## **KOBELCO**

## SK300LC



## Power Meets Efficiency







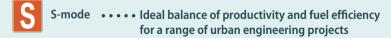
#### In Pursuit of Improved Fuel Efficiency

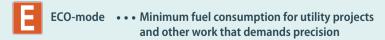
#### ECO-mode: engineered for economy

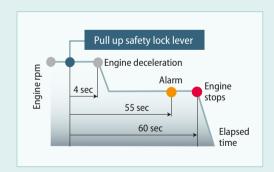
Kobelco's ECO-mode maximizes the operating efficiency of the engine and other components to achieve much greater fuel efficiency. Just press a button to choose the operation mode best suited to the task at hand and the working conditions.

Optimal operation with three modes







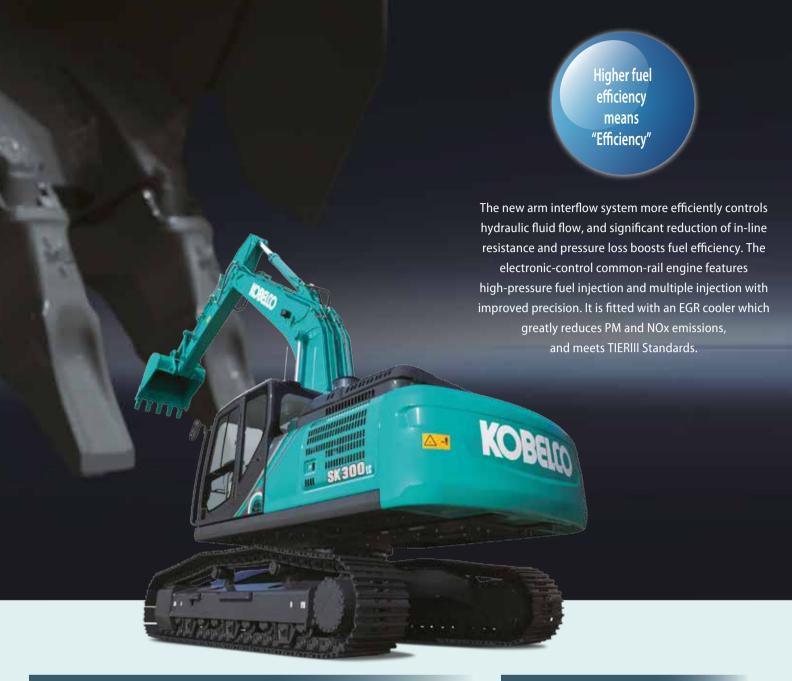


#### AIS (Auto Idle Stop)

If the boarding/disembarking lever is left up, the engine will stop automatically.

This eliminates wasteful idling during standby, saving fuel and reducing  $CO_2$  emissions as well.

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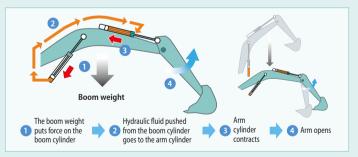


#### **Hydraulic System: Revolutionary Technology Saves Fuel**

#### **Arm Interflow System**

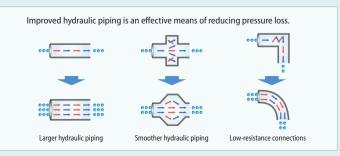
NEW

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



#### Hydraulic circuit reduces energy loss

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



#### Pursuing maximum fuel efficiency

#### Common rail system

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



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# More Power and Higher Efficiency

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

#### **Superior Digging Force**

Max. Bucket Digging Force

Normal: 188kN

With Power Boost: 208kN

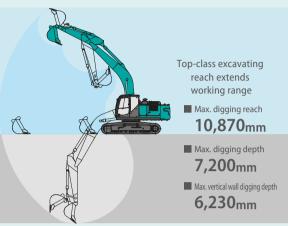
Max. Arm Crowding Force

Normal: 126kN

With Power Boost: 139KN



#### **Get More Done Faster with Superior Operability**



\*Values are for Standard HD arm (3.10m)

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

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

\*Compared to SK330-8



#### **Complying with Transport Regulations**



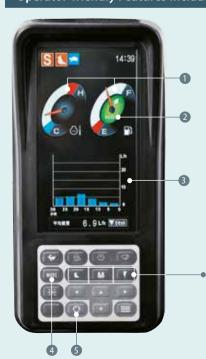
#### **Top Class Traveling Force**

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



■ Drawbar Pulling Force: 280kN

#### 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
- 3 Fuel consumption/Switch indicator for rear camera images
- 4 Digging mode switch
- 6 Monitor display switch

**Mode Switch** 

## One-Touch Attachment

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



Fuel consumption



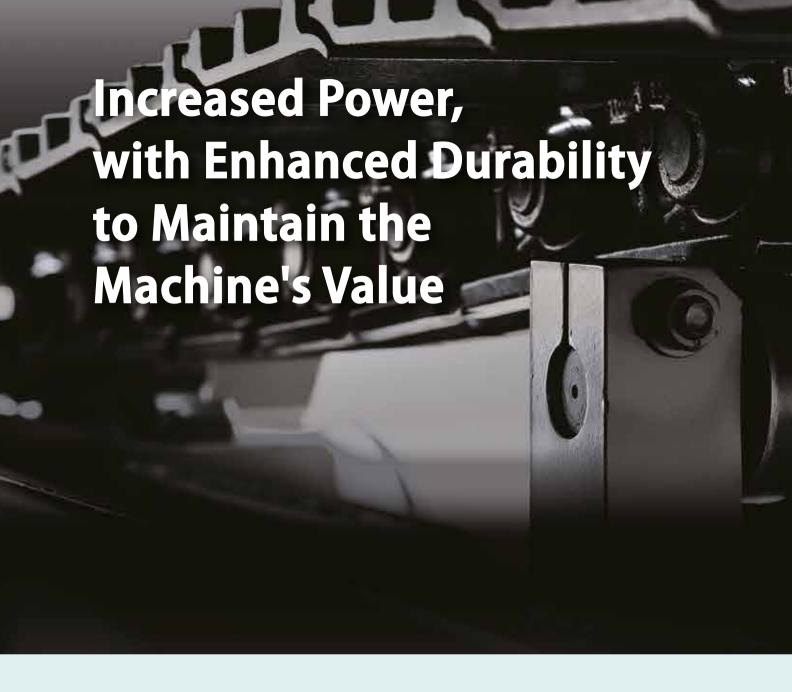
Breaker mode

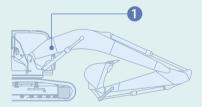


Maintenance



Nibbler mode





#### **Built to Operate in Tough Working Environments**

Redesigned boom offers excellent durability during demanding work conditions to reliably handle work volume.



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#### 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

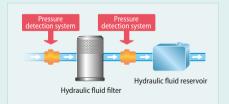


Recognized as the best in the industry, our super-fine filter separates out even the smallest particles. New cover prevents contamination when changing filters.



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

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





Metal mesh cover **NEW** air cleaner

Metal mesh cover ensures strength and durability.



**Fuel Filter** 

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



# 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 vibration.



## Broad View Liberates the Operator

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

## Air Conditioner Register behind the Seat



The large air-conditioner has registers 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







## 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**





#### 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 machine tip over





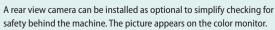
#### **Expanded Field of View for Greater Safety**



Greater safety assured by rearview mirrors on left and right.











### Easy, On-the-Spot Maintenance NEW



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

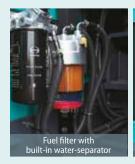


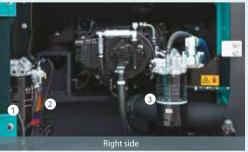




#### Maintenance Work, Daily Checks, Etc., Can Be Done from Ground Level

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









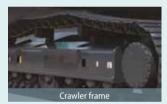
- 1 Fuel filter
- 2 Fuel filter with built-in water-separator
- 3 Engine oil filter

Laid out for easy access to radiator and cooling system elements

## Efficient Maintenance Keeps the Machine in Peak Operating Condition



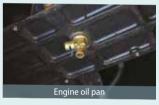
#### **Easy Cleaning**



Special crawler frame design is easily cleaned of mud.



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



Engine oil pan equipped with drain



#### Long-Interval Maintenance

Long-life hydraulic oil reduces cost and labor.

Replacement cycle: 1,000 hours

#### **Highly Durable** Super-fine Filter

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



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

filters can be easily removed without tools for cleaning.



# Internal and external air conditioner

#### **KOMEXS**

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**

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

#### **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

#### **Fuel Consumption Data**

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

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

#### Security System

#### **Engine Start Alarm**

Sends a notification if the engine is started outside of

Sends a notification if the machine leaves a pre-defined

Note: KOMEXS is not applicable in some area due to country regulation of the communication lines or availability of infrastructure.

## **Specifications**



### **Engine**

Model	HINO J08E	
Type Direct injection, water-cooled, 4-cycle, 6-cyl diesel engine with intercooler turbo-charge		
No. of cylinders 6		
Bore and stroke	112 mm x 130 mm	
Displacement	7.684 L	
Pated naver output	173 kW/2,100 min <sup>-1</sup> (ISO 9249)	
Rated power output	185 kW/2,100 min <sup>-1</sup> (ISO 14396)	
	966 N•m/1,600 min <sup>-1</sup> (ISO 9249)	
Max. torque	998 N•m/1,600 min <sup>-1</sup> (ISO 14396)	



## **Hydraulic System**

Pump		
Туре	Two variable displacement pumps + 1 gear pump	
Max. discharge flow	2 x 245 L/min, 1 x 21 L/min	
Relief valve setting		
Boom, arm and bucket	34.3 MPa {350 kgf/cm²}	
Power Boost	37.8 MPa {385 kgf/cm²}	
Travel circuit	34.3 MPa {350 kgf/cm²}	
Swing circuit	29.0 MPa {296 kgf/cm²}	
Control circuit	5.0 MPa {50 kgf/cm²}	
Pilot control pump	Gear type	
Main control valves	8-spool	
Oil cooler	Air cooled type	



## Swing System

Swing motor	Axial-piston motor	
Brake	Hydraulic; locking automatically when the swing control lever is in neutral position	
Parking brake	Oil disc brake, hydraulic operated automatically	
Swing speed	10.3 min <sup>-1</sup> {rpm}	
Tail swing radius	3,300 mm	
Min. front swing radius	4,420 mm	



### **Attachments**

Backhoe bucket and arm combination

Туре		Backhoe bucket			
			Normal digging		
Pucket capacity	Heaped (ISO7451) m	1.2	1.2HD	1.40	1.4HD
Bucket capacity	Struck (ISO7451) m	0.84	0.88	0.96	1
Opaning width	With side cutters mn	1.490	1,300	1,680	1,460
Opening width	Without side cutters mn	1,400	1,180	1,580	1,340
No. of teeth		5	4	5	5
Bucket weight kg		1,050	1,270	1,140	1,410
Cambinations	2.40 m short HD arm	0	0	0	0
Combinations	3.10 m standard HD arm	0	0	0	0

 $\bigcirc$  Standard  $\bigcirc$  Recommended



### **Travel System**

Travel motors	2 x axial-piston, two-step motors
Travel brakes	Hydraulic
Parking brakes	Oil disc brake per motor
Travel shoes	50 each side
Travel speed	5.2/3.1 km/h
Drawbar pulling force	280 kN (ISO 7464)
Gradeability	70 % {35°}



## Cab & Control

#### Cah

All-weather, sound-suppressed steel cab mounted on the high suspension mounts filled with silicone oil 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	140 mm x 1,305 mm
Arm cylinder	150 mm x 1,675 mm
Bucket cylinder	130 mm x 1,208 mm



## **Refilling Capacities & Lubrications**

Fuel tank	503 L
Cooling system	35 L
Engine oil	28.5 L
Travel reduction gear	2 x 8.0 L
Swing reduction gear	7.0 L
Lhudwaulia ail tank	245 L tank oil level
Hydraulic oil tank	410 L hydraulic system



## **Working Ranges**

Unit: m

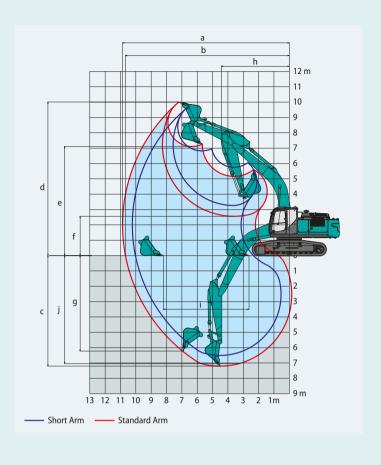
Boom	6.2	0 m
Arm Range	Short 2.4 m	Standard 3.1 m
a- Max. digging reach	10.23	10.87
b- Max. digging reach at ground level	10.03	10.68
c- Max. digging depth	6.50	7.20
d- Max. digging height	9.74	10.01
e- Max. dumping clearance	6.83	7.11
f- Min. dumping clearance	3.26	2.56
g- Max. vertical wall digging depth	5.65	6.23
h- Min. swing radius	4.4	4.42
i- Horizontal digging stroke at ground level	4.0	5.58
j- Digging depth for 2.4 m (8') flat bottom	6.31	7.04
Bucket capacity ISO heaped m <sup>3</sup>	1.4	1.4

#### Digging Force (ISO 6015)

Unit: kN

Arm length	Short 2.4 m	Standard 3.1 m
Bucket digging force	188 208*	188 208*
Arm crowding force	158 174*	126 139*

\*Power Boost engaged



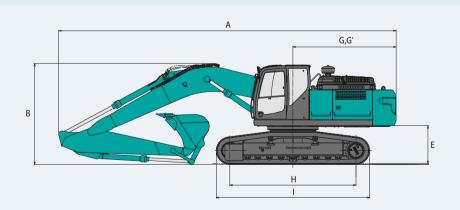


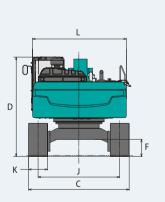
## Dimensions

Arm length		Short 2.4 m	Standard 3.1 m
Α	Overall length	10,830	10,710
В	Overall height (to top of boom)	3,460	3,200
C	Overall width	3,1	90
D	D Overall height (to top of cab) 3,160		60
Ε	Ground clearance of rear end*	1,200	
F	Ground clearance*	51	0

		Unit: mm
G	Tail swing radius	3,300
G'	Distance from center of swing to rear end	3,270
Н	Tumbler distance	4,000
1	Overall length of crawler	4,870
J	Track gauge	2,590
K	Shoe width	600
L	Overall width of upperstructure	2,980

\*Without including height of shoe



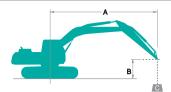


### **Operating Weight & Ground Pressure**

In standard trim, with Standard HD boom (6.20m), Standard HD arm (3.10m), and 1.4  $\,\mathrm{m^3}$  ISO heaped bucket.

Туре		Triple grouser shoes (even height)						
Shoe width	mm 600	700	800					
Overall width	mm 3,190	3,290	3,390					
Ground pressure kPa (kgf/	:m²) 58 (0.59)	51 (0.52)	45 (0.46)					
Operating weight	kg 30,600	31,200	31,700					







A: Reach from swing centerline to arm top B: Arm top height above/below ground C: Lifting capacities in Kilograms Bucket: Without bucket Relief valve setting: 34.3 MPa (350 kgf/cm²)

SK300LC Boom: 6.2 m HD Arm: 3.1 m Bucket: without Shoe: 600 mm																
A		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		At Max. Reach		
В		<u> </u>	<del></del>	1	<del></del>	1	<del></del>	1	<b>—</b>	-	<del></del>	<u> </u>	<del></del>	4	<del></del>	Radius
7.5 m	kg													*3,830	*3,830	7.45 m
6.0 m	kg									*5,590	*5,590			*3,630	*3,630	8.37 m
4.5 m	kg							*6,640	*6,640	*6,020	5,730			*3,590	*3,590	8.95 m
3.0 m	kg					*10,790	*10,790	*7,950	7,610	*6,700	5,480	*5,650	4,140	*3,680	*3,680	9.24 m
1.5 m	kg					*13,110	10,700	*9,220	7,170	*7,400	5,250	6,420	4,030	*3,890	3,850	9.28 m
G.L.	kg					*14,220	10,340	*10,110	6,890	*7,960	5,080	*5,090	3,960	*4,280	3,920	9.06 m
-1.5 m	kg			*10,530	*10,530	*14,370	10,270	*10,480	6,770	8,160	5,010			*4,960	4,210	8.57 m
-3.0 m	kg	*12,310	*12,310	*16,580	*16,580	*13,750	10,380	*10,220	6,810	*7,850	5,070			*6,240	4,860	7.76 m
-4.5 m	kg			*17,020	*17,020	*12,080	10,690	*8,870	7,050					*7,840	6,370	6.50 m

SK300L	c	Boom: 6.2 m HD Arm: 2.4 m Bucket: without Shoe: 600 mm										
A		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		
В			<b>—</b>	1	<del></del>		<b>—</b>		<del></del>		<del></del>	Radius
7.5 m	kg					*6,270	*6,270			*6,500	*6,500	6.63 m
6.0 m	kg					*6,540	*6,540	*6,430	5,800	*6,490	5,590	7.66 m
4.5 m	kg			*9,420	*9,420	*7,480	*7,480	*6,690	5,680	*6,470	4,830	8.28 m
3.0 m	kg					*8,720	7,510	*7,270	5,470	*6,630	4,450	8.60 m
1.5 m	kg					*9,830	7,140	*7,870	5,270	6,870	4,330	8.64 m
G.L.	kg			*14,560	10,400	*10,490	6,930	*8,280	5,150	7,080	4,440	8.41 m
-1.5 m	kg	*10,250	*10,250	*14,250	10,450	*10,590	6,890	*8,270	5,140	*7,760	4,840	7.88 m
-3.0 m	kg	*18,080	*18,080	*13,200	10,640	*9,930	7,010			*8,140	5,780	6.98 m
-4.5 m	kg			*10,750	*10,750					*8,350	8,250	5.53 m

#### Notes:

- 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
- Arm top defined as lift point.
- 4. The above lifting capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic
- lifting capacity or 75% of tipping load. Lifting 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

  HINO J08E diesel engine with turbocharger intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12V 96Ah)
- Starting motor (24V 5 kW), 50 amp alternator
- Automatic engine shut-down for low engine oil pressure
- Engine oil pan drain cock
- Double element air cleaner
- CONTROL
- Working mode selector (H-mode, S-mode and ECO-mode)
- Power Boost

#### SWING SYSTEM & TRAVEL SYSTEM

- Swing rebound prevention systemStraight propel system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- Automatic swing brake
- HYDRAULIC
- Arm interflow system
- Auto warm up system
- Boom regeneration system
- Aluminum hydraulic oil cooler
- Hydraulic fluid filter clog detector Standard piping (Less N & B piping)
- MIRRORS, LIGHTS & CAMERA
- Two rear view mirrors Three front working lights
  - (Two for boom, one for storage box)

#### **CAB & CONTROL**

- Two control levers, pilot-operated
- Horn, electric
- Cab light (interior)
- Luggage tray
- Large cup holderDetachable two-piece floor mat
- Headrest
- Handrails
- Intermittent windshield wiper with double-spray washer
- Skyliaht
- Tinted safety glass
- Pull-up type front window and removable lower front window
- Easy-to-read multi-display
- color monitor Automatic air conditioner

Remote machine monitoring system KOMEXS

hammer

Emergency escape

Suspension seat

#### **OPTIONAL EQUIPMENT**

- Short HD arm (2.4m)
- Additional Track Guide Refueling pump
- Front guard
- Lower frame guard Air suspension seat
- E & N & B piping (foot control) N & B piping (foot control)
- N & B piping (foot control)
- + Boom & Arm Safety
- Quick hitch piping 1.2m3 bucket General Duty
- 1.2m³ bucket Heavy Duty
- 1.4m³ bucket General Duty
- 1.4m3 bucket Heavy Duty
- 700mm steel shoe 800mm steel shoe
- Cab top work lights (two lights)
- Travel alarm Yellow Rotating Warning Light

Rear view camera 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.

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