

# KOBELCO

SK135SR-7/SK135SRLC-7

Performance  Design

## SK135SR SK135SRLC

■ Bucket capacity:

0.24 – 0.57 m<sup>3</sup>

■ Engine power:

73.0 kW / 2,000 min<sup>-1</sup>

■ Operating weight:

14,000 – 15,300 kg



**We Save You Fuel**  
Achieving a Low-Carbon Society



sk135SR



# Performance Design

SK135SR and SK135SRLC 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.



# THE ULTIMATE IN SIMPLE AND ELEGANT DESIGN

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

## Jog dial

This jog dial integrates multiple functions to realise simple operations. Even with gloved hands, the operator can set various machine conditions without stress.

## LED backlights

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





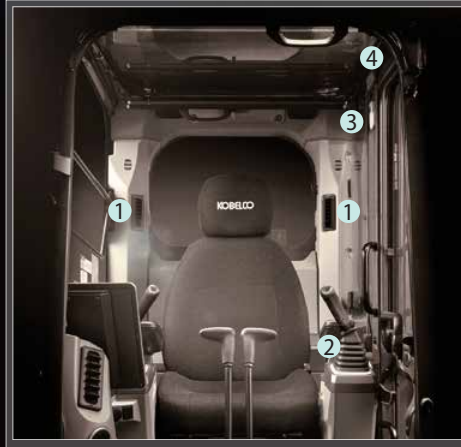




# UNFORGETTABLE COMFORT

## ① Air conditioner blowing from the rear NEW

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



## ② Lever angles allow for comfortable operations NEW

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



## New hydraulic control

Our newly upgraded hydraulic control system responds to shorter lever strokes than current models, delivering swifter, more precise movement and improved lever operability.

## ③ 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.

## ④ 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.



# KOBELCO



04:33



SETTING MENU



PICTURE OF  
CAMERA



CLOCK  
SETTING



SCREEN  
BRIGHTNESS



MAINTENANCE



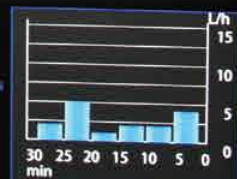
CONSUMPTION



LANGUAGE  
SELECTION



PRESSURE  
RELEASE



AVERAGE FUEL  
CONSUMPTION 4L/h  
OPERABLE  
TIME 12 h





# A WIDER VIEW BRINGS A WIDER RANGE OF USE

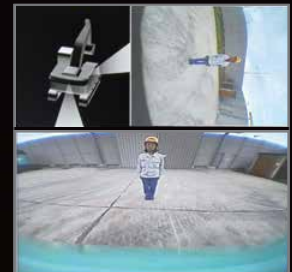
## 10-inch colour monitor (the largest in the industry)

The easy-to-operate menu screen facilitates reading of important information. Images from the built-in cameras can be checked on the large screen, which helps secure safety.

In addition, each icon has become easy to recognise.



The right camera and rear camera (right side view mode)



The right camera and rear camera (straight view mode)



The bird's-eye view

## Right and rear cameras

Images from the right camera and rear camera are displayed together on the large colour monitor. The right camera view can be selected between the straight view mode and right side view mode.

In addition, the bird's-eye view mode can also be selected.



## Screen display linked with the jog dial operation

The jog dial can be operated as desired without causing stress. Turn the jog dial to the right or left to select an item and press the dial to confirm the selection.



\*Dozer is optional equipment.

## Greatly improved digging performance

Bucket Digging Force

**105.4** kN ISO6015

Increased by **17** %

(Compared to SK135SR-2 model)

Digging volume per hour

Increased by **20** %

(Compared to SK135SR-2 at H mode)





### >>> New hydraulic control

The redesigned hydraulic flow division ensures the right pressure at the right time for faster digging. It contributes to improved cycle time.

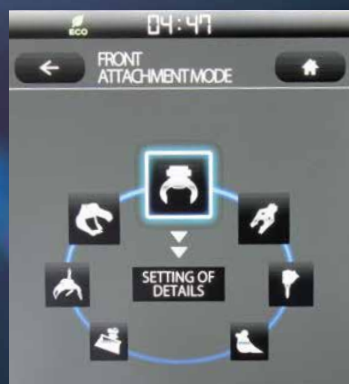




# GREATER MULTI-FUNCTION CAPABILITIES

## Attachment mode

The flow-rate modes of the bucket, breaker, nibbler, and rotating grapple are set before delivery, which allows you to start operating immediately. Mode settings for other attachments, such as the tilt rotator, can easily be added or changed.

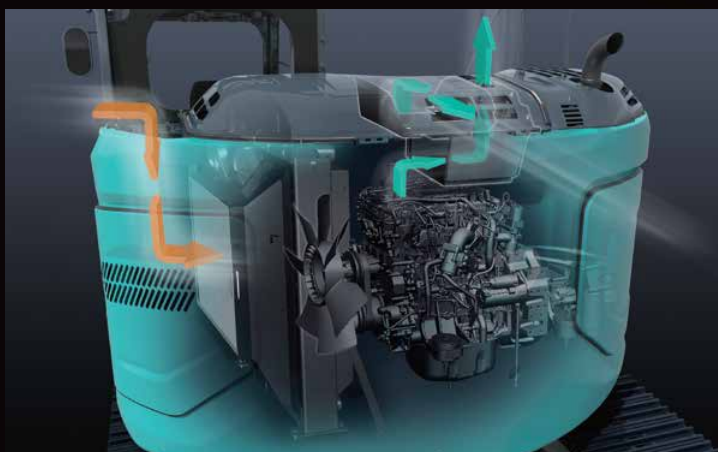


## Adjustment for hydraulic flow

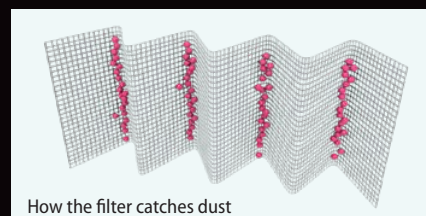
Divide ratio of hydraulic flow can be adjusted by service factory for custom usage.



## NON-STOP OPERATION BY iNDr



**iNDr** Integrated  
Noise & Dust  
Reduction  
Cooling System



### iNDr Filter

A high-density stainless steel mesh filter blocks dust and debris from entering the cooling package during air intake. This prevents the cooling package and air cleaner from clogging, allowing the machine to maintain cooling performance. The ridges of the corrugated filter allow air to pass through, while the grooves collect dust and debris, preventing the filter from clogging.

## CONVENIENT AND SENSIBLE EQUIPMENT



### Engine start password

A password is required when starting the engine for greater security. The initial password must be set at our workshop.



### Wiper adjustment function

In addition to the intermittent wiper mode and continuous wiper mode, the one-time wiper mode was added.



### Console mount **NEW**

The console-integrated seat allows for comfortable operation.



### 24 V power outlet



### Smartphone holder



### Built-in rear camera/right camera



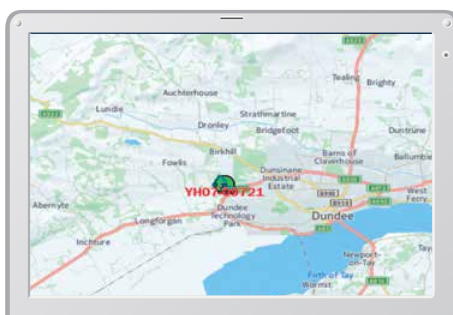
# Ecavator Remote Monitoring System



## Direct Access to Operational Status

### Location Data

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



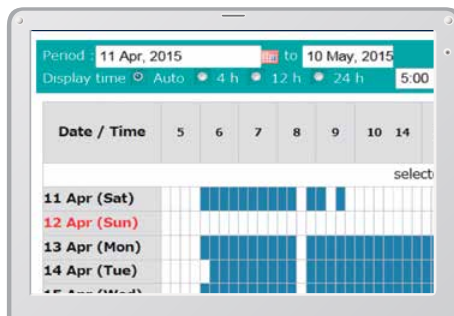
Period	11 Apr, 2015	to	10 May, 2015	Search
Type of Operation	Working Hrs	Ratio		
Total Working Hrs	169 Hrs	100 %		
Digging Hrs	72.2 Hrs	43 %		
Traveling Hrs	18.3 Hrs	11 %		
Idle Hrs	15.9 Hrs	9 %		
Opt Att Hrs	62.5 Hrs	37 %		
Crane Mode Hrs	0 Hrs	0 %		

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

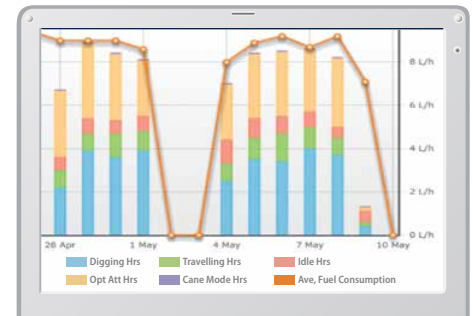
Data on fuel consumption and idling times can be used to indicate improvements in fuel consumption.

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
<b>TOTAL</b>	<b>171:25</b>	<b>1514.2 L</b>

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	734 Hr	434
SK135SRLC-3/SK140SRL	YH07-09789	73 Hr	429
SK210LC-9	YQ13-10454	960 Hr	58
SK210LC-9	YQ13-10481	549 Hr	498
SK75SR-	YT08-30374		

Maintenance

### 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.



Alarm messages can be received on a 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 up with an alarm if the machine is operated outside designated time.

Engine start alarm outside prescribed work time

### 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

# Specifications



## Engine

Model	ISUZU MOTORS LIMITED 4JJ1XDJA
Type	Four cycle, 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 L
Rated power output	65.4 kW/2,000 min <sup>-1</sup> (ISO 9249: with fan) 73.0 kW/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	
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
Pilot control pump	Gear type
Main control valves	12-spool
Oil cooler	Air cooled type



## Swing system

Swing motor	One fixed displacement piston pump
Brake	Hydraulic; locking automatically when the swing control lever is in the neutral position
Parking brake	Wet multiple plate
Swing speed	11.0 min <sup>-1</sup>



## Attachments

Backhoe bucket and combination

Use			Backhoe bucket									
			Normal digging									
Bucket capacity	ISO heaped	m <sup>3</sup>	0.24	0.31	0.38	0.45	0.45*	0.50	0.50**	0.50***	0.57	0.57**
	Struck	m <sup>3</sup>	0.20	0.23	0.28	0.35	0.35	0.37	0.35	0.37	0.43	0.40
Opening width	With side cutter	mm	590	700	800	915	915	1,000	1,030	1,000	1,100	1,150
	Without side cutter	mm	500	640	740	855	855	940	945	940	1,040	1,070
No. of teeth			3	3	4	4	4	5	5	5	5	5
Bucket weight			280	300	340	360	430	390	420	420	410	450
Combination	2.38 m arm		○ (○)	○ (○)	○ (○)	○ (○)	○ (○)	⊗ (⊗)	○ (○)	○ (○)	△ (△)	△ (△)
	2.84 m arm		○ (○)	○ (○)	⊗ (⊗)	△ (△)	△ (△)	× (×)	× (×)	× (×)	× (×)	× (×)

⊗ Standard ○ Recommended △ Loading only × Not recommended

\*Bottom plate reinforcement \*\*Side pin \*\*\*For demolition  
( ) = SK135SR[LC]



## Travel system

Travel motors	Variable displacement axial piston type×2 pcs with Counter Balance Valve
Travel brakes	Hydraulic brake
Parking brakes	Wet multiple plate
Travel shoes	44 each side
Travel speed	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	186 L
Cooling system	17 L
Engine oil	17 L
Travel reduction gear	2 x 2.1 L
Swing reduction gear	1.65 L
Hydraulic oil tank	89.9 L tank oil level
	176 L hydraulic system

# SK135SR

SK135SR-7

# SK135SR<sub>LC</sub>

SK135SR<sub>LC</sub>-7



## Working ranges

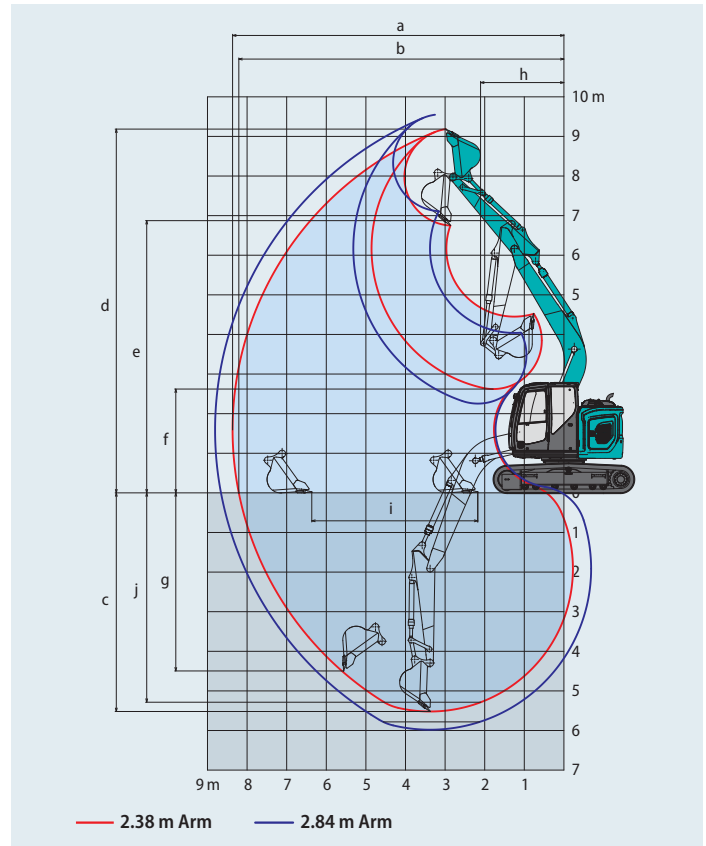
Unit: m

Boom		4.68 m	
Arm		2.38 m	2.84 m
Range			
a- Max. digging reach		8.37	8.81
b- Max. digging reach at ground level		8.21	8.66
c- Max. digging depth		5.52	5.98
d- Max. digging height		9.18	9.55
e- Max. dumping clearance		6.75	7.11
f- Min. dumping clearance		2.62	2.25
g- Max. vertical wall digging depth		4.50	4.95
h- Min. swing radius		2.13	2.52
i- Horizontal digging stroke at ground level		4.19	4.67
j- Digging depth for 2.4 m (8') flat bottom		5.29	5.78
Bucket capacity ISO heaped m <sup>3</sup>		0.50	0.38

## Digging Force (ISO 6015)

Unit: kN

Arm length		2.38 m	2.84 m
Bucket digging force		105.4	
Arm crowding force		64.0	58.0



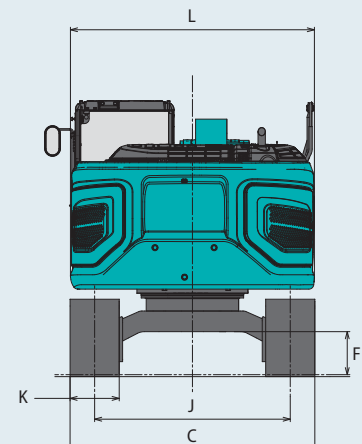
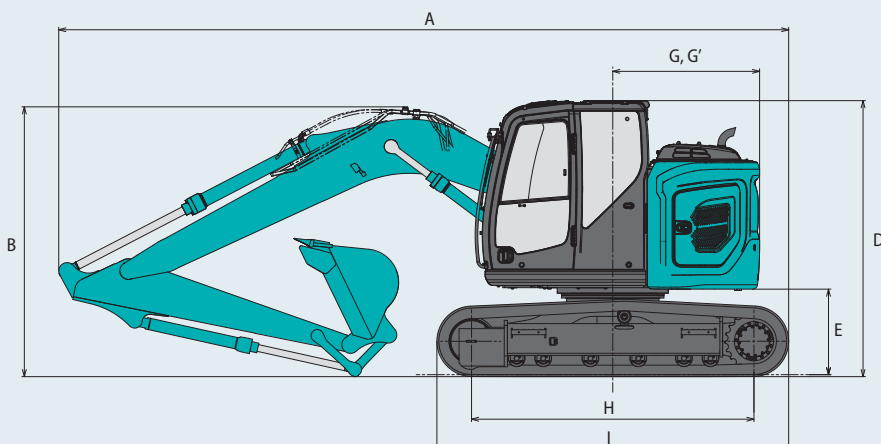
## Dimensions

Arm length		2.38 m	2.84 m
A Overall length	SL135SR	7,430/8,070**	7,440/8,080**
	SK135SR <sub>LC</sub>	7,510/8,070**	7,530/8,080**
B Overall height (to top of boom)		2,740	3,140
C Overall width (500 mm shoe)		2,490	
D Overall height (to top of cab)		2,810	
E Ground clearance of rear end*		870	
F Ground clearance*		440 [400**]	

Unit: mm

G Tail swing radius		1,490
G' Distance from centre of swing to rear end		1,490
H Tumbler distance	SL135SR	2,870
	SK135SR <sub>LC</sub>	3,040
I Overall length of crawler	SL135SR	3,580
	SK135SR <sub>LC</sub>	3,750
J Track gauge		1,990
K Shoe width		500
L Overall width of upperstructure		2,480

\*Without including height of shoe lug \*\*With Dozer





# Operating weight & ground pressure

SK135SR-7 Boom: 4.68 m Arm: 2.38 m Bucket: 0.50 m<sup>3</sup> ISO heaped Dozer: without

Shaped		Triple grouser shoes (even height)		
Shoe width	mm	500	600	700
Overall width of crawler	mm	2,490	2,590	2,690
Ground pressure	kPa	44	37	32
Operating weight	kg	14,000	14,200	14,400

SK135SR-7 Boom: 4.68 m Arm: 2.38 m Bucket: 0.50 m<sup>3</sup> ISO heaped Dozer: with

Shaped		Triple grouser shoes (even height)		
Shoe width	mm	500	600	700
Overall width of crawler	mm	2,490	2,590	2,690
Ground pressure	kPa	46	39	34
Operating weight	kg	14,800	15,000	15,300

SK135SRLC-7 Boom: 4.68 m Arm: 2.38 m Bucket: 0.50 m<sup>3</sup> ISO heaped Dozer: without

Shaped		Triple grouser shoes (even height)		
Shoe width	mm	500	600	700
Overall width of crawler	mm	2,490	2,590	2,690
Ground pressure	kPa	42	36	31
Operating weight	kg	14,200	14,400	14,700

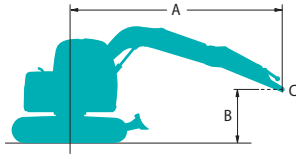
# Lift capacities

## SK135SR

SK135SR-7

## SK135SR<sub>LC</sub>

SK135SR<sub>LC</sub>-7



Rating over front













Rating over side or 360 degrees











A - Reach from swing centreline to arm top











B - Arm top height above/below ground

C - Lift point

Relief valve setting: 34.3 MPa

SK135SR		Arm: 2.38 m		Bucket: without		Counterweight: 3,150 kg		Shoe: 500 mm		Dozer: without		
<div><div>A</div><div>B</div></div>		1.5 m		3.0 m		4.5 m		6.0 m		At Max. Reach		
												Radius
7.5m	kg									*2,300	*2,300	3.80 m
6.0m	kg					*3,450	*3,450			*1,830	*1,830	5.55 m
4.5m	kg			*4,330	*4,330	*3,730	3,410	3,100	2,140	*1,700	*1,700	6.50 m
3.0m	kg			*6,650	5,930	*4,510	3,190	3,020	2,060	*1,690	1,600	6.99 m
1.5m	kg			*5,270	5,210	4,470	2,940	2,900	1,960	*1,790	1,510	7.14 m
G.L.	kg			*6,040	5,010	4,290	2,780	2,820	1,880	*2,000	1,530	6.94 m
-1.5m	kg	*5,320	*5,320	*8,230	5,020	4,240	2,730	2,790	1,850	*2,460	1,710	6.39 m
-3.0m	kg	*9,090	*9,090	*6,610	5,140	4,300	2,790			3,340	2,220	5.36 m

SK135SR		Arm: 2.38 m		Bucket: without		Counterweight: 3,150 kg		Shoe: 500 mm		Dozer: blade up		
A  B		1.5 m		3.0 m		4.5 m		6.0 m		At Max. Reach		
												Radius
7.5m	kg									*2,300	*2,300	3.80 m
6.0m	kg					*3,450	*3,450			*1,830	*1,830	5.55 m
4.5m	kg			*4,330	*4,330	*3,730	3,600	3,190	2,270	*1,700	*1,700	6.50 m
3.0m	kg			*6,650	6,260	*4,510	3,380	3,100	2,190	*1,690	*1,690	6.99 m
1.5m	kg			*5,270	*5,270	4,600	3,130	2,990	2,080	*1,790	1,610	7.14 m
G.L.	kg			*6,040	5,340	4,420	2,960	2,900	2,000	*2,000	1,640	6.94 m
-1.5m	kg	*5,320	*5,320	*8,230	5,350	4,360	2,920	2,880	1,980	*2,460	1,830	6.39 m
-3.0m	kg	*9,090	*9,090	*6,610	5,470	4,430	2,980			3,440	2,370	5.36 m

SK135SR <sub>LC</sub>		Arm: 2.38 m		Bucket: without		Counterweight: 3,150 kg		Shoe: 500 mm		Dozer: without		
<div><div>A</div><div>B</div></div>		1.5 m		3.0 m		4.5 m		6.0 m		At Max. Reach		
												Radius
7.5m	kg									*2,300	*2,300	3.80 m
6.0m	kg					*3,450	*3,450			*1,830	*1,830	5.55 m
4.5m	kg			*4,330	*4,330	*3,730	3,460	*3,400	2,170	*1,700	*1,700	6.50 m
3.0m	kg			*6,650	6,020	*4,510	3,240	3,320	2,090	*1,690	1,630	6.99 m
1.5m	kg			*5,270	*5,270	4,980	2,990	3,210	1,990	*1,790	1,530	7.14 m
G.L.	kg			*6,040	5,090	4,790	2,830	3,120	1,910	*2,000	1,560	6.94 m
-1.5m	kg	*5,320	*5,320	*8,230	5,100	4,740	2,780	3,100	1,890	*2,460	1,740	6.39 m
-3.0m	kg	*9,090	*9,090	*6,610	5,230	*4,570	2,840			*3,480	2,260	5.36 m

### Note:

- 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.
- 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.
- Bucket pin attachment point defined as lift point.
- 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.
- 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 as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

## STANDARD EQUIPMENT

### ENGINE

- Engine, ISUZU MOTORS LIMITED 4JJ1XDJA, Direct injection type, with turbocharger
- Auto Idle Stop (AIS)
- Automatic engine deceleration
- Batteries (2 x 12 V - 80 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)
- N&B piping (Foot controlled)

### SWING SYSTEM & TRAVEL SYSTEM

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

### MIRRORS, LIGHTS & CAMERAS

- Rear view mirror, rear view camera, and right side view camera
- Two front working lights (LED)

### CAB & CONTROL

- Two control levers, pilot-operated
- Horn, electric
- Integrated left-right slide-type control box
- LED door light (interior)
- Coat hook
- Large cup holder
- Detachable two-piece floor mat
- Mechanical suspension seat (Applicable for N&B piping)
- Retractable seatbelt
- Headrest
- Handrails
- Intermittent wiper with double-spray washer
- Skylight
- Tinted safety glass
- Pull-type front window and removable lower front window
- Easy-to-read 10-inch LCD SCREEN multi-display monitor
- Emergency escape hammer
- 24 V converter
- Automatic air conditioner
- GEOSCAN

## OPTIONAL EQUIPMENT

- Rotatory N & B piping
- Long arm
- Wide range of shoes
- Front-guard protective structure (may interfere with bucket action)
- TOP guard
- Additional counterweight (+ 580 kg/ + 1,000 kg)
- Cab top work LED lights (two lights)

- GRAMMER\* air suspension seat with heater
- Additional trackguide
- Rain visor (may interfere with bucket action)
- Dozer blade
- Roll sun shade
- Travel alarm

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

\*GRAMMER is trademark of GRAMMER AG. registered in Germany and other countries.

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.

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