# KOBELCO

Bucket Capacity:

1.6 – 1.9 m<sup>3</sup> (ISO heaped)

Engine Power :
 191 kW/2,100 min<sup>-1</sup>

Operating Weight :38,300 kg

10Kill



# SK380 XD<sub>LC</sub>

# **Power Meets Efficiency**

In line with KOBELCO's concept of earth-friendly construction machinery that will work long and hard on any site on the planet, the rugged machine body is newly designed, and comprehensive reinforcement makes the attachment more robust. It all adds up to KOBELCO's toughest ever mining excavator. The latest hydraulics technology delivers both high-powered output and lower fuel consumption. As the 10th generation model of KOBELCO's SK series, the SK380XDLC meets the needs of the most punishing mining sites with a performance that simply astounds.



Increase in productivity means "Power"

KOBELO \*\*\*

10

**24%** Higher fuel saving means "Efficiency"

# **Even Stronger Attachment**

#### **Reinforced Arm Exhibits Strength**

Thick steel plate 🦇



Thickness of steel plate has been increased in preference to adding reinforcing plates.

Arm foot Base plate thickness has been increased.

Modified Foot Boss Shape 極



The arm foot boss shape has been modified and improved to distribute stress, delivering more strength for tasks like digging next to a wall.



SK 300 10.

Guards Specially designed long, solid rock guard installed to prevent

damage to arm.

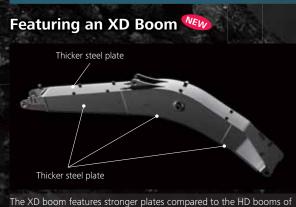
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Rock

Increase in productivity means <u>"</u>Power"

The boom and arm that take the greatest punishment are significantly reinforced.

Newly Developed Mining Boom Made of Thicker Steel Plate



standard machines, which increases longevity even under the toughest

Boom

Big Cross-Section 🦇



Newly designed, big cross-section boom for unbeatable durability under harsh working conditions.

#### Side Deck Bumpers and Protective Guards that Cover the Main Upper Machinery

working conditions.

### Side Deck Bumpers

KOBELCO

Side deck bumpers are fitted to protect power plant and cab.

### Upper Under Covers

Thick covers with increased durability compared to standard models.



# Increase in Productivity Means "Power"

Powerful travel system for easy transit over loose stones, and highly reliable filtration system ensure higher machine performance.

### Crawlers Built for Unbeatable Durability

### Reinforced Guide Frame



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

# Thicker Steel Plate for Shoes



Reinforced HD shoes of thick steel plate to master rough, stony ground.

### **Reinforced Step**



Design of the step uses strong, thick-plate steel, to stop large rocks impacting the travel motor.

### Track Links



The size and durability of the track link are increased compared to standard models.

### Track Guides



Large, reinforced track guides are installed in three locations.

### Reinforced Travel Motor Cover



Rear of travel motor cover is reinforced.

### Double-Support Outer Flange Upper Rollers



### Lower Frame Underside Cover



Hydraulic piping and equipment protected against damage from rubble and stony ground.



### **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.

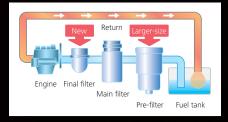
### Fuel Filter

The pre-filter with built-in water separator has 1.8 times more filter area compared to the previous models and with a new final stage maintenance free fuel filter to maximize filtering performance.

Hydraulic tank pressure sensor monitors the pressure difference between the return line and tank inside pressure to determine the degree of clogging. If the difference exceeds a predetermined level, a warning appears on the multi-display,

so any contamination can be trapped by the filter and replaced before it reaches

the hydraulic fluid in the tank.



# Hydraulic Fluid Filter

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



### Metal Mesh New **Cover Air Cleaner**

Metal mesh cover ensures strength and durability.



Enlarged filter image



Hydraulic fluid filter Hydraulic fluid reservoir

# **Evolution Continues, with Improved Fuel Efficiency**

24%\* **Higher fuel** saving means "Efficiency"

The new arm interflow system more efficiently controls hydraulic fluid flow, and significant reduction of in-line resistance and pressure loss boosts fuel efficiency by about 24%\*.

n Eco-mode compared to S-mode on the SK330-8

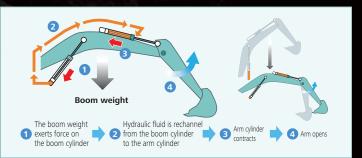
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Hydraulic System: Revolutionary Technology Saves Fuel

### Arm Interflow System

SK380X0c

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.



### **Energy Saving System Saves Fuel Further**

### Fuel efficient work mode ECO-mode 🖤

The fuel-saving ECO-mode is newly provided to the work mode, selectable according to a desired operation. Fuel consumption can be greatly reduced.

Used to reduce fuel consumption for small workloads

KOE

ECO-mode, 24% decrease (compared to S-mode on the SK330-8.)

Used to prioritize the amount of work done

H-mode, 16% decrease (compared to H-mode on the SK330-8.)

Used to strike a balance between workloads and fuel efficiency S-mode, 19% decrease (compared to S-mode on the SK330-8)



## Get More Done Faster

100

ELCO

### Standard 3.30 m arm (reinforced for rocks)

Max. Bucket Digging Force
Normal: 229 kN
With power boost: 252 kN
Max. Arm Crowding Force
Normal: 165 kN
With power boost: 182 kN

Max. Digging Reach:
11,260 mm
Max. Digging Depth:
7,560 mm
Max. Vertical Digging Depth:
6,480 mm

### Piping for Breaker

Piping for breaker is fitted as standard.



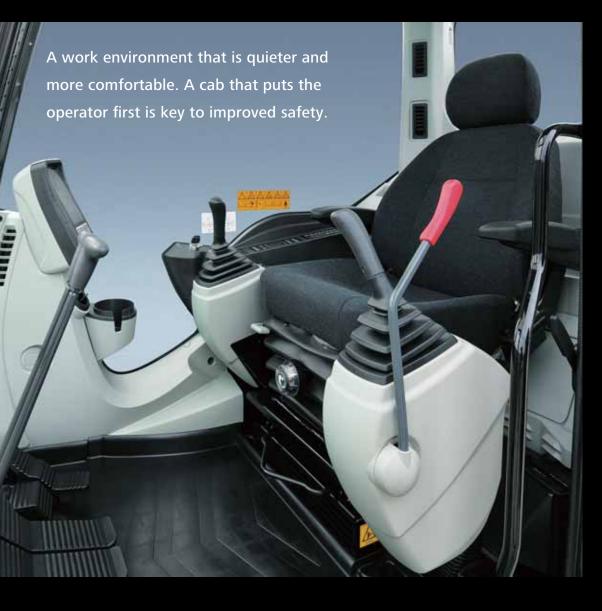


### **Top Class Traveling Force**

Powerful traveling force and drawbar 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: 320 kN

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



### Multi-Display in Color 🖤

6:58

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-

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 switch5 Monitor display switch
  - Monitor display switc

### Large Cab

4% larger than the previous cab capacity. Relaxing environment allows work to be performed in comfort.

### 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.

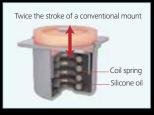
### Super-Airtight Cab



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

### Low Vibration New

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.



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.

### Comfort



# 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.

### Large Cab Is Easy 🦇 to Get In and Ou<u>t of</u>

The expanded cab provides plenty of room for a large door, more headroom and smoother entry and exit.



### More Comfortable Seat Means Higher Productivity







### Interior Equipment Adds to Comfort and Convenience







### 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.

### 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.



### Improved Operational Web Safety Cab Guard (Optional)



The top guard (FOPS, Top Guard Level II. (Meets ISO10262)) provided as standard. The top-mounted working light ensures a wide field of view.

### Wide View During Operations High Visibility for Safety



Greater safety assured by rearview mirrors on left and right.





# Efficient Maintenance Keeps the Machine in Peak Operating Condition

### MAINTENANCE

		8	5.4
	INTERNAL	THE	EXCHANCE
ENGINE OIL	250	246	//
FUELFILTER	500	496	//
HYD. FILTER	1000	996	//
HYD. OIL	2000	1996	

Examples of displaying maintenance information

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

### Easy, On-the-Spot Maintenance

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.



Generous space for maintenance work



Step/Hand rail

### 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 cooling system elements.



Fuel filter
 Fuel filter with built-in water-separator
 Engine oil filter

### **Easy Cleaning**



Special crawler frame design for easy mud removal cleaning.

### More Efficient Maintenance inside the Cab

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



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





KOBELCO

Floor mat's raised edges help keep the cab floor free of mud, simplify cleaning.

### KOMEXS

KOMEXS is the remote monitoring system for SK series excavators.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.



Engine oil pan equipped with drain valve.







# Engine

Model	HINO JO8E-UN
Туре	Direct injection, water-cooled, 4-cycle, 6-cylinder diesel engine with intercooler turbo-charger
No. of cylinders	6
Bore and stroke	112 mm X 130 mm
Displacement	7.684 L
Rated power output	191 kW/2,100 min <sup>-1</sup> (with fan)
	200 kW/2,100 min <sup>-1</sup> (ISO 9249: without fan)
Max. torque	979 N•m/1,600 min <sup>-1</sup> (with fan)
	998 N•m/1,600 min <sup>-1</sup> (ISO 9249: without fan)



## Hydraulic System

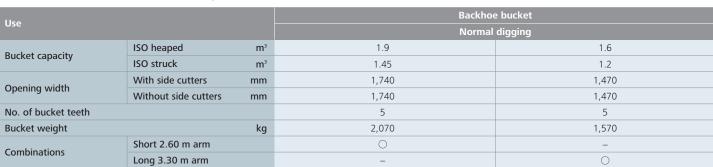
Pump		
Туре	Two variable displacement piston pumps + one gear pump	
Max. discharge flow	2 x 294 L/min, 1 x 21 L/min	
Relief valve setting		
Boom, arm and bucket	34.3 MPa {350 kgf/cm <sup>2</sup> }	
Power Boost	37.8 MPa {385 kgf/cm <sup>2</sup> }	
Travel circuit	34.3 MPa {350 kgf/cm <sup>2</sup> }	
Swing circuit	29.0 MPa {296 kgf/cm <sup>2</sup> }	
Control circuit	5.0 MPa {50 kgf/cm <sup>2</sup> }	
Pilot control pump	Gear type	
Main control valves	8-spool	
Oil cooler	Air cooled type	

# Swing System

Swing motor	Axial-piston mortor
Brake	Hydraulic; locking automatically when the swing control lever is in neutral position
Parking brake	Wet multiple plate
Swing speed	10.2 min <sup>-1</sup> {rpm}

# Attachments

Backhoe bucket and arm combination (reference only)



 $\bigcirc$  Recommended

## 🔚 Travel System

Travel motors	Variable displacement piston pump
Travel brakes	Hydraulic
Parking brakes	Wet multiple plate
Travel shoes	48 each side
Travel speed	5.6/3.3 km/h
Drawbar pulling force	320 kN (SAE)
Gradeability	70% {35°}

# **P** Cab & Control

#### Cab

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 1,550 mm
Arm cylinder	170 mm x 1,788 mm
Bucket cylinder	150 mm x 1,193 mm

## Refilling Capacities & Lubrications

Fuel tank	503 L
Cooling system	35 L
Engine oil	26.0 L
Travel reduction gear	2 x 8.0 L
Swing reduction gear	7.4 L
Hydraulic oil tank	245 L tank oil level
	407 L hydraulic system

### **Specifications**



## Working Ranges

		Unit: m
Boom	6.50 m	
Arm	Short 2.60 m	Standard 3.30 m
a-Max. digging reach	10.61	11.26
b-Max. digging reach at ground level	10.40	11.06
c- Max. digging depth	6.84	7.56
d-Max. digging height	10.23	10.54
e-Max. dumping clearance	7.07	7.37
f- Min. dumping clearance	3.34	2.62
g-Max. vertical wall digging depth	5.70	6.48
h-Min. swing radius	4.46	4.31
i- Horizontal digging stroke at ground level	4.21	5.82
j- Digging depth for 2.4 m (8') flat bottom	6.65	7.40
Bucket capacity ISO heaped m <sup>3</sup>	1.90	1.60

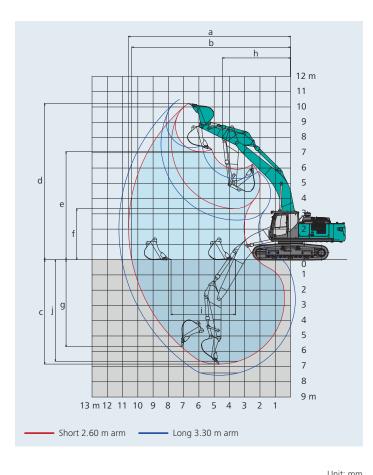
#### Digging Force (ISO 6015)

Digging Force (ISO 6015)		Unit: kN
Arm length	Short 2.60 m	Standard 3.30 m
Bucket digging force	22 25	29 52*
Arm crowding force	207 228*	165 182*

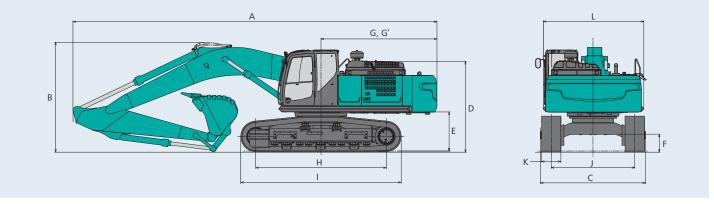
#### \*Power Boost engaged.

## Dimensions

A	rm length	Short 2.60 m	Standard 3.30 m
А	Overall length	11,380	11,290
В	Overall height (to top of boom)	3,690	3,410
С	Overall width	3,260	
D	Overall height (to top of cab)	3,170	
Е	Ground clearance of rear end*	1,210	
F	Ground clearance*	515	



\*Without including height of shoe.

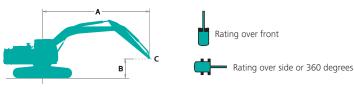


### **Operating Weight & Ground Pressure**

In standard trim, with standard boom, 3.30 m arm, and 1.60 m<sup>3</sup> ISO heaped bucket

Shaped	Triple grouser shoes (even height)
Shoe width mn	600
Overall width mn	3,260
Ground pressure kP	a 72
Operating weight k	38,300

### **Lift Capacities**



A: Reach from swing centerline to arm top

SK380XDLC-10

A: Reach from swing centerline to arm top B: Arm top height above/below ground C: Lift point

Relief valve setting: 34.3 MPa (350 kgf/cm<sup>2</sup>)

SK380XI	CDLC Short arm: 2.60 m Bucket: without Counterweight: 8,590 kg Shoe: 600 mm HD												
$\searrow$	А	3.0 m		4.5 m		6.0 m		7.5	m	At Max. Reach			
в		L	<b>—</b>	┢ ≪-		L	<b>—</b>	L	<b>—</b>	<b>⊢</b>		Radius	
7.5 m	kg									*7,820	*7,820	7.06 m	
6.0 m	kg					*8,360	*8,360	*7,670	*7,670	*7,600	7,050	8.00 m	
4.5 m	kg			*12,020	*12,020	*9,330	*9,330	*8,030	7,640	*7,570	6,180	8.58 m	
3.0 m	kg					*10,480	10,030	*8,580	7,330	*7,640	5,730	8.87 m	
1.5 m	kg					*11,380	9,530	*9,060	7,060	*7,760	5,580	8.89 m	
G.L.	kg			*15,850	13,890	*11,760	9,260	*9,280	6,880	*7,920	5,710	8.66 m	
-1.5 m	kg			*15,040	13,940	*11,490	9,200	*9,020	6,850	*8,050	6,190	8.15 m	
-3.0 m	kg	*16,970	*16,970	*13,400	*13,400	*10,390	9,330			*8,060	7,270	7.29 m	
-4.5 m	kg	*12,820	*12,820	*10,360	*10,360					*7,570	*7,570	5.95 m	

SK380XI	DLC	Short arm: 3.30 m Bucket: without Counterweight: 8,590 kg Shoe: 600 mm HD														
	Α	1.5	5 m	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		At Max. Reach		
в		ł	<b>¢</b> -	ł	<b>¢</b> -	ł	<b>—</b> —	ł	<del>,</del>	ł	<del>,</del>	L	<b></b> -	ł	<del>,</del>	Radius
9.0 m	kg													*5,700	*5,700	6.58 m
7.5 m	kg									*6,870	*6,870			*5,220	*5,220	7.88 m
6.0 m	kg									*6,980	*6,980			*5,040	*5,040	8.72 m
4.5 m	kg					*10,740	*10,740	*8,590	*8,590	*7,460	*7,460	*6,880	5,720	*5,050	*5,050	9.25 m
3.0 m	kg					*13,360	*13,360	*9,840	*9,840	*8,110	7,340	*7,140	5,570	*5,220	5,090	9.52 m
1.5 m	kg					*15,270	14,230	*10,940	9,550	*8,730	7,020	*7,420	5,410	*5,550	4,960	9.54 m
G.L.	kg					*15,900	13,760	*11,570	9,180	*9,120	6,790	*7,540	5,300	*6,130	5,050	9.32 m
-1.5 m	kg			*14,010	*14,010	*15,550	13,670	*11,610	9,030	*9,120	6,680			*7,090	5,400	8.84 m
-3.0 m	kg	*15,940	*15,940	*19,520	*19,520	*14,350	13,810	*10,930	9,070	*8,450	6,730			*7,530	6,170	8.06 m
-4.5 m	kg			*15,830	*15,830	*12,010	*12,010	*9,110	*9,110					*7,420	*7,420	6.86 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.
- 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.

 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.

3. Arm top pin is defined as lift point.

RUCTION MACHINERY CO., LTD.

### STANDARD EQUIPMENT

#### ENGINE

- Engine, HINO J08E-UN, diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12 V 96 Ah)
- Starting motor (24 V 5 kW), 60 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 system
- Straight propel system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- 600 mm HD triple grouser shoe
- Automatic swing brake
- Tow eyes
- Travel alarm
- Lower under cover
- HYDRAULIC
- Arm interflow system
- Auto warm up system

#### **OPTIONAL EQUIPMENT**

Rear view camera

Refilling pump

- Cab guards
- Top quard Rotatory beacon Rear camera

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

### EXCAVATOR REMOTE MONITORING SYSTEM

Remote Monitoring System 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 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)

Note: Remote monitoring system is not applicable in some area due to country regulation of the communication lines or availability of infrastructure

#### 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

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

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. 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 ser

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Inquiries To:



Aluminum hydraulic oil cooler Hydraulic fluid filter clog detector

Five front working lights (Two for boom,

Two control levers, pilot-operated

Detachable two-piece floor mat

Easy-to-read multi-display color monitor

one for right storage box and two for cab)

Intermittent windshield wiper with double-spray washer

Pull-up type front window and removable lower front window

■ N&B piping

**MIRRORS & LIGHTS** 

CAB & CONTROL

Cab light (interior)

Tinted safety glass

Suspension seat

Air suspension seat

Refilling pump

■ 12 V outlet

Automatic air conditione

Emergency escape hammer Excavator Remote Monitoring System

Horn, electric

Luggage tray Large cup holder

Headrest

Handrails

Two rear view mirrors