	12-spool
Oil cooler	Air cooled type

Swing system

Swing motor	One fixed displacement piston motor
Brake	Hydraulic; locking automatically when the swing control lever is in the neutral position
Parking brake	Wet multiple plate
Swing speed	11.0 min^{-1}

Travel system

Travel motors	Variable displacement axial piston, two-speed motors
Travel brakes	Hydraulic brake
Parking brakes	Wet multiple plate
Travel shoes	46 each side
Travel speed (1st/2nd)	3.4/5.6 km/h
Drawbar pulling force	141 kN (SAE)
Gradeability	70% {35°}

Cab & control

Cab
All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous mounts and equipped with a heavy, insulated floor mat
Control
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	100 mm x 1,092 mm
Arm cylinder	115 mm x 1,116 mm
Bucket cylinder	100 mm x 903 mm

Refilling capacities & lubrications

Fuel tank	280 L
Cooling system	16 L
Engine oil	17 L
Travel reduction gear	2 x 2.1 L
Swing reduction gear	1.65 L
Hydraulic oil tank	96.7 L tank oil level
	180 L hydraulic system

Attachments

Backhoe bucket and combination

Use			Backhoe bucket	
			Normal digging	
Bucket capacity	ISO heaped	m^3	0.50	0.57
	ISO Struck	m^3	0.37	0.40
Opening width	With side cutter	mm	1,000	1,150
	Without side cutter	mm	940	1,070
No. of teeth			5	5
Bucket weight		kg	420	470
Combination	2.09 m		○	◎
	2.38 m		◎	○

◎Standard ○Recommended

Specifications

Working ranges

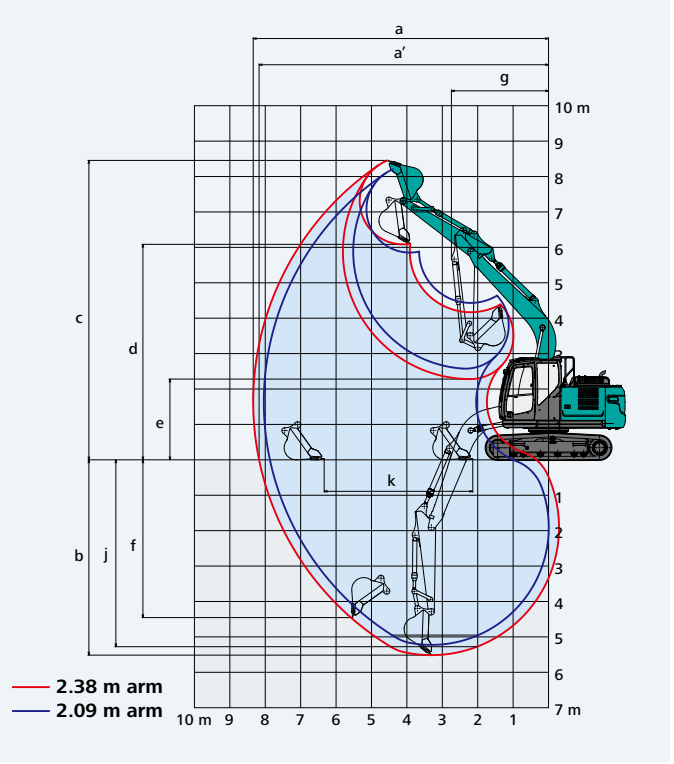
Unit: mm

Boom	4.68 m	
Arm / Range	2.09 m	2.38 m
a- Max. digging reach	8,040	8,340
a'- Max. digging reach at ground level	7,870	8,170
b- Max. digging depth	5,230	5,520
c- Max. digging height	8,200	8,450
d- Max. dumping clearance	5,850	6,080
e- Min. dumping clearance	2,580	2,280
f- Max. vertical wall digging depth	4,810	4,450
g- Min. front swing radius	2,750	2,750
j- Digging depth for 2.4 m (8') flat bottom	4,950	5,280
k- Horizontal digging stroke at ground level	3,600	4,200
Bucket capacity ISO heaped m³	0.57	0.50

Digging force (ISO 6015)

Unit: kN

Arm length	2.09 m	2.38 m
Bucket digging force	107	105
Arm crowding force	72.3	64.0



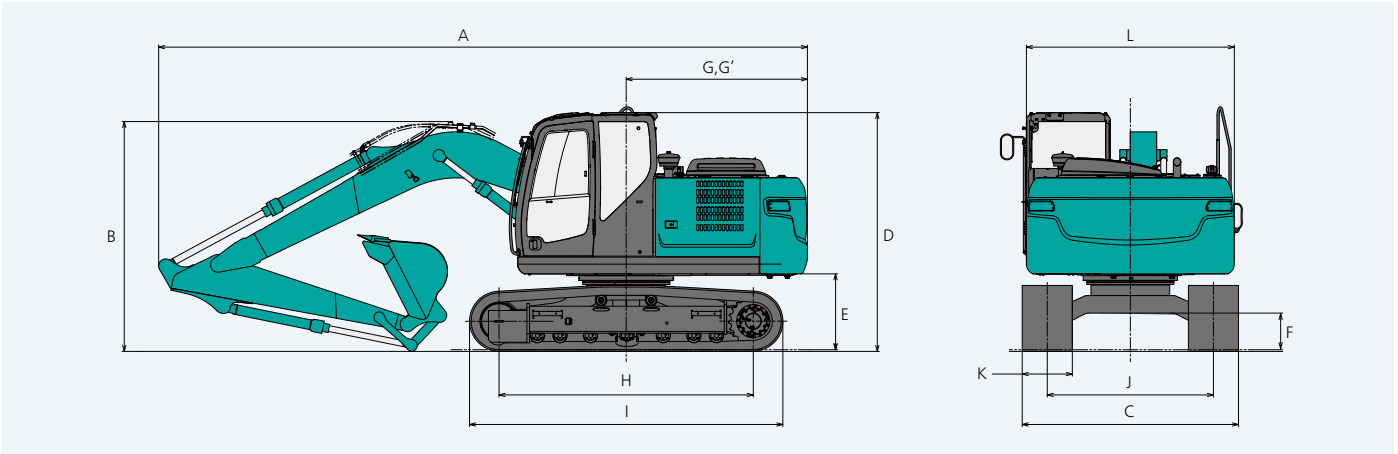
Dimensions

Unit: mm

Arm length		2.09 m	2.38 m
A	Overall length	7,800	7,770
B	Overall height (to top of boom)	2,780	2,750
C	Overall width	2,590	
D	Overall height (to top of cab)	2,860	
E	Ground clearance of rear end*	910	
F	Ground clearance*	440	

G	Tail swing radius	2,190
G'	Distance from center of swing to rear end	2,170
H	Tumbler distance	3,040
I	Overall length of crawler	3,750
J	Track gauge	1,990
K	Shoe width	600
L	Overall width of upper structure	2,490

*Without including height of shoe lug



Operating weight & ground pressure

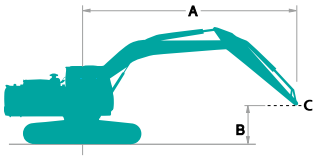
In standard trim, with standard boom, 2.38 m arm and 0.50 m³ ISO heaped bucket

Shaped		Triple grouser shoes (even height)					
Counterweight		2,600 kg			3,000 kg		
Shoe width	mm	500	600	700	500	600	700
Overall width of crawler	mm	2,490	2,590	2,690	2,490	2,590	2,690
Ground pressure	kPa	41.4	35.1	30.6	42.6	36.1	31.5
Operating weight	kg	13,900	14,100	14,400	14,300	14,500	14,800

Lift capacities

SK140LC

SK140LC-11



Rating over front

Rating over side or 360 degrees

A: Reach from swing centerline to arm top
B: Arm top height above/below ground
C: Lift point
Bucket: Without bucket
Relief valve setting: 34.3 MPa {350kgf/cm²}

SK140LC	Arm: 2.09 m Bucket: without Counterweight with swing flashers: 2,600 kg Shoe: 600 mm										
A / B	1.5 m		3.0 m		4.5 m		6.0 m		At max. reach		Radius
6.0 m kg					*3,390	*3,390			*2,500	*2,500	5.16 m
4.5 m kg					*3,680	*3,680	*3,210	2,410	*2,330	2,290	6.16 m
3.0 m kg			*6,920	6,540	*4,550	3,580	3,680	2,340	*2,340	1,970	6.67 m
1.5 m kg					*5,510	3,340	3,570	2,240	*2,500	1,860	6.81 m
G.L. kg			*5,980	5,790	5,350	3,200	3,500	2,170	*2,870	1,910	6.60 m
-1.5 m kg	*5,950	*5,950	*8,950	5,830	5,330	3,180	3,500	2,170	3,490	2,170	6.01 m
-3.0 m kg			*7,480	6,000	*5,040	3,270			*4,450	2,950	4.88 m

SK140LC	Arm: 2.09 m Bucket: without Counterweight with swing flashers: 3,000 kg Shoe: 600 mm										
A / B	1.5 m		3.0 m		4.5 m		6.0 m		At max. reach		Radius
6.0 m kg					*3,390	*3,390			*2,500	*2,500	5.16 m
4.5 m kg					*3,680	*3,680	*3,210	2,580	*2,330	*2,330	6.16 m
3.0 m kg			*6,920	*6,920	*4,550	3,840	*3,790	2,510	*2,340	2,130	6.67 m
1.5 m kg					*5,510	3,590	3,800	2,420	*2,500	2,020	6.81 m
G.L. kg			*5,980	*5,980	5,700	3,460	3,720	2,350	*2,870	2,070	6.60 m
-1.5 m kg	*5,950	*5,950	*8,950	6,290	5,670	3,430	3,730	2,350	*3,650	2,350	6.01 m
-3.0 m kg			*7,480	6,450	*5,040	3,530			*4,450	3,170	4.88 m

SK140LC	Arm: 2.38 m (HD) Bucket: without Counterweight with swing flashers: 2,600 kg Shoe: 600 mm										
A / B	1.5 m		3.0 m		4.5 m		6.0 m		At max. reach		Radius
6.0 m kg					*				*1,790	*1,790	5.56 m
4.5 m kg					*3,400	*3,400	*3,310	2,420	*1,660	*1,660	6.49 m
3.0 m kg			*6,250	*6,250	*4,290	3,600	*3,610	2,340	*1,660	*1,660	6.98 m
1.5 m kg			*5,430	*5,430	*5,300	3,350	3,560	2,230	*1,760	1,730	7.11 m
G.L. kg			*6,230	5,750	5,340	3,180	3,480	2,150	*1,980	1,770	6.91 m
-1.5 m kg	*5,410	*5,410	*9,140	5,760	5,290	3,140	3,460	2,130	*2,440	1,990	6.34 m
-3.0 m kg	*9,240	*9,240	*7,890	5,900	*5,310	3,210			*3,650	2,590	5.29 m

SK140LC	Arm: 2.38 m (HD) Bucket: without Counterweight with swing flashers: 3,000 kg Shoe: 600 mm										
A / B	1.5 m		3.0 m		4.5 m		6.0 m		At max. reach		Radius
6.0 m kg									*1,790	*1,790	5.56 m
4.5 m kg					*3,400	*3,400	*3,310	2,600	*1,660	*1,660	6.49 m
3.0 m kg			*6,250	*6,250	*4,290	3,860	*3,610	2,510	*1,660	*1,660	6.98 m
1.5 m kg			*5,430	*5,430	*5,300	3,600	3,790	2,410	*1,760	*1,760	7.11 m
G.L. kg			*6,230	6,200	5,680	3,440	3,700	2,330	*1,980	1,920	6.91 m
-1.5 m kg	*5,410	*5,410	*9,140	6,220	5,630	3,390	3,680	2,310	*2,440	2,150	6.34 m
-3.0 m kg	*9,240	*9,240	*7,890	6,360	*5,310	3,460			*3,650	2,800	5.29 m

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 top is defined as lift point.
4. The above lift capacities are in compliance with 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 machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

STANDARD EQUIPMENT

ENGINE
- Engine, ISUZU 4JJ1XDJA, Direct injection type, with turbocharger
- Auto Idle Stop (AIS)
- Automatic engine deceleration
- Batteries 2 x 12 V (80 Ah)
- Alternator 24 V/50 A
- Starter motor 24 V/4.0 kW
- Engine oil pan drain cock
- Double element air cleaner

CONTROL
- Working mode selector (H-mode, S-mode and ECO-mode)

SWING SYSTEM & TRAVEL SYSTEM
- Swing rebound prevention system
- Straight propel system
- Two-speed travel with automatic shift down
- Standard counterweight with swing flashers
- 600 mm steel shoes
- Grease-type track adjusters
- Automatic swing brake
- Travel alarm

CAB & CONTROL
- Two control levers, pilot-operated
- Horn, electric
- Integrated left-right slide-type control box
- LED Room light (interior)
- Left side rear view mirror
- Coat hook
- Large cup holder
- Detachable two-piece floor mat
- Suspension seat
- Retractable seatbelt
- Headrest
- Handrails
- Intermittent windshield wiper with double-spray washer
- Tinted safety glass
- Pull-type front window and removable lower front window
- Color multi display
- Automatic air conditioner
- Emergency escape hammer
- 24 V power outlet
- KOMEXS
- N&B piping
- Refueling pump

OPTIONAL EQUIPMENT

- Short HD arm (2.09 m)
- Cab top work lights (LED) (two lights)
- Lower under cover (9 mm)
- 500 mm steel shoes
- 700 mm steel shoes
- Front-guard protective structure (may interfere with bucket action)
- Rear view camera
- Heavy counterweight with swing flashers (+ 400 kg)

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

Note: This catalogue 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. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice.

KOBELCO CONSTRUCTION MACHINERY CO., LTD.
5-15, Kitashinagawa 5-chome, Shinagawa-ku, Tokyo 141-8626 JAPAN
Tel: +81 (0) 3-5789-2146 Fax: +81 (0) 3-5789-2135
www.kobelcocm-global.com

Inquiries To:

SK140LC-11-LAR-101-2306XXEF