

# KOBELCO

Hydraulic Excavator

## -11 SERIES

# SK520 LC

Performance  Design

■ Engine Power:

463 hp {345 kW} @ 1,800 rpm  
(SAE NET)

■ Operating Weight:

121,000 lb {54,900 kg}



Complies with the  
latest exhaust  
emission regulations



US EPA  
Tier IV Final



# Performance Design

## PERFORMANCE BY DESIGN

The next generation of KOBELCO excavators brings together superior performance and thoughtful design like never before. Performance enhancements offer greater efficiency and productivity, along with increased speed. Design improvements provide the ultimate in comfort and control.

KOBELCO refuses to compromise by creating machines that meet every challenge.

**4** YEAR  
**KO-PRO+**

4,000 HOUR WARRANTY  
+ KOMES



# EXCEPTIONAL PERFORMANCE JUST GOT EVEN BETTER

## Higher Efficiency, Plus a Tier IV Final Compliant Engine

Our Tier IV Final compliant engine is fitted with a diesel oxidation catalyst (DOC) and an SCR device to control emissions without using a diesel particulate filter (DPF). It has a large-capacity DEF tank, extending intervals between fill-ups.



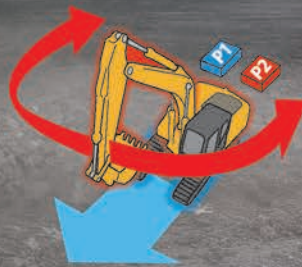
Model: ISUZU 6WG1

### Engine Output

**463 hp {345 kw}/1,800 rpm (SAE NET)**

## Independent Travel

Selecting Independent Travel dedicates one hydraulic pump to travel and one to the attachment on a continuous basis, allowing for a smooth and constant movement speed even while swinging or using the boom or attachment. With Independent Travel, safely carrying a large pipe across a jobsite is a breeze.



Lifting Capacity

**46,540 lb {21,110 kg}**

(11'4" arm, heavy lift, ground level @ 20')

Bucket Digging Force

**72,200 lb {321 kN}**

(11'4" arm with power boost engaged)



# KOBELCO



04:33



SETTING MENU



PICTURE OF  
CAMERA



CLOCK  
SETTING



SCREEN  
BRIGHTNESS



MAINTENANCE



CONSUMPTION



LANGUAGE  
SELECTION



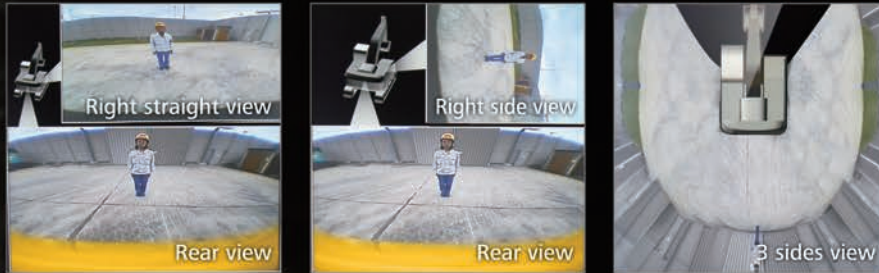
PRESSURE  
RELEASE



# SAFETY ON FULL DISPLAY

## Standard 3 Sides Safety Camera System

Our high-resolution, large display shows right, left and rear side cameras together. Multiple display allows the operator to customize viewing needs to enhance operator awareness and jobsite safety.



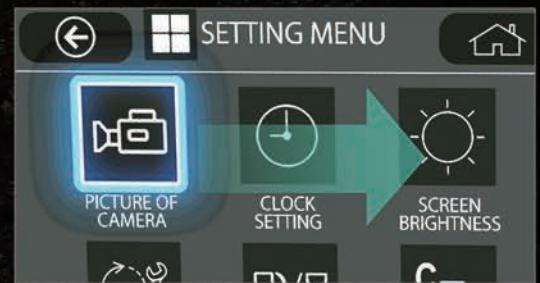
## Large 10-Inch Color Monitor

The easy-to-operate menu screen and recognizable icons assist the operator to select the most important information needed to ensure jobsite safety and machine control.



## Dial in the Right Information

Simply turn the jog dial to the right or left to select an operational feature, then press the dial to confirm selection.







# PREMIER OPERATOR COMFORTS

## Heated Air Ride Suspension Seat

A 7-way adjustable seat achieves excellent shock absorption and superior ride comfort.

## Multi Vent Air Conditioner

Cool air is blown from multiple outlets toward the operator's body for more comfortable operation.

## Ergonomic Lever Angles

Operators can move levers horizontally without twisting their wrists, reducing fatigue.



## Adjustable Height Joysticks

Joystick height is manually adjustable to suit operator's preference.

## LED Interior Light

Interior lights turn on and off automatically when the door is open or the ignition is turned to the OFF position. This ensures safe entry and exit in the dark.

## Tilting Left Side Console

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



# THE ULTIMATE IN SIMPLE DESIGN

In our pursuit of functional beauty and styling, we created an all new interior design focused with the operator in mind.

## Jog Dial

This dial integrates multiple functions into a single, easy to use interface. Even with gloves on, the operator can make the adjustments they need.

## LED Illumination

Dials and buttons are now backlit to provide a bright, clear view in any lighting condition.





# SAFETY AND CONVENIENCE IN EVERY CORNER



**Standard Rear, Left and Right Side Cameras**



**Swing Flashers for a Safer Jobsite**

Standard swing flashers notify ground workers that the machine is swinging.



**Travel Alarm**



**Single Pedal Travel**



**Standard 7 LED Lights**

Bright LED lights ensure visibility even during night work.



**Wire Mesh or Vertical Bar Front Cab Guard (optional)**



**Battery Disconnect Switch with DEF Purge Notification Buzzer**



**Machine Guidance Ready Brackets**

Pre-welded brackets for quicker and easier installation of Machine Guidance Systems.



**Quick Coupler Piping Brackets**



**Adjustable Height Joystick Consoles**

The operator can adjust height of attachment control levers.



**Hands-Free Bluetooth® Phone Calls**



**USB Charging Port / 12V Power Outlet**



**Smartphone Holder**  
Includes USB port for charging.



# Total Support for Machines with Network Speed and Accuracy

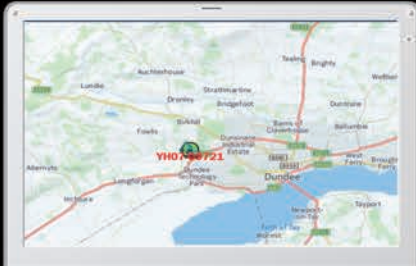
KOMEXS is a telematics system for receiving machine information. Manage your machines anywhere in the world using the Internet. Location, workload and diagnostic data aid business operations.



## Direct Access to Operational Status

### Location Data

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



Latest location

### Fuel Consumption Data

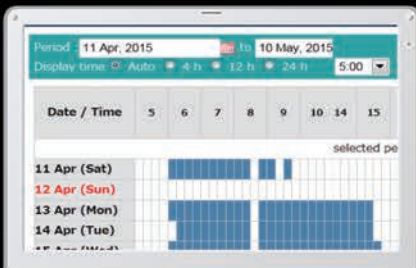
Data on fuel consumption and idling times can be used to indicate improvements in fuel consumption.

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

### 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

### Graph of Work Content

The graph shows how working hours are divided among different operating categories, including digging, idling, traveling, and optional operations (NGB).



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	F
SK135SRLC-3/SK140SRL	YH07-09721	734 Hr	434 Hr	
	0.38/0.35			
SK135SRLC-3/SK140SRL	YH07-09789	73 Hr	429 Hr	
	0.38/0.35			
SK210LC-9	YO13-10454	960 Hr	58 Hr	
	0.8/0.7			
SK210LC-9	YO13-10481	549 Hr	498 Hr	
	0.8/0.7			
SK75SR-	YT08-30374			

### Warning Alerts

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

## Security System

### 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.

# EASY MAINTENANCE



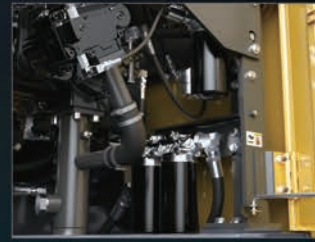
## Catwalks

Step platforms on the left and right side allow for easy access to the upper frame and fold down for ease of transportation.



## Left Side

With an easy-access fuel filter, electromagnetic fuel pump, and sturdy new catwalk as a standard feature, routine maintenance is easier than ever.



## Engine Oil Filter



## Fuel Filter / Pre-Filter with Integrated Water Separator



## Engine Maintenance

Moving the fuel filter to the inside left panel and the engine forward makes them easier to service on the spot. With the new electromagnetic fuel pump, you no longer need to touch the priming pump.



## Air Filter

The greatly increased filtering capacity reduces clogging and extends reserve power and reliability.



## Right Side

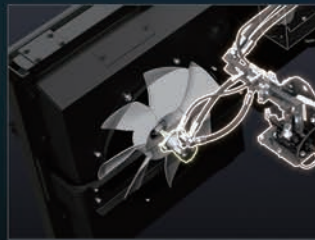
With the flip of a switch from the drivers seat, the standard feature reversing fan pulls air in the opposite direction, blowing debris away to prevent clogging.



## Reversible Fan



## Hydraulic Drive for Engine Cooling Fan, Independent Oil Cooler Fan



## Tilt Opening Top Guard Level II



## DEF Tank

The DEF fill is located inside the locking tool box.



## Counterweight Removal System (Optional)

With less weight during transport, counterweight removal and installation is a safe, one-person job, saving labor and crane rental costs.



## GREATER MULTI-FUNCTION CAPABILITIES

### Attachment Mode Selection

The auxiliary flow rates for the bucket, breaker, nibbler and thumb are all now adjustable by the operator through the monitor, allowing you to change tools quickly and easily. Mode settings for other attachments like the tilt rotator can be added or changed.



# Specifications

## Engine

Model	ISUZU 6WG1
Type	Direct injection, water-cooled, 4-cycle diesel engine with turbocharger, intercooler, Tier IV Final certified
No. of cylinders	6
Bore and stroke	5.8" × 6.1" {147 mm × 154 mm}
Displacement	956.9 cu.in {15.681 L}
Rated power output	463 hp {345 kW} /1,800 rpm (Without fan)
Max. torque	1,460 lb-ft {1,980 N·m} /1,500 rpm (Without fan)

## Hydraulic System

Pump	
Type	Two variable displacement pumps + one gear pump
Max. discharge flow	2 × 97.7 gpm {2 × 370 L/min} 1 × 7.1 gpm {1 × 27 L/min}
Relief valve setting	
Boom, arm and bucket	4,970 psi {34.3 MPa}
Power Boost	5,480 psi {37.8 MPa}
Travel circuit	4,970 psi {34.3 MPa}
Swing circuit	3,770 psi {26.0 MPa}
Control circuit	725 psi {5.0 MPa}
Pilot control pump	Gear type
Main control valve	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	7.5 rpm
Swing torque	139,000 lb-ft {188.4 kN·m}

## Hydraulic P.T.O.

Specification	Output	Maximum pressure psi {MPa}	Max. flow U.S. gpm, {lpm}
			(0 pressure) 1,800 rpm
Auxiliary		4,970 {34.3}	2 × 97.7 {2 × 370}
Rotation		2,990 {20.6}	15.4 {58.5}

## Operating Weight & Ground Pressure

In standard trim, with standard boom, 11'4" {3.45 m} arm, and 2.49 cu.yd. {1.90 m<sup>3</sup>} ISO heaped bucket

Shaped	Triple grouser shoes (even height)	
Shoe width	ft-in {mm}	35.4" {900}
Overall width of crawler	ft-in {mm}	12'0" {3,650}
Ground pressure	psi {kPa}	9.1 {62.7}
Operating weight	lb {kg}	121,000 {54,900}

## Travel System

Travel motors	2 x axial-piston, two-step motors
Travel brakes	Hydraulic brake per motor
Parking brakes	Oil disc brake per motor
Travel shoes	50 each side
Travel speed	3.4/2.0 mph {5.4/3.2 km/h}
Drawbar pulling force	92,200 lb {410 kN}
Gradeability	70% {35°}

## Cab & Control

Cab	
All-weather, sound-suppressed steel cab mounted on 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	6.7" {170 mm} × 5'2" {1,584 mm}
Arm cylinder	7.5" {190 mm} × 6'6" {1,990 mm}
Bucket cylinder	6.3" {160 mm} × 4'8" {1,410 mm}

## Refilling Capacities & Lubrications

Fuel tank	190 U.S.gal {720 L}
Cooling system	18.2 U.S.gal {69 L}
Engine oil	13.7 U.S.gal {52 L}
Travel reduction gear	2 × 4.0 U.S.gal {15 L}
Swing reduction gear	2 × 1.3 U.S.gal {5 L}
Hydraulic oil tank	97.7 U.S.gal {370 L}: Tank oil level
	212 U.S.gal {803 L}: Hydraulic system
DEF tank	21.9 U.S.gal {83 L}



## Working Ranges

Unit: ft-in (m)

Boom	23'0" (7.0 m)		
Arm	Standard	Semi Long	Long
Range	11'4" (3.45 m)	13'3" (4.04 m)	16'1" (4.90 m)
a- Max. digging reach	39'7" (12.07)	41'1" (12.51)	43'10" (13.37)
b- Max. digging reach at ground level	38'11" (11.85)	40'4" (12.30)	43'3" (13.17)
c- Max. digging depth	25'6" (7.77)	27'5" (8.36)	30'3" (9.22)
d- Max. digging height	36'0" (10.98)	35'8" (10.87)	37'2" (11.34)
e- Max. dumping clearance	25'0" (7.62)	24'10" (7.58)	26'4" (8.02)
f- Min. dumping clearance	9'2" (2.79)	7'3" (2.20)	4'5" (1.34)
g- Max. vertical wall digging depth	23'2" (7.07)	23'5" (7.13)	26'8" (8.13)
h- Min. swing radius	17'1" (5.21)	17'4" (5.29)	17'5" (5.31)
i- Horizontal digging stroke at ground level	19'10" (6.05)	22'9" (6.93)	26'9" (8.15)
j- Digging depth for 8' (2.4 m) flat bottom	25'0" (7.62)	27'0" (8.23)	29'11" (9.11)
Bucket capacity SAE heaped cu.yd. (m <sup>3</sup> )	2.49 (1.90)	2.09 (1.60)	1.77 (1.35)

## Digging Force (ISO 6015)

Unit: lb (kN)

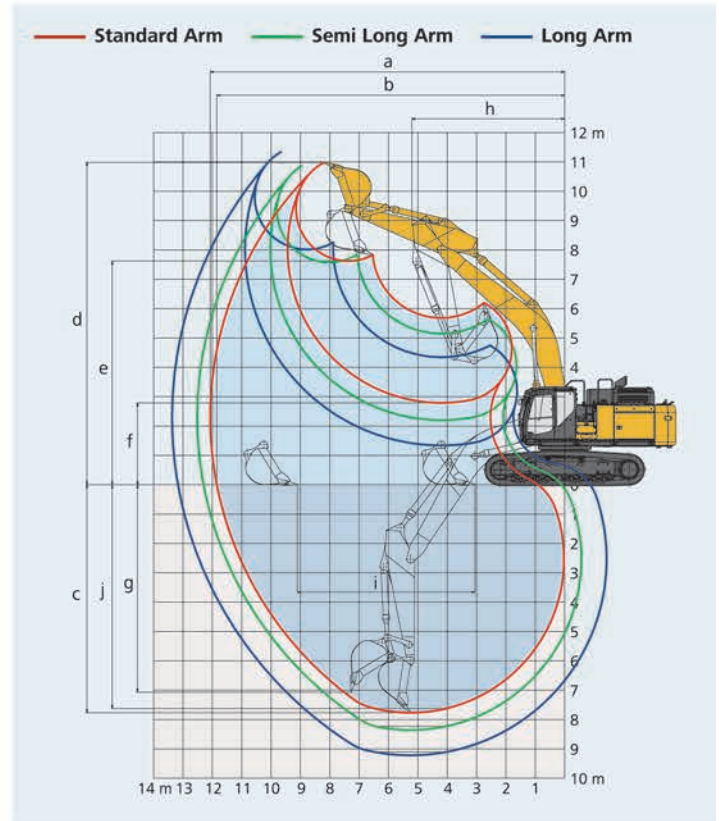
Arm length		Standard	Semi Long	Long
		11'4" (3.45 m)	13'3" (4.04 m)	16'1" (4.90 m)
Bucket digging force	SAE		57,300 (255) 63,200 (281)*	
	ISO	65,600 (292) 72,200 (321)*	64,700 (288) 71,300 (317)*	64,700 (288) 71,300 (317)*
Arm crowding force	SAE	47,700 (212) 52,400 (233)*	43,600 (194) 47,900 (213)*	38,000 (169) 41,800 (186)*
	ISO	49,500 (220) 54,400 (242)*	45,000 (200) 49,200 (219)*	38,900 (173) 42,700 (190)*

\*Power Boost engaged.

## Dimensions

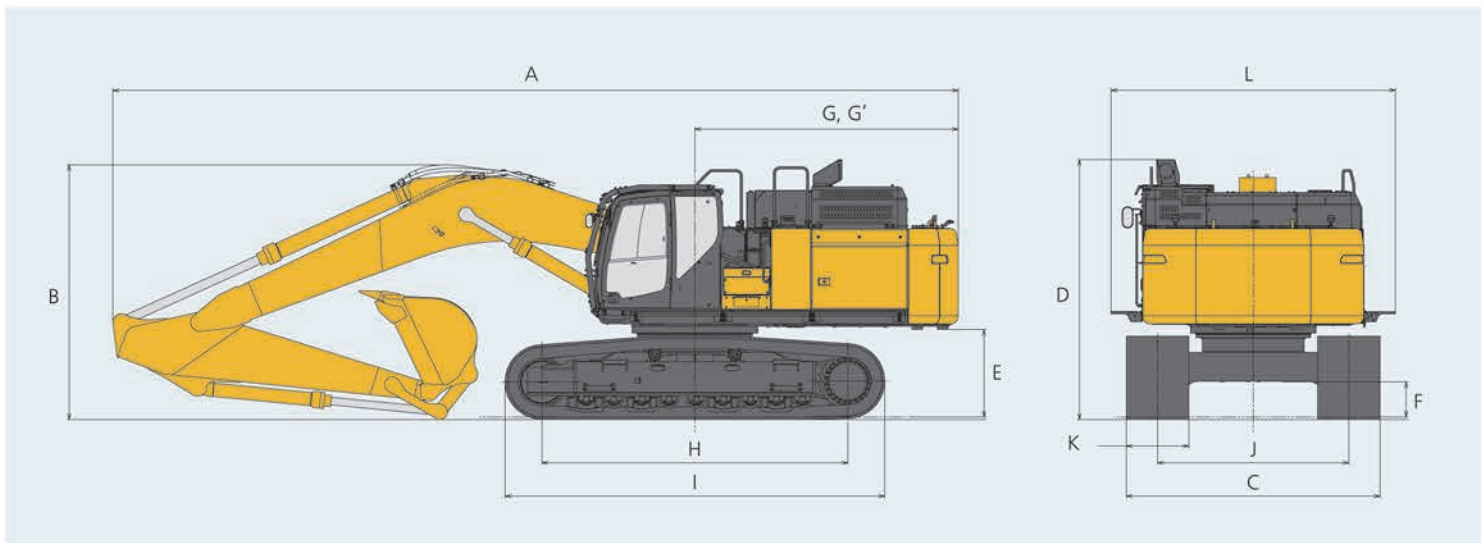
Unit: ft-in (mm)

Arm length	Standard	Semi Long	Long
	11'4" (3.45 m)	13'3" (4.04 m)	16'1" (4.90 m)
A Overall length	39'11" (12,160)	40'3" (12,260)	40'5" (12,330)
B Overall height (to top of boom)	12'0" (3,670)	12'7" (3,830)	14'5" (4,400)
C Overall width		12'0" (3,650)**	
D Overall height (to top of muffler guard)		12'3" (3,740)	
E Ground clearance of rear end*		4'2" (1,260)	
F Ground clearance*		20.1" (510)	

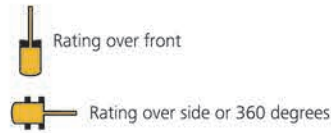
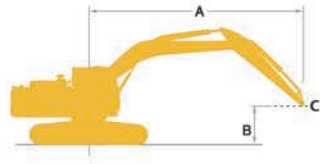


G Tail swing radius	12'9" (3,880)
G' Distance from center of swing to rear end	12'5" (3,790)
H Tumbler distance	14'5" (4,400)
I Overall length of crawler	17'11" (5,460)
J Track gauge	9'0" (2,750)
K Shoe width	35.4" (900)
L Overall width of upperstructure	13'5" (4,090)

\*Without including height of shoe lug. \*\*Shoe width: 35.4" (900 mm)



# Lift Capacities



A - Reach from swing centerline to arm top  
 B - Arm top height above/below ground  
 C - Lift point (kg)  
 Relief valve setting: 4,970 psi (34.3 MPa)  
 Relief valve setting (Heavy Lift): 5,480 psi (37.8 MPa)

SK520LC Standard arm		Boom: 23'0" (7.0 m) Arm: 11'4" (3.45 m) Without bucket: Counterweight: 21,600 lb (9,800 kg) Shoe: 35.4" (900 mm) (Heavy Lift)													
A		10' (3.0 m)		15' (4.6 m)		20' (6.1 m)		25' (7.6 m)		30' (9.1 m)		At max. reach		Radius	
B															
30' (9.1 m)	lb (kg)														
25' (7.6 m)	lb (kg)														
20' (6.1 m)	lb (kg)														
15' (4.6 m)	lb (kg)														
10' (3.0 m)	lb (kg)														
5' (1.5 m)	lb (kg)														
G.L.	lb (kg)														
-5' (-1.5 m)	lb (kg)														
-10' (-3.0 m)	lb (kg)														
-15' (-4.6 m)	lb (kg)														

SK520LC Semi long arm		Boom: 23'0" (7.0 m) Arm: 13'3" (4.04 m) Without bucket: Counterweight: 21,600 lb (9,800 kg) Shoe: 35.4" (900 mm) (Heavy Lift)																
A		5' (1.5 m)		10' (3.0 m)		15' (4.6 m)		20' (6.1 m)		25' (7.6 m)		30' (9.1 m)		35' (10.7 m)		At max. reach		Radius
B																		
30' (9.1 m)	lb (kg)																	
25' (7.6 m)	lb (kg)																	
20' (6.1 m)	lb (kg)																	
15' (4.6 m)	lb (kg)																	
10' (3.0 m)	lb (kg)																	
5' (1.5 m)	lb (kg)																	
G.L.	lb (kg)																	
-5' (-1.5 m)	lb (kg)																	
-10' (-3.0 m)	lb (kg)																	
-15' (-4.6 m)	lb (kg)																	
-20' (-6.1 m)	lb (kg)																	



# Standard and Optional Equipment

●=Std ○=Opt

Category	Description	SK520LC-11
Engine	ISUZU 6WG1 (Tier IV Final certified)	●
	Auto engine acceleration/deceleration	●
	Auto Idle Stop	●
Hydraulic system	3 work modes H, S, Eco	●
	Power boost	●
	Heavy lift mode	●
	Hydraulic Pressure Release	●
	Independent travel	●
	Swing priority	●
	Boom to arm regeneration	●
	Auto warm-up system	●
	Bi-direction (proportional hand control) and single-direction auxiliary hydraulics (nibbler and breaker)	●
	Rotation hydraulics with proportional hand control	○
	Hydraulic oil VG46	●
Cabin	Air suspension seat with heat	●
	10-inch color monitor	●
	LED door light	●
	Automatic climate control	●
	Radio (AM/FM, AUX, USB, Bluetooth® and hands-free telephone)	●
	12V power outlet	●
Lights	7 LED work lights: 2 on boom, 2 on cab front, 2 on rear counterweight, 1 on front right	●
Working equipment	Standard HD boom 23'0" (7.0 m) with boom cylinder	●
	Standard HD arm 11'4" (3.45 m) with rock guard	●
	Semi long HD arm 13'3" (4.04 m) with rock guard	○
	Long HD arm 16'1" (4.90 m) with rock guard	○
Counterweight	Standard C/W 21,600 lb (9,800 kg) with swing flashers	●
	Removable Counterweight	○
Undercarriage	35.4" (900 mm) triple grouser shoe	●
	35.4" (900 mm) single grouser shoe	○
	Additional track guides (two additional per side)	●
	Lower swivel guard	●
Safety	ROPS cab (ISO 12117-2:2008)	●
	Tilt opening top cab guard (Top guard level II ISO 10262:1998)	●
	Bar-type front guard (Front guard level II ISO 10262:1998)	○
	Mesh-type front guard (Front guard level I ISO 10262:1998)	○
	Engine emergency stop switch	●
	3-inch retractable seat belt	●
	Seatbelt indicator on display	●
	Travel alarm	●
	Swing flashers in counterweight	●
	Left and right side mirrors	●
	3-side 270-degree camera system	●
	Hose burst valve for boom and arm cylinder	○
	Others	Angled upper deck guards
Catwalk (Left & Right Side)		●
Reversible Fan		●
Machine Guidance ready brackets		●
Quick coupler piping ready brackets		●
ISO to BHL pattern changer		●
Battery disconnect switch		●
KOMEXS Machine Monitoring		●
4 Year or 4,000 Hour Warranty		●
Single pedal travel		●

Note: Bluetooth® is a registered trademark of the Bluetooth SIG Inc.

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.

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