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.

KOBELCO CONSTRUCTION MACHINERY U.S.A. INC.
4690 World Houston Parkway Houston, TX 77032
http://www.kobelco-usa.com/

Inquiries To:

KOBELCO

SK850LC-9

Hydraulic Excavators

SK850LC

- Bucket Capacity:
  2.53 –7.06 cu yd (1.93 – 5.4 m³) SAE heaped
- Engine Power:
  510 HP (380 kW)/1,800 min⁻¹ (SAE J 1309)
- Operating Weight:
  181,440 lb (82,300 kg)
  with 14' 5" (4.4 m) arm

ENDLESS EVOLUTION

KOBELCO fuel economy just keeps getting better. The “Three E’s” concept that gave birth to the Acera Geospec series (Enhancement, Economy, Environment) has been further refined to reduce the emission of PM & NOx, minimize fuel consumption to incredible new lows, and create a new breed of hydraulic excavator on the cutting edge of performance.
The SK850LC meets increasingly stringent environmental requirements while delivering revolutionary, next-generation operation.
To offset the cost of reducing the machine’s environmental impact, we’ve cut running costs in quick response to modern needs.
Through our endless evolution of fuel economy, we continue to create value for our customers, the KOBELCO way.

Pursuing The “Three E’s”

Enhancement

•High productivity resulting from lower fuel costs
•New environmental engine and energy-efficient hydraulic circuit improve fuel efficiency

Economy

•New ECO mode greatly reduces fuel consumption
• Low-maintenance design reduces operating costs
•High structural durability and reliability boost machine resale value

Environment

•New design achieves low vibration and low noise levels (including improvements in sound quality)

More Work with Less Fuel!!

New, Environmentally Friendly Engine

Fuel efficiency
(ECO mode, compared with S mode on Tier III machines)
About **17% reduction**

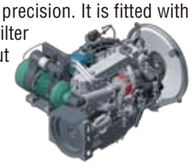
The new ECO mode provides a maximum of about a 17% reduction in fuel consumption.

PM Reduction
(Compared with Tier III models)
About **88% reduction**

Since the adoption of 2006 regulations, PM emissions have been reduced by about 88%, and NOx emissions by about 44%.

Next-Generation Electronic Engine Control

The new electronic-control common-rail engine features high-pressure fuel injection and multiple injection with improved precision. It is fitted with an EGR cooler, and DP filter which deliver high output from optimized combustion and greatly reduce PM and NOx emissions.



PM emissions cut:

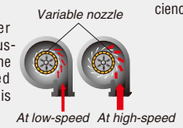
Limits creation of particulate matter (which results from incomplete combustion of fuel) (Complies with Interim Tier IV)

■Common rail system

High-pressure injection atomizes the fuel, and injection timing is more precise, improving combustion efficiency.

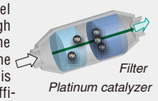
■VG Turbo

The variable-geometry turbocharger adjusts air intake to maximize combustion efficiency. At low engine speeds the nozzles are closed, the turbo speed increased and air intake is boosted. This helps lower fuel consumption.



■DP filter

Carbon builds up as soot on the diesel particulate filter and is burned off at high temperature. At low engine speeds the exhaust temperature is too low, and the common rail multiple injection system is then used to raise the temperature sufficiently to burn off the soot.

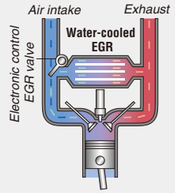


NOx emissions cut:

Reduces nitrous oxides (created by reaction with oxygen at high temperature)

■EGR cooler

While ensuring sufficient oxygen for combustion, cooled emission gases are mixed with the air intake and re-circulated into the engine. The lowered oxygen temperature lowers the combustion temperature and increases combustion efficiency.



** Normally, re-circulation occurs automatically. Under certain circumstances, however, it must be done manually using a switch.*

Energy-Efficient System

ECO-mode

Work modes for a closer match to the job in hand. An addition to the existing H-mode and S-mode, the new ECO-mode saves even more energy.

H-mode
For heavy duty when a higher performance level is required.

S-mode
For normal operations with lower fuel consumption.

ECO-mode
Puts priority on low fuel consumption and economic performance.

Fuel Savings in Each Mode

(Compared with Tier III models)

H: About **3.5%** improvement
S: About **8.5%** improvement
E: About **17%** improvement, compared with Tier III S mode

Big Power, Little Fuel for Unbeatable Cost Performance

Working Volume Per Unit Fuel
(ECO mode, compared with S mode on Tier III machines)
11% increase

Max. Arm Crowding Force (SAE/ISO)
59,120lbf (263kN)/**61,148**lbf (272kN)

Max. Bucket Digging Force (SAE/ISO)
79,582lbf (354kN)/**9 0,598**lbf (403kN)

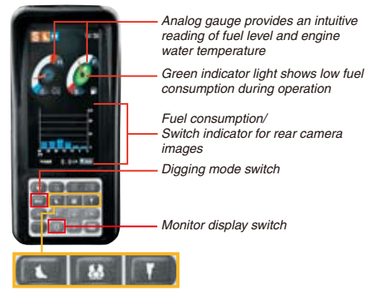
Top-of-Class Working Ranges

Max. digging reach:	**47′ 10″** (14,560mm)
Max. digging depth:	**31′ 10″** (9,700mm)
Max. vertical wall digging depth:	**31′ 10″** (7,480 mm)

Value are for 14′ 5″ (4.4m) arm

Multi-Display Color Monitor for Easy Checking

An LCD multi-display color monitor is fitted as standard. Operations data as well as the full range of machine-status data can readily be checked.



Maintenance


Fuel consumption


Rearview monitoring

One-Touch Attachment Mode Switch

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.

Cab Design That Puts the Operator First

Comfort

Big Cab

The big cab provides a roomy operating space with plenty of legroom, and the door opens wide for entry and exit. As well as giving a wide, open view to the front, the cab has increased window areas on both sides and to the rear, for improved visibility in all directions.

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.

Wide-Access Cab Aids Smooth Entry and Exit

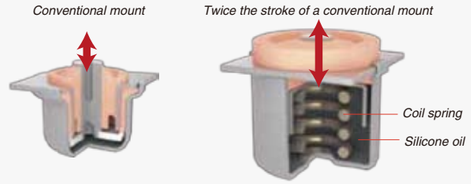
Easy entry and exit assured with wider cab entry and safety lock lever integrated with mounting for control levers.

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.

Vibration control compared with previous models

- When traveling: about **30%** reduction
- When digging: about **30%** to **50%** reduction



Safety

- Wiper is stored out of sight when not in use to maintain a clear view
- Greater safety assured by rearview mirrors on left and right, and a third mirror mounted at lower right

Rear View Camera

A rear view camera is installed as standard to simplify checking for safety behind the machine. The picture appears on the color monitor.

Safety Features Take Various Scenarios into Consideration

Hammer for emergency exit

Retractable seatbelt requires no manual adjustment

Firewall separates the pump compartment from the engine

- *Handrails meet ISO standards*
- *Thermal guard prevents contact with hot components during engine inspections*
- *Travel alarm*

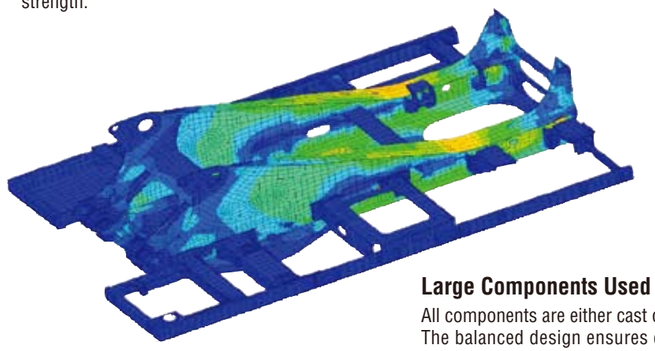
The Value and Quality of Sturdy Construction

Stable Attachment Strength

All components are either cast or forged, with HD type boom and arm provided as standard equipment. The balanced design ensures excellent durability even when using a large bucket, providing highly reliable attachment strength.

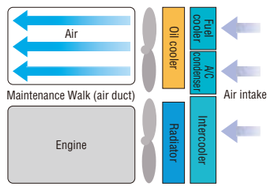
Upper Frame with High Structural Strength

FEM analysis was used determine the best materials, select the steel plate, and create a high-strength design to resulting in an upper frame that features high structural strength.



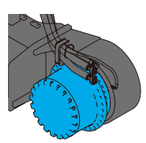
New Cooling System

The cooling fan changes speed automatically according to the temperature of the cooling water in the radiator. This prevents overheating when the water temperature rises, allowing continuous, high-load operation. When the water temperature falls, the cooling system operates very quietly. Contributing to both low noise and low fuel consumption.



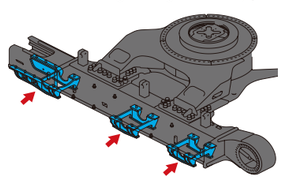
Large Components Used in the Crawler Frame

All components are either cast or forged, with HD type boom and arm provided as standard equipment. The balanced design ensures excellent durability even when using a large bucket, providing highly reliable attachment strength.



Reinforce Travel Reduction Gear Cover

A high-strength protective cover enhances the durability of the travel reduction gear.

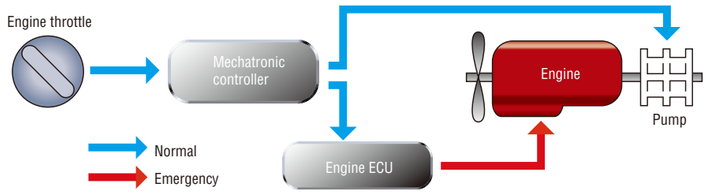


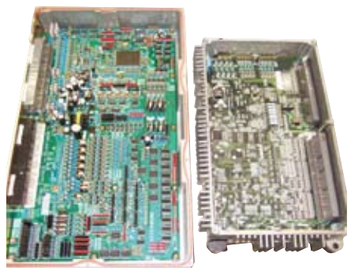
Track Guide Installed in Three Places

Track guides installed in three different places improve travel stability and help prevent the crawlers from coming off the rollers. More track guides can be installed as an option.

Emergency Acceleration (Dial) Permits Continued Operation in the Unlikely Event of Malfunction

If the mechatronic system should happen to malfunction, the ECU will automatically put the engine into high idle (maximum RPM), allowing the operator to continue working until a service specialist can come to repair the machine. During emergency operation, the hydraulic pumps automatically sense any trouble and control hydraulic flow accordingly.





MCU

Conventional MCU

Newly designed MCU (Micro Computer Unit)

- Vertical alignment and sealed cover gives better protection from water and dust
- Integration in base plate boosts assembly quality

Countermeasures Against Electrical System Failure

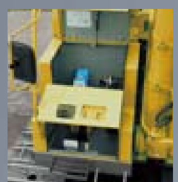
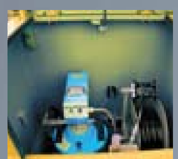
All elements of the electrical system, including controller, have been designed for enhanced reliability.

Emergency Acceleration Feature

In the unlikely event of an ITCS control system malfunction, the emergency acceleration feature enables the operator to control the engine directly. The machine' s backup system automatically switches to emergency operation mode.

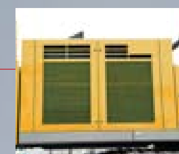
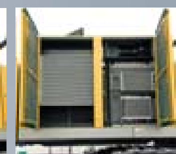
Easy Maintenance That Supports Large-Scale Operation

Auto-Coil Grease Gun Holder
- *Grease tank*
- *Lubrication hose*
- *Fuel tank drain valve*

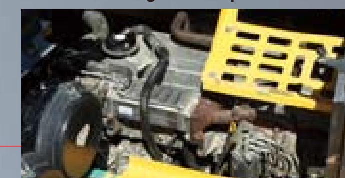



• Air cleaner

Bolted Double Service Doors Open and Close Easily
• Intercooler • A/C condenser • Fuel cooler • Radiator • Oil cooler

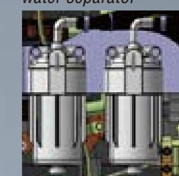



Around the Engine Compartment

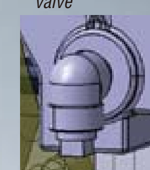


• Fuel filter

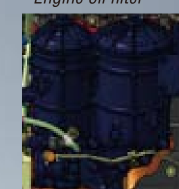
• Fuel pre-filter with water separator

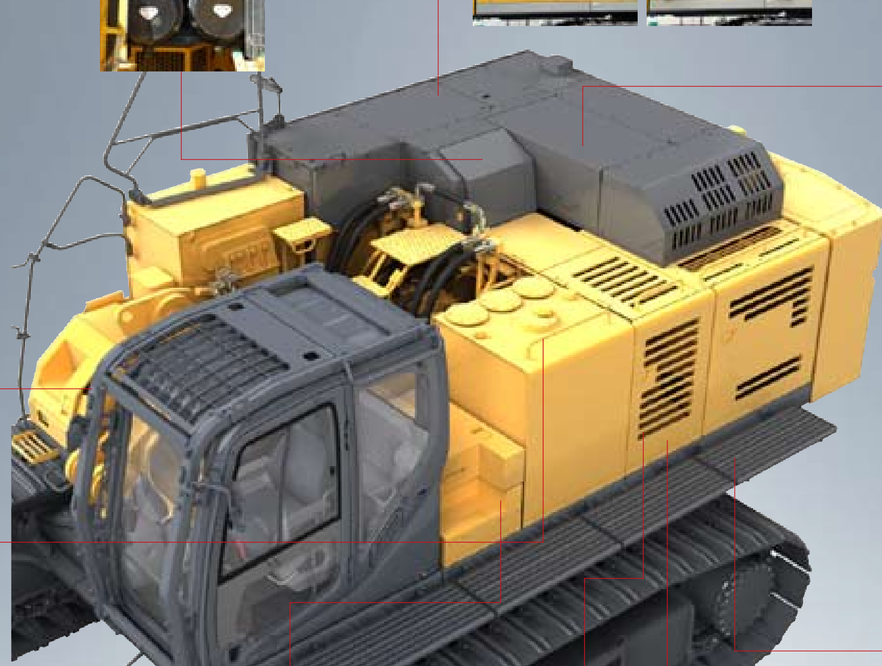


• Engine oil drain valve



• Engine oil filter

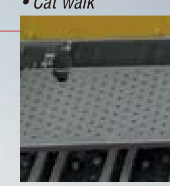




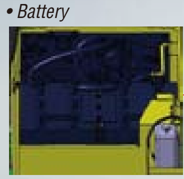
Simple Filtration
• Hydraulic oil filter x 3

• Suction filter

• Cat walk



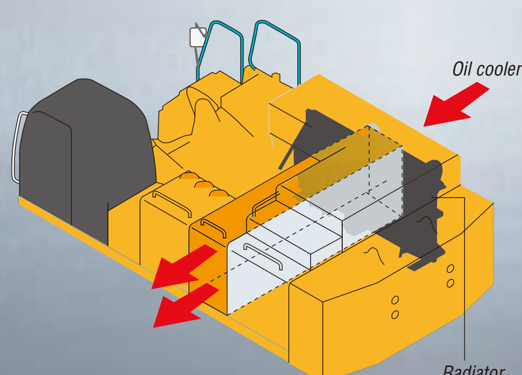
• Battery



• Drain filter

• Large tool box

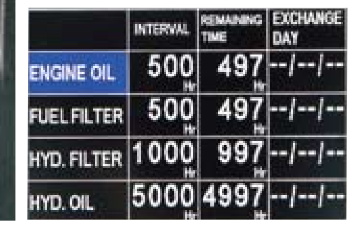
Maintenance Walk Serves as a Air Duct During Operation
KOBELCO's unique design covers the maintenance walk to create an air duct that helps to keep the radiator cool during machine operation.



Easy Inspection of Swing Bearing, Gear and Bolt
A small access port is located in front of the upper frame to make it easier to inspect the swing bearing, gear and bolt.

Monitor Display with Essential Information for Accurate Maintenance Checks

- Displays only the mainte nance information that's needed, when it's needed tion and display of electrical system malfunctions
- Record function of previous breakdowns including irregular and transient malfunction



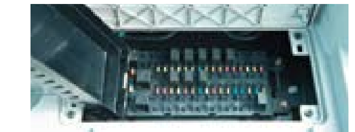
Easy Cleaning

Crawler frame
Special crawler frame design is easily cleaned of mud.


Fuel tank
Fuel tank equipped with bottom flange and large drain valve.

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

More Efficient Maintenance Inside the Cab



Easy-access fuse box
More finely differentiated fuses make it easier to locate malfunctions.

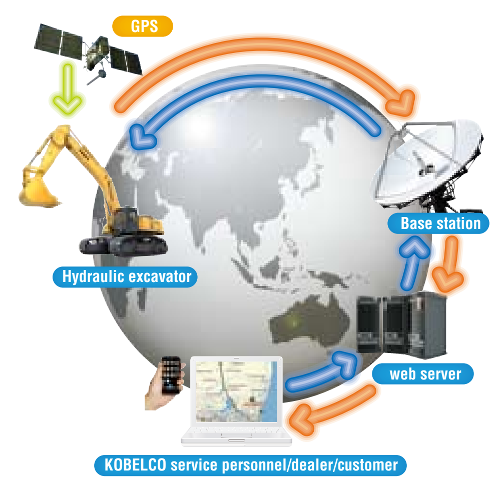
Hour meter
Hour meter can be checked while standing on the ground.

DPF reactivation switch
If manual regeneration warning goes off, the filter should be reactivated manually using a switch.

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

Total Support for Machines with Network Speed and Accuracy

Our "Machine Operation Management System" allows you to use the Internet to manage information from your office for machines operating in all areas. Be prepared for any problems with strategic information and cost management. This provides a wide range of support for your 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 profitability.
- 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 consump-tion.

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).

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.

Security System

Operation Alarm
- The system can be set an alarm if the machine is operated outside designated hours.

Area Alarm
- It can also be set so that an alarm if the machine is moved out of its designated area to another location.

Excellent Transportability

Four Disassembly and Transport Patterns

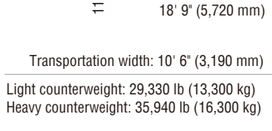
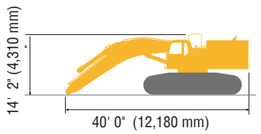
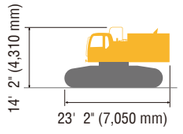
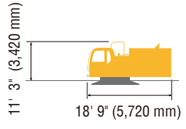
The SK850LC can be disassembled and transported in four different ways, including: no counterweight, with boom attached; main body only; main body without crawler frame; etc.

Variable Gauge Crawler

The variable gauge crawler extends the crawlers for extremely stable operation, and retracts them for easier transport.

Crawler Width

Shoe	29.5" (750 mm)	35.4" (900 mm)
Extended	14' 1" (4,300 mm)	14' 7" (4,450 mm)
Retracted	12' 0" (3,650 mm)	12' 6" (3,800 mm)

Configuration	Description	Total weight
Plan 1  Transportation with: 12' 0" (3,650 mm)/ 29.5" (750 mm) shoe 12' 6" (3,800 mm)/ 35.4" (900 mm) shoe	Base machine without counterweight and bucket, with lower structure, 27' 1" (8.25 m) boom and 11' 10" (3.6 m) arm	138,300 lb (62,700 kg)
Plan 2  Transportation with: 12' 0" (3,650 mm)/ 29.5" (750 mm) shoe 12' 6" (3,800 mm)/ 35.4" (900 mm) shoe	Base machine without counterweight, bucket and arm, with lower structure and 27' 1" (8.25 m) boom	129,000 lb (58,500 kg)
Plan 3  Transportation with: 12' 0" (3,650 mm)/ 29.5" (750 mm) shoe 12' 6" (3,800 mm)/ 35.4" (900 mm) shoe	Base machine with lower structure, without counterweight, bucket, arm and boom,	107,600 lb (48,800 kg)
Plan 4  Transportation width: 10' 6" (3,190 mm)	Base machine with lcarbody, without counterweight, bucket, bucket, arm, boom and lower structure	54,900 lb (24,900 kg)

Light counterweight: 29,330 lb (13,300 kg)
Heavy counterweight: 35,940 lb (16,300 kg)

Engine

Model	HINO E13CVV
Type	Direct injection, water-cooled, 4-cycle electronically-common rail system diesel engine with turbocharger (for high sulfer fuel) (Complies with Interim Tier IV)
No. of cylinders	6
Bore and stroke	5.39 in (137 mm) x 5.75 in (146 mm)
Displacement	788 cu-in (12.913 L)
Rated power output	510 HP (380 kW)/1,800 min^{-1} (SAE J 1309)
Max. torque	1,564 lbs-ft (2,120 N·m)/1,350 min^{-1} (SAE J 1309)
Electrical system	D. C. , 24V
Starter	7 kW, 24 V
Alternator	24 V, 60 A
Batteries	2 x 12 V, 190H52

Hydraulic System

Pump	
Type	Three variable displacement pumps + one gear pump
Max. discharge flow	2 x 133 US gal/min 504 L/min), 1 x 7.93 US gal (30 L/min)
Relief valve setting	
Boom, arm and bucket	4,786 psi (33.0 MPa)
Travel circuit	4,786 psi (33.0 MPa)
Swing circuit	3,756 psi (25.9 MPa)
Control circuit	725 psi (5.0 MPa)
Pilot control pump	Gear type
Main control valve	6-spool
Oil cooler	Air cooled type

Swing System

Swing motor	Two 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	7.3 min^{-1} (rpm)
Swing torque	197,200 lb-ft (268 kN·m)
Tail swing radius	15' 0" (4,580 mm)
Min. front swing radius	20' 10" (6,340 mm)

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	51 each side
Travel speed	2.7/1.7 mph (4.2/2.7 km/h)
Drawbar pulling force	143,200 lbf (637 kN) (SAE J 1309)
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

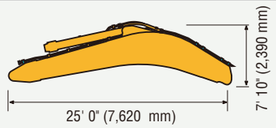
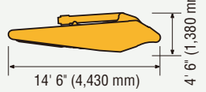
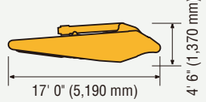
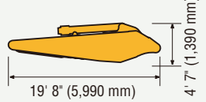
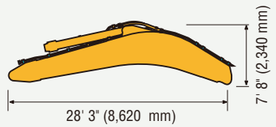
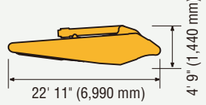
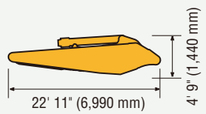
Boom cylinders	8" x 5' 11" (210 mm x 1,800 mm)
Arm cylinder	9" x 7' 2" (220 mm x 2,175 mm)
Bucket cylinder	8" x 5' 2" (200 mm x 1,570 mm)

Refilling Capacities & Lubrications

Fuel tank	254 gal (960 L)
Cooling system	19.6 gal (74 L)
Engine oil	14.3 gal (54 L)
Travel reduction gear	2 x 5.8 gal (22 L)
Swing reduction gear	2 x 2.1gal (8 L)
Hydraulic oil tank	125 gal (473 L) tank oil level 226 gal (856 L) hydraulic system

Attachments

Backhoe Bucket and Arm Combination

Boom	Arm	Application
23' 9" (7.25 m) Short Boom	**9' 6" (2.9 m)**	23' 9" (7.25 m) Short Boom + 9' 6" (2.9 m) ME Arm Application
Weight: 17,770 lb (8,060 kg)	Weight: 8,970 lb (4,070 kg)	
		
27' 1" (8.25 m) Standard Boom	**9' 6" (2.9 m)**	9' 6" (2.9 m) Arm Application
Weight: 18,610 lb (8,440 kg)	Weight: 8,970 lb (4,070 kg)	
		
	11' 10" (3.6 m)	11' 10" (3.6 m) Arm Application
	Weight: 9,210 lb (4,180 kg)	
		
	**14' 5" (4.4 m)**	14' 5" (4.4 m) Arm Application
	Weight: 10,280 lb (4,660 kg)	
		
	17' 9" (5.4 m)	17' 9" (5.4 m) Arm Application
	Weight: 11,670 lb (5,300 kg)	
		

Bucket Selection Chart

Boom length				27' 1" (8.25 m)				23' 9" (7.25 m)
Bucket Type	**Capacity (SAE) cu yd (m³)**	**Width in (m)**	**Weight lb (kg)**	**9' 6" (2.9 m) Arm**	**11' 10" (3.6 m) Arm**	**14' 5" (4.4 m) Arm**	**17' 9" (5.4 m) Arm**	**9' 6" (2.9 m) ME Arm**
Light Duty	7.06 (5.4)	98 (2.5)	8,000 (3,630)	X	X	X	X	L
Heavy Duty	2.53 (1.93)	42 (1.07)	6,403 (2,904)	H	H	H	H	H
	3.00 (2.29)	48 (1.22)	6,803 (3,086)	H	H	H	H	H
	3.48 (2.66)	54 (1.37)	7,203 (3,267)	H	H	H	M	H
	3.96 (3.03)	60 (1.52)	7,780 (3,529)	H	H	M	M	H
	4.45 (3.40)	66 (1.68)	8,180 (3,710)	H	H	M	L	H
	4.94 (3.78)	72 (1.83)	8,580 (3,892)	M	M	L	X	H
	5.91 (4.52)	84 (2.13)	9,557 (4,335)	L	L	X	X	M
Extra Heavy Duty	1.78 (1.36)	35 (0.89)	5,619 (2,549)	H	H	H	H	H
	2.47 (1.89)	45 (1.14)	6,.470 (2,935)	H	H	H	H	H
	3.26 (2.50)	56 (1.42)	7,211 (3,271)	H	H	H	M	H
	3.99 (3.05)	66 (1.68)	8,061 (3,656)	H	H	M	M	H
	4.43 (3.39)	72 (1.83)	8,466 (3,840)	H	M	L	L*	H
	5.30 (4.05)	84 (2.13)	9,557 (4,335)	L	L	X	X	M

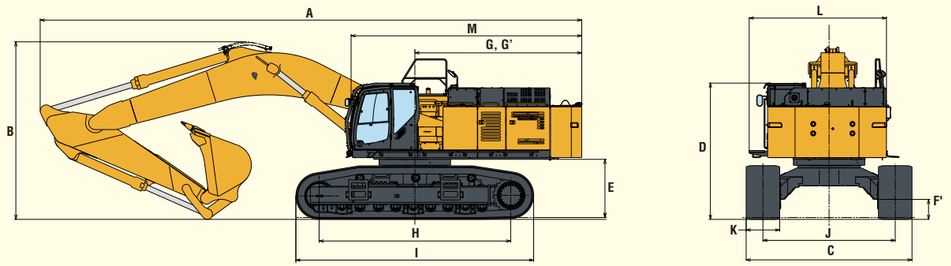
H: Used with material weight up to 3,000 lbs/cu yd (1,780 kgf/m³)
M: Used with material weight up to 2,500 lbs/cu yd (1,483 kgf/m³)
L: Used with material weight up to 2,000 lbs/cu yd (1,186 kgf/m³)
L: Use for loading or light-duty digging*
X: Not recommended

Dimensions

Unit: ft-in (mm)

Arm length				9' 6" (2.9 m)	11' 10" (3.6 m)	14' 5" (4.40 m)	17' 9" (5.40 m)	9' 6" (2.9 m)
Boom length				27' 1" (8.25 m)				23' 9" (7.25 m)
A	**Overall length**		ft-in (mm)	47' 11" (14,600)	47' 8" (14,530)	47' 6" (14,480)	46' 8" (14,220)	4' 7" (13,590)
B	**Overall height (to top of boom)**		ft-in (mm)	15' 10" (4,830)	15' 7" (4,760)	16' 11" (5,160)	18' 10" (5,750)	16' 0" (4,850)
C	**Overall width of crawler**	**Extended**	ft-in (mm)	14' 7" (4,450)				
		Retracted	ft-in (mm)	12' 6" (3,800)				
D	**Overall height (to top of cab)**		ft-in (mm)	12' 0" (3,660)				
E	**Ground clearance of rear end***		ft-in (mm)	5' 1" (1,560)				
F	**Ground clearance***		ft-in (mm)	2' 9" (850)				
G	**Tail swing radius**		ft-in (mm)	15' 0" (4,580)				
G'	**Distance from center of swing to rear end**		ft-in (mm)	14' 8" (4,480)				
H	**Tumbler distance**		ft-in (mm)	16' 10" (5,140)				
I	**Overall length of crawler**		ft-in (mm)	20' 11" (6,380)				
J	**Track gauge**	**Extended**	ft-in (mm)	11' 8" (3,550)				
		Retracted	ft-in (mm)	9' 6" (2,900)				
K	**Shoe width**		in (mm)	35.4" (900)				
L	**Overall width of upperstructure**		ft-in (mm)	12' 1" (3,680)**				
M	**Overall length of upperstructure**		ft-in (mm)	10' 6" (6,350)***				

* Without including height of shoe lug **With catwalk ***With cab guard



Operating Weight & Ground Pressure

In standard trim, with 27' 1" (8.25 m) standard boom, 9' 6" (2.9 m) arm, 6.0 cu yd (4.6 m³) SAE heaped bucket and heavy counterweight

Shaped		Double grouser shoes (even height)	
Shoe width	**in (mm)**	29.5 (750)	35.4 (900)
Overall width of crawler	**ft-in (mm)**	14' 1" (4,300)	14' 7" (4,450)
Ground pressure	**psi (kPa)**	14.1 (97)	11.9 (82)
Operating weight	**lb (kg)**	182,100 (82,600)	184,520 (83,700)

IIn standard trim, with 27' 1" (8.25 m) standard boom, 11' 10" (3.6 m) arm, 4.58 cu yd (3.5 m³) SAE heaped bucket and heavy counterweight

Shaped		Double grouser shoes (even height)	
Shoe width	**in (mm)**	29.5 (750)	35.4 (900)
Overall width of crawler	**ft-in (mm)**	14' 1" (4,300)	14' 7" (4,450)
Ground pressure	**psi (kPa)**	14.1 (97)	11.9 (82)
Operating weight	**lb (kg)**	181,880 (82,500)	184,300 (83,600)

In standard trim, with 27' 1" (8.25 m) standard boom, 14' 5" (4.4 m) arm, 3.66 cu yd (2,8 m³) SAE heaped bucket and heavy counterweight

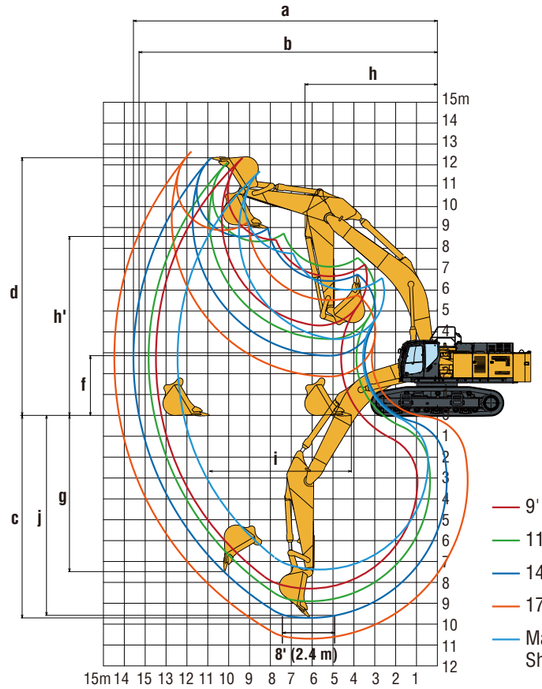
Shaped		Double grouser shoes (even height)	
Shoe width	**in (mm)**	29.5 (750)	35.4 (900)
Overall width of crawler	**ft-in (mm)**	14' 1" (4,300)	14' 7" (4,450)
Ground pressure	**psi (kPa)**	14.1 (97)	11.9 (82)
Operating weight	**lb (kg)**	181,440 (82,300)	183,860 (83,400)

In standard trim, with 27' 1" (8.25 m) standard boom, 17' 9" (5.4 m) arm, 3.0 cu yd (2.3 m³) SAE heaped bucket and heavy counterweight

Shaped		Double grouser shoes (even height)	
Shoe width	**in (mm)**	29.5 (750)	35.4 (900)
Overall width of crawler	**ft-in (mm)**	14' 1" (4,300)	14' 7" (4,450)
Ground pressure	**psi (kPa)**	14.1 (97)	11.9 (82)
Operating weight	**lb (kg)**	182,320 (82,700)	184,740 (83,800)

In standard trim, with 23' 9" (7.25 m) standard boom, 9' 6" (2.9 m) arm, 7.06 (5.4 m³) SAE heaped bucket and heavy counterweight

Shaped		Double grouser shoes (even height)	
Shoe width	**in (mm)**	29.5 (750)	35.4 (900)
Overall width of crawler	**ft-in (mm)**	14' 1" (4,300)	14' 7" (4,450)
Ground pressure	**psi (kPa)**	13.9 (96)	11.7 (81)
Operating weight	**lb (kg)**	180,780 (82,000)	183,200 (83,100)



— 9' 6" (2.9 m) Arm
— 11' 10" (3.6 m) Arm
— 14' 5" (4.4m) Arm
— 17' 9" (5.4 m) Arm
— Mass Excavator
Short Boom 23' 9" (7.25 m) + 9' 6" (2.9 m) Arm

Working Ranges

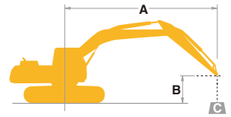
Unit: ft-in (m)

Boom	27' 1" (8.25 m)				23' 9" (7.25 m)
Arm / Range	9' 6" (2.9 m)	11' 10" (3.6 m)	14' 5" (4.4 m)	17' 9" (5.4 m)	ME 9' 6" (2.9 m)
a- Max. digging reach	44' 3" (13.48)	45' 4" (13.83)	47' 10" (14.56)	50' 10" (15.48)	40' 10" (12.45)
b- Max. digging reach at ground level	43' 3" (13.19)	44' 6" (13.55)	46' 11" (14.29)	50' 0" (15.23)	39' 10" (12.13)
c- Max. digging depth	27' 3" (8.30)	29' 2" (8.9)	31' 10" (9.7)	35' 1" (10.70)	24' 3" (7.38)
d- Max. digging height	40' 6" (12.34)	39' 9" (12.11)	40' 6" (12.35)	41' 6" (12.64)	38' 4" (11.69)
e- Max. dumping clearance	27' 7" (8.41)	27' 4" (8.34)	28' 1" (8.57)	29' 1" (8.87)	25' 6" (7.77)
f- Min. dumping clearance	14' 2" (4.31)	12' 0" (3.67)	9' 5" (2.86)	6' 1" (1.86)	12' 0" (3.66)
g- Max. vertical wall digging depth	16' 11" (5.16)	22' 1" (6.74)	24' 6" (7.48)	27' 7" (8.41)	14' 6" (4.42)
h- Min. swing radius	18' 10" (5.74)	20' 10" (6.34)	20' 10" (6.34)	21' 0" (6.39)	17' 11" (5.47)
I- Horizontal digging stroke at ground level	14' 7" (4.6)	18' 7" (5.67)	22' 4" (6.80)	26' 6" (8.08)	14' 5" (4.39)
j- Digging depth for 2.4 m (8') flat bottom	26' 9" (8.15)	28' 9" (8.75)	31' 5" (9.58)	34' 9" (10.06)	23' 9" (7.23)
Bucket capacity SAE heaped cu yd (m³)	6.0 (4.6)	4.58 (3.5)	3.66 (2.8)	3.0 (2.3)	6.0 (4.6)

Digging Force

Unit: lb (kN)

Arm length		9' 6" (2.9 m)	11' 10" (3.6 m)	14' 5" (4.4 m)	17' 9" (5.4 m)	ME9' 6" (2.9 m)
Bucket digging force	SAE	86,551 (385)	79,582 (354)	79,582 (354)	79,582 (354)	86,551 (385)
	ISO	97,117 (432)	90,598 (403)	90,598 (403)	90,598 (403)	97,117 (432)
Arm crowding force	SAE	75,985 (338)	67,443 (300)	59,120 (263)	51,260 (228)	75,985 (338)
	ISO	79,908 (351)	69.916 (311)	61,148 (272)	52,605 (234)	79,908 (351)



Rating over front
Rating over side or 360 degrees

A: Reach from swing centerline to arm tip
B: Arm tip height above/below ground
C: lifting capacities in pounds
Relief valve settng: 4,786 psi (33.0 MPa)

9' 6" (2.9 m) Arm Application: Heavy Counterweight

SK850LC	Boom: 27' 1" (8.25 m) Arm: 9' 6" (2.9 m), Bucket: without Shoe: 35.4" (900 mm) Heavy Counterweight: 35,940 lb (16,300 kg)												
A / B	15 ft		20 ft		25 ft		30 ft		35 ft		At Max. Reach		Radius
35 ft	lb										*36,680	*36,680	25' 8"
30 ft	lb						*34,840	*34,840			*34,860	*34,860	30' 0"
25 ft	lb				*37,670	*37,670	*34,700	*34,700			*34,140	34,130	33' 0"
20 ft	lb		*50,500	*50,500	*41,260	*41,260	*36,330	*36,330	*33,960	30,600	*33,950	30,460	35' 1"
15 ft	lb				*45,540	*45,540	*38,600	37,760	*34,680	30,000	*34,100	28,320	36' 3"
10 ft	lb				*49,380	46,810	*40,840	36,410	*35,720	29,280	*34,460	27,260	36' 9"
5 ft	lb				*51,840	45,290	*42,490	35,380	*36,460	28,710	*34,950	27,100	36' 6"
G.L.	lb				*52,510	44,560	*43,070	34,800	*36,270	28,460	*35,500	27,900	35' 6"
-5 ft	lb		*63,550	61,870	*51,310	44,470	*42,110	34,720			*35,950	29,880	33' 10"
-10 ft	lb	*70660	*58,640	*58,640	*47,850	45,000	*38,540	35,300			*36,050	33,740	31' 2"
-15 ft	lb	*60,460	*50,430	*50,430	*40,540	*40,540					*35,100	*35,100	27' 4"

11' 10" (3.6 m) Arm Application: Heavy Counterweight

SK850LC	Boom: 27' 1" (8.25 m) Arm: 11' 10" (3.6 m), Bucket: without Shoe: 35.4" (900 mm) Heavy Counterweight: 35,940 lb (16,300 kg)													
A / B	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		At Max. Reach		Radius
30 ft	lb								*31,290	*31,290			*31,330	*31,330	31' 10"
25 ft	lb								*32,060	*32,060			*31,030	*31,030	34' 8"
20 ft	lb						*38,410	*38,410	*34,030	*34,030	*31,540	30,910	*31,130	28,560	36' 7"
15 ft	lb				*54,620	*54,620	*42,940	*42,940	*36,590	*36,590	*32,810	30,110	*31,500	26,590	37' 9"
10 ft	lb				*61,930	*61,930	*47,250	*47,250	*39,180	36,590	*34,250	29,240	*32,060	25,560	38' 3"
5 ft	lb				*65,890	62,250	*50,420	45,500	*41,280	35,370	*35,430	28,510	*32,780	25,330	38' 0"
G.L.	lb				*66,660	61,270	*51,940	44,420	*42,440	34,570	*35,930	28,030	*33,610	25,910	37' 1"
-5 ft	lb		*54,390	*54,390	*65,080	61,180	*51,660	44,040	*42,270	34,240	*35,130	27,950	*34,480	27,500	35' 5"
-10 ft	lb	*58,170	*58,170	*77,160	*77,160	*61,310	*61,310	*49,330	44,270	*40,190	34,460			*35,270	30,590	32' 11"
-15 ft	lb	*84,750	*84,750	*67,850	*67,850	*54,700	*54,700	*44,110	*44,110					*35,630	*35,630	29' 4"
-20 ft	lb			*53,220	*53,220	*43,180	*43,180							*34,470	*34,470	24' 1"

14' 5" (4.4 m) Arm Application: Heavy Counterweight

SK850LC	Boom: 27' 1" (8.25 m) Arm: 14' 5" (4.4 m), Bucket: without Shoe: 35.4" (900 mm) Heavy Counterweight: 35,940 lb (16,300 kg)																
A / B	10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		At Max. Reach		Radius
35 ft	lb														*27,130	*27,130	31' 0"
30 ft	lb														*25,970	*25,970	34' 8"
25 ft	lb								*29,060	*29,060	*28,000	*28,000			*25,580	*25,580	37' 4"
20 ft	lb								*31,260	*31,260	*29,050	*29,050			*25,760	25,720	39' 1"
15 ft	lb				*49,390	*49,390	*39,610	*39,610	*34,060	*34,060	*30,640	30,270	*27,950	24,290	*26,450	24,060	40' 2"
10 ft	lb				*57,520	*57,520	*44,360	*44,360	*36,980	36,820	*32,400	29,260	*29,430	23,760	*27,700	23,160	40' 7"
5 ft	lb				*63,140	62,860	*48,230	45,760	*39,520	35,380	*33,970	28,350	*30,150	23,260	*29,630	22,900	40' 5"
G.L.	lb				*65,680	61,080	*50,630	44,280	*41,260	34,330	*35,010	27,670			*30,710	23,300	39' 6"
-5 ft	lb		*52,360	*52,360	*65,600	60,450	*51,330	43,540	*41,860	33,740	*35,120	27,320			*31,630	24,480	38' 0"
-10 ft	lb	*50,630	*50,630	*73,020	*73,020	*63,210	60,620	*50,150	43,450	*40,900	33,660	*33,580	27,440		*32,570	26,780	35' 8"
-15 ft	lb	*71,930	*71,930	*74,570	*74,570	*58,240	*58,240	*46,620	43,980	*37,550	34,170				*33,350	30,970	32' 4"
-20 ft	lb	*81,540	*81,540	*62,500	*62,500	*49,570	*49,570	*39,230	*39,230						*33,500	*33,500	27' 9"

17' 9" (5.4 m) Arm Application: Heavy Counterweight

SK850LC	Boom: 27' 1" (8.25 m) Arm: 17' 9" (5.4 m), Bucket: without Shoe: 35.4" (900 mm) Heavy Counterweight: 35,940 lb (16,300 kg)																
A / B	5 ft		10 ft		15 ft		20 ft		25 ft		30 ft		35 ft		40 ft		At Max. Reach		Radius
35 ft	lb																*20,470	*20,470	34' 11"
30 ft	lb												*23,770	*23,770			*19,680	*19,680	38' 2"
25 ft	lb												*24,350	*24,350	*21,610	*21,610	*19,390	*19,390	40' 7"
20 ft	lb												*25,710	*25,710	*24,720	*24,720	*19,490	*19,490	42' 3"
15 ft	lb								*34,800	*34,800	*30,380	*30,380	*27,550	*27,550	*25,720	24,240	*19,950	*19,950	43' 3"
10 ft	lb						*50,990	*50,990	*39,940	*39,940	*33,600	*33,600	*29,590	29,170	*26,930	23,510	*20,780	20,250	43' 7"
5 ft	lb						*58,150	*58,150	*44,530	*44,530	*36,600	35,280	*31,540	28,040	*28,090	22,800	*22,070	19,970	43' 5"
G.L.	lb				*40,530	*40,530	*62,580	60,840	*47,890	43,980	*38,850	33,900	*33,090	27,110	*28,940	22,240	*23,950	20,200	42' 7"
-5 ft	lb		*30,220	*30,220	*50,080	*50,080	*64,330	59,400	*49,700	42,750	*40,340	32,980	*33,940	26,500	*29,110	21,920	*26,710	21,020	41' 2"
-10 ft	lb	*35,040	*35,040	*43,480	*43,480	*64,220	*64,220	*63,690	58,990	*49,800	42,230	*40,460	32,550	*33,710	26,260			*28,950	22,640	39' 1"
-15 ft	lb	*48,160	*48,160	*59,090	*59,090	*80,100	*80,100	*60,630	59,380	*47,910	42,360	*38,860	32,660	*31,600	26,530			*29,940	25,490	36' 1"
-20 ft	lb			*79,000	*79,000	*70,880	*70,880	*54,610	*54,610	*43,330	43,160	*34,410	33,440					*30,730	30,650	32' 1"
-25 ft	lb					*56,400	*56,400	*43,950	*43,950	*33,810	*33,810							*30,750	*30,750	26' 5"

Short Boom 23' 9" (7.25 m) + 9' 6" (2.9 m) ME Arm Application: Heavy Counterweight

SK850LC	Boom: 23' 9" (7.25 m) Arm: 9' 6" (2.9 m), Bucket: without Shoe: 35.4" (900 mm) Heavy Counterweight: 35,940 lb (16,300 kg)												
A / B	10 ft		15 ft		20 ft		25 ft		30 ft		At Max. Reach		Radius
30 ft	lb						*41,690	*41,690			*41,860	*41,860	25' 9"
25 ft	lb						*41,670	*41,670			*40,460	*40,460	29' 3"
20 ft	lb				*51,600	*51,600	*44,320	*44,320	*40490	40,220	*40,000	37,060	31' 6"
15 ft	lb				*59,380	*59,380	*48,150	*48,150	*42,070	39,240	*40,040	34,100	32' 10"
10 ft	lb				*66,310	*66,310	*51,950	49,490	*43,940	38,170	*40,380	32,710	33' 4"
5 ft	lb				*70,010	65,880	*54,550	47,990	*45,220	37,300	*40,890	32,590	33' 1"
G.L.	lb				*70,070	64,970	*55,160	47,160	*45,090	36,840	*41,420	33,820	32' 0"
-5 ft	lb		*84,980	*84,980	*66,840	64,990	*53,130	47,040	*42,010	37,020	*41,730	36,860	30' 1"
-10 ft	lb	*88,990	*88,990	*74,750	*74,750	*59,770	*59,770	*46,980	*46,980			*41,260	*41,260	27' 0"
-15 ft	lb			*57,920	*57,920	*45,840	*45,840					*38,290	*38,290	22' 6"

Notes:
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 tip 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.
5. 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 t all times.
6. Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.
7. The above figures indicate machine capacity, but in practice the machine should not be used for lifting loads.

Standard

ENGINE
- Engine, HINO 13CVV, diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Batteries (2 x 12 V, 190H52)
- Starting motor (24 V -7 kW), 60 amp alternator
- Removable clean-out screen for radiator
- Automatic shut-down for low engine oil pressure
- Engine oil pan drain cook
- Double element air cleaner x 2

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

HYDRAULIC
- Arm regeneration system
- Auto warm up system
- Aluminum hydraulic oil cooler

MIRRORS & LIGHTS
- Two rearview mirrors
- Four front working lights

CAB & CONTROL
- Two control levers, pilot-operated
- Tow eyes
- Horn, electric
- Integrated left-right slide-type control box
- Cab light (interior)
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- Retractable seat belt
- Headrest
- Handrails
- Heater and defroster
- 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 monitor
- Automatic air conditioner
- Emergency escape hammer
- Suspension seat
- Travel alarm
- Pre-air cleaner
- Rear view camera

Optional

- Wide range of buckets
- Various optional arms
- Wide range of shoes (750 mm shoe is standard)
- Additional track guide
- Additional hydraulic circuit
- Pattern changer
- FOPS guard
- Rotation circuit
- Boom safety valve
- Counterweight removal device
- Light counterweight

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