We Save You Fuel
Achiteving a Low-Carboo Society

**KOBELCO** 

SK130 SK140<sub>LC</sub>



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.

## KOBELCO CONSTRUCTION MACHINERY CO., LTD.

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# More operable. Durable. Better performance.



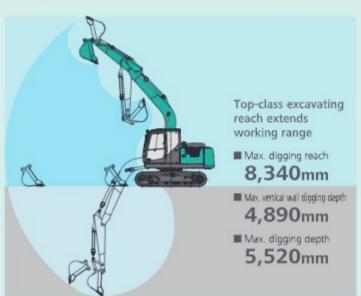
### **Upper Structure**

## **Cooling System**



The oil cooler has been changed from a two-layer to a one-layer type. This prevents dust from collecting in the gaps, helping to maintain the cooling function.

## Get More Done Faster with Superior Operability

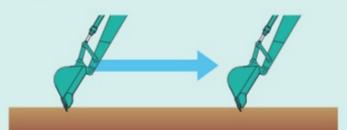


\*1 Values are for STD arm (2.38m)
\*2 Without including height of shoe

### Improved Workability

### Speedy combined operations

Combined attachment operations, such as horizontal pulling to operate the boom and arm at the same time, are also nimble and smooth, making it possible to work faster.

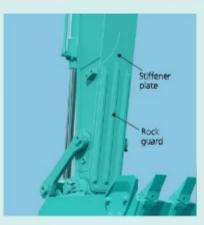


### Attachment/Equipment

### Reinforced Attachments

There is a new long arm.
Additionally, rock guard
reinforcement can now be attached
to the tip.
The shape of the lower plate has

The shape of the lower plate has been optimized for logging work, and the arm strength is enhanced.



### **Travel System**

### Reinforced Guide Frame

Reinforced guide frame prevents deformation caused by impact or encroaching of loose stones.



### Reinforced Undercover

Reinforced undercover protects the piping and other components from damage caused by accidental contact with branches, debris and other obstacles.



# We're always pursuing fuel efficiency.

# Efficient maintenance to sustain high performance.

### Reduced fuel consumption in ECO-mode

### ECO-mode: Engineered for Economy

Kobelco's ECO-mode maximizes the operating efficiency of the engine and other components to achieve much greater fuel efficiency. Just press a button to choose the operation mode best suited to the task at hand and the working conditions.

- Optimal operation with three modes
- H-mode • Maximum power for maximum productivity on your toughest jobs
- S-mode • Ideal balance of productivity and fuel efficiency for a range of urban engineering projects
- ECO-mode • Minimum fuel consumption for utility projects and other work that demands precision

## (Auto Idle Stop) Pull up safety lock lever

If the safety lock lever is lifted up, the engine will stop automatically. This eliminates wasteful idling

during standby, saving fuel and reducing CO2 emissions as well.

### Hydraulic system engineered to reduce energy loss

60 sec

Kobelco's proprietary hydraulic systems offer hydraulic line positioning that reduces friction resistance and valves designed for higher efficiency, minimizing energy loss throughout the system.

### 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.

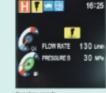




- Analog gauge provides an intuitive reading of fuel level and engine water temperature
- Green indicator light shows low fuel consumption during operation
- Euel consumption/Switch indicator for rear camera images
- Digging mode switch
- Monitor display switch

### **One-Touch Attachment** Mode Switch

A simple touch of a button, switches the hydraulic circuit and flow amount to match attachment changes. Icons help the operator to confirm the proper configuration at a glance.





### Compatible with Biofuel

Biofuel may be used with Kobelco machinery, reducing environmental impact and supporting business.

\*For more information about using biofuels, please contact the nearest dealer.

### 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.





Simple layout for easy access to radiator and









An enlarged cartridge-type pilot filter simplifies maintenance.



### **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
- Service-diagnostic function makes it easier to check the status of the machine
   Record function of previous breakdowns including irregular and transient malfunction



### **More Efficient** Maintenance Inside the Cab



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

### **Easy Cleaning**



Special crawler frame design for easy mud removal cleaning.



### Long-Interval Maintenance

Long-life hydraulic oil reduces cost and labor.



### **Highly Durable** Premium-fine Filter

The high-capacity hydraulic oil filter incorporates glass fiber with superior cleaning power and durability.





handles for easy removal. A floor drain is located under floor mat.



the cab floor free of mud, simplify



# **Comfortable Cab Is Now Safer than Ever.**



### Comfort

### Super-Airtight Cab



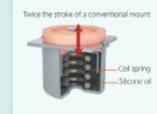
The high level of air-tightness keeps dust out of the cab.

### **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



### Anti-theft measures

Theft-prevention brackets have been installed on the ECU, mechatronics, and cluster panels. Their structure makes



### **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

### **Air Conditioner Louvers** behind the Seat



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





\*Armrests are equipped with suspension seats only.

### 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.

### Interior Equipment Adds to Comfort and Convenience





\*Prevention bar shall be equipped on the right side window.

### Safety

### **ROPS Cab**

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



## Standard 3 LED Lights

Bright LED lights ensure visibility even during night work. (one for boom, one for right storage box, and one for Cab)



### **Expanded Field of View for Greater Safety**



Greater safety assured by rearview mirrors on left and right.





# KOMEXS KOBELCO MONITORING EXCAVATOR SYSTEM







### 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.

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

### **Location Data**

Customer

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





Festor 11 Apr, 2015	10 May, 2015	Search	
Type of Operation	Working Hrs.	0	Ratio
Total Working Hrs		169 Hrs	100 %
Digging Hrs		72.2 Hrs	43 %
Traveling Hrs		18.3 Hrs	11 %
Idle Hrs		15.9 Hs	2 %
Opt Att Hrs		62.5 Hrs	37 %
Crane Hode Hrs		0 Hrs	0.%

### **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.

2:06

0.00

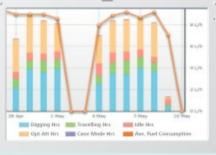
169:19

171:25



### **Graph of Work Content**

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



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-	YH07-09721		
3/SK140SRL	0.38/0.35	734 Hr	434
SK135SRLC-	YH07-09789	73 Hr	429
3/SK140SRL	0.38/0.35		46
SK210LC-9	YQ13-10454	960 Hr	50
SKZ10UU-9	0.8/0.7	900 HI	3
5K210LC-9	Y013-10481	549 Hr	498
ONE EUCO 9	0.8/0.7	345111	424
SK75SR-	YT08-30374		

S mode

### **Warning Alerts**

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

### **Alarm Information Can Be** Received via E-mail

· Alarm information or maintenance notice can be received via e-mail, using a computer or a mobile device.



### **Daily/Monthly Reports**

Alarm messages can be received on a mobile device.

## **Security System**

### **Engine Start** Alarm

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



Engine start alarm outside prescribed work time

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

## Area Alarm

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



Alarm for outside of reset area



# **Engine**

Model	ISUZU 4JJ1	
Туре	Four cycle, water cooled, overhed camshaft, vertical in-line, direct injection type, with turbocharger	
No. of cylinders	4	
Bore and stroke	95.4 mm × 104.9 mm	
Displacement	2,999 ml	
Batal account	65.4kW / 2,000min <sup>-1</sup> (ISO 9249 : with fan)	
Rated power output	73.0kW / 2,000 min <sup>-1</sup> (ISO 14396: without fan)	
Max. torque	341 N+m / 1,600 min <sup>-1</sup> (ISO 9249 : with fan)	
	365 N+m / 1,600 min <sup>-1</sup> (ISO 14396; without fan)	

# Hydraulic System

Pump	
Туре	Two variable displacement pumps + one gear pump
Max. discharge flow	2 x 130.4 L/mln, 1 x 20 L/min
Relief valve setting	
Boom, arm and bucket	34.3 MPa (350 kgf/cm²)
Travel circuit	34.3 MPa (350 kgf/cm²)
Swing circuit	28.0 MPa (286 kgf/cm²)
Control circuit	5.0 MPa {51 kgf/cm²}
Pilot control pump	Gear type
Main control valve	12 -Spool valve
Oil cooler	Air cooled type



## **Swing System**

Swing motor	Axial piston pump	
Brake	Hydraulic; locking automatically when the swing control lever is in neutral posit	
Parking brake	Oil disc brake, hydraulic operated automatically	
Swing speed	10.9 min <sup>-1</sup> (rpm)	
Tail swing radius	2,330 mm	
Min. front swing radius	2,640 mm	



## Travel System

Travel motors		2x axial-piston, two-step motors	
Travel brakes		Hydraulic brake per motor	
Parking brakes	ing brakes Oil disc brake per motor		
	SK130	44 each side	
Travel shoes	SK140LC	46 each side	
Travel speed (Low / High)		3.3 / 5.7 km/h	
Drawbar pulling force		142 kN (14,500 kgf) SAE	
Gradeability		70% (35°)	



## Cab & Control

-du
NI-weather, sound-suppressed steel cab mounted on the high suspension
nounts filled with silicone oil and equipped with a heavy, insulated floor mat.

		77	
Control			
Two hand levers and two foot pe	edals for travel		
Two hand levers for excavating a	and swing		
Electric rotary-type engine throttl	le		



## Boom, Arm & Bucket

Boom cylinders	100 mm × 1,092 mm
Arm cylinder	115 mm × 1,116 mm
Bucket cylinder	95 mm × 903 mm



## Refilling Capacities & Lubrications

Fuel tank	271 L		
Cooling system	12 L		
Engine oil	17 L		
Travel reduction gear	2 x 2.1 L		
Swing reduction gear	1 x 1.65 L		
	94.5 L tank oil level		
Hydraulic oil tank	197 L hydraulic system		



## **Attachments**

### Backhoe bucket and combination

Туре		Backhoe bucket			
	ISO heaped	m³	0.50	0.57	0.57 HD
Bucket capacity ISO Struck	m³	0.38	0.43	0.43	
With side cutter	mm	1,000	1,110	1,110	
Opening width Without side cutter		mm	905	1,020	1,020
No. of teeth			5	5	5
Bucket weight		kg	380	390	440
2.38m arm (with roo Combination 2.84 m arm (with ro	2.20m arm (trith rock arrand)	SK130	0	Δ	Δ
	2.56m arm (with rock guard)	SK140LC	0	0	0
	2.04 m area fasith waste assault	SK130	Δ		
	2.64 m arm (with rock guard)	SK140LC	0	Δ	Δ

Standard combination ○ Recommended △Loading only - Not applicable

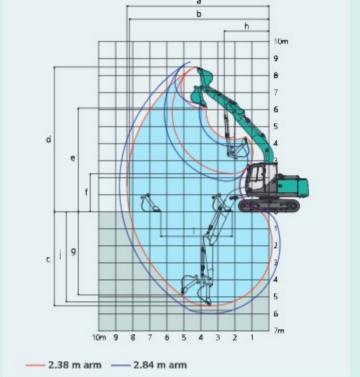
## **Working Ranges**

Unit: mm

		VIIIC IIIII	
Boom	4.68 m		
Range	Standard 2.38 m	Long 2.84 m	
a- Max. digging reach	8,340	8,780	
b- Max. digging reach at ground level	8,190	8,640	
c- Max. digging depth	5,520	5,980	
d- Max. digging height	8,500	8,800	
e- Max. dumping clearance	6,090	6,390	
f- Min. dumping clearance	2,230	1,800	
g- Max. vertical wall digging depth	4,890	5,350	
h- Min. swing radius	2,640	2,800	
i- Horizontal digging stroke at ground level	4,180	4,670	
j- Digging depth for 2.4 m (8') flat bottom	5,300	5,800	
Bucket capacity ISO heaped m <sup>3</sup>	0.50	0.50	

### Digging Force (ISO 6015)

		VIIIC KIV
Arm length	Standard 2.38 m	Long 2.84 m
Bucket digging force	90.5	90.5
Arm crowding force	64.2	58.2

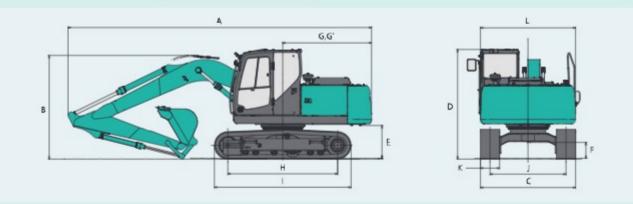


## **Dimensions**

			Offic. fifth				
Ai	rm length	Standard 2.38 m	Long 2.84 m				
Α	Overall length	7,950	7,940				
В	Overall height (to top of boom)	2,710	3,120				
C	Overall width of crawler	2,4	90				
D	Overall height (to top of cab)	2,8	B0				
E	Ground clearance of rear end*	860					
F	Ground clearance*	415					
G	Tail swing radius	2,330					

		Unit: m
Distance from centre of swir	ng to rear end	2,330
Tumbler distance	SK130	2,870
	SK140LC	3,040
6	5K130	3,580
Overall length of crawler	SK140LC	3,750
Track gauge		1,990
Shoe width	500	
Overall width of upperstruc	cture	2,490
	Tumbler distance  Overall length of crawler  Track gauge  Shoe width	Tumbler distance SK130 SK140LC  Sverall length of crawler SK130 SK140LC  Track gauge

\*Without including height of shee



# Operating Weight & Ground Pressure In standard trim, with standard boom, 2.38 m arm, and 0.50 m² ISO heaped bucket

Shaped			Triple grouser shoes (even height)				
Shoe width		mm	500	700			
Overall width of crawler		mm	2,490	2,690			
20 7	5K130	kPa	39.7	29.4			
Ground pressure	SK140LC	kPa	39.6	29.4			
	SK130	kg	12,600	13,100			
Operating weight	SK140LC	kg	13,300	13,800			





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 (350 kgf/cm²)

SK130-1	0E	Arm: HD arm	1 2.38 m Bu	cket: Without	Shoe: 500	mm Counte	rweight: 2,00	0 kg					
		1.5	m	3.0m		4.5m		6.0	)m	At max. reach			
				41-		41-	1	41-		41-	-	41-	Radius
6.0m	kg					*3,250	*3,250			*1,820	*1,820	5.47m	
4.5m	kg			T.		*3,530	3,390	3,080	2,110	*1,680	*1,680	6.44m	
3.0m	kg			*6,300	5,930	*4,380	3,170	3,000	2,040	*1,670	1,590	6.96m	
1.5m	kg			*5,630	5,180	4,460	2,920	2,880	1,930	*1,760	1,490	7.11m	
G.L.	kg			*6,080	4,970	4,270	2,750	2,800	1,850	*1,980	1,510	6.93m	
-1.5m	kg	*5,200	*5,200	8,480	4,970	4,210	2,700	2,770	1,830	*2,420	1,690	6.40m	
-3.0m	kg	*8,950	*8,950	*7,870	5,100	4,280	2,760			3,300	2,180	5.39m	

SK130-1	0E	Arm: HD k	ong arm 2.8	84 m Buck	et: Withou	t Shoe: 500	mm Cou	nterweight	2,000 kg					
		1.5m		3.0m		4.5m		6.0m		7.5	im	At max. reach		
			4		41-		4	1	4		-		4	Radius
7.5m	kg											*2,070	*2,070	4.49m
6.0m	kg							<b>41,870</b>	*1,870			*1,710	*1,710	6.04m
4.5m	kg							*3,060	2,120			*1,590	*1,590	6.93m
3.0m	kg			*5,280	*5,280	*3,930	3,200	2,990	2,030			*1,580	1,410	7.41m
1.5m	kg			*8,130	5,290	4,470	2,920	2,860	1,910	*1,960	1,340	*1,660	1,320	7.55m
G.L.	kg			*6,310	4,900	4,230	2,710	2,750	1,800			*1,830	1,330	7.39m
-1.5m	kg	*4,450	*4,450	8,340	4,840	4,140	2,630	2,700	1,760			*2,190	1,460	6.89m
-3.0m	kg	*7,530	*7,530	*8,370	4,940	4,170	2,650					2,770	1,820	5.96m
-4.5m	kg			*5,960	5,200							*3,800	2,980	4.34m

SK140LC-	10E	Arm: HD arm	n 2.38 m Bu	cket: Withou	t Shoe: 500	mm Counte	rweight: 2,48	i0 kg				
		1.5m		3.0	0m	4.5m		6.0	)m		At max. rea	ch
В		-	41-		41-	1	₩-		41-		41-	Radius
6.0m	kg					*3,250	*3,250			*1,820	*1,820	5.47m
4.5m	kg					*3,530	*3,530	*3,250	2,370	*1,680	*1,680	6.44m
3.0m	kg			°6,300	*6,300	*4,380	3,540	3,560	2,290	*1,670	*1,670	6.96m
1.5m	kg			*5,630	*5,630	5,350	3,280	3,450	2,190	*1,760	1,700	7,11m
G.L.	kg			*6,080	5,610	5,160	3,120	3,360	2,110	*1,980	1,730	6.93m
-1.5m	kg	*5,200	*5,200	*9,170	5,620	5,100	3,070	3,330	2,080	*2,420	1,920	6.40m
-3.0m	kg	*8,950	*8,950	*7,870	5,750	5,170	3,130			*3,530	2,470	5.39m

SK140LC-	10E	Arm: HD le	ong arm 2.1	84 m Buck	et: Without	t Shoe: 50	0 mm Cou	nterweight	: 2,480 kg						
В		1.5m		3.0m		4.5m		6.0m		7.5m		At max. reach		h	
			4		41-		4		-		-		4	Radius	
7.5m	kg											*2,070	*2,070	4.49m	
6.0m	kg							*1,870	*1,870			*1,710	*1,710	6.04m	
4.5m	kg							*3,060	2,380			*1,590	*1,590	6.93m	
3.0m	kg			*5,280	*5,280	*3,930	3,570	*3,400	2,280			*1,580	*1,580	7.41m	
1.5m	kg			*8,130	5,940	*5,000	3,280	3,430	2,160	*1,960	1,530	*1,660	1,510	7.55m	
G.L.	kg			*6,310	5,550	5,120	3,080	3,320	2,060			*1,830	1,530	7.39m	
-1.5m	kg	*4,450	*4,450	*8,640	5,490	5,020	2,990	3,260	2,010			*2,190	1,680	6.89m	
-3.0m	kg	*7,530	*7,530	*8,370	5,580	5,050	3,020					*2,980	2,070	5.96m	
-4.5m	kg			*5,960	5,850							*3,800	3,360	4.34m	

- 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 defined as lift point.

- 4. The above lift capacities are in compilance with ISO 10567. They do not exceed 87% of The above intrapactives are in compinance with 50 10507. They do not exceed a 7% of hydraulic lift capacities or 75% of tipping load. Lift capacities marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.
   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.
   Lift capacities apply to only machine originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

### STANDARD EQUIPMENT

### ENGINE

- Engine, ISUZU 4JJ1,
- diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12 V 100 Ah)
- Starting motor (24 V 4 kW), 50 amp alternator
- 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
- Sealed & lubricated track links
- Grease-type track adjusters
- Automatic swing brake
- HYDRAULIC
- Arm regeneration system
- Aluminum hydraulic oil cooler
- MIRRORS & LIGHTS
- Two rear view mirrors
- Three front working LED lights

(one for boom, one for right storage box, and one for Cab)

### CAB & CONTROL

- Two control levers, pilot-operated
- Horn, electric
- Cab light (interior)
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- 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

### OPTIONAL EQUIPMENT

- Two cab LED lights
- Rearview camera
- N & B piping
- Wide range of buckets

- Various optional arms
- Wide range of shoes ■ Multi control valve
- Suspension seat with armrest

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