

SK250-10 **KOBELCO** SK250

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SK250-10-SEASIA-E(MYA)-101-170801EF





In Pursuit of Improved Fuel Efficiency

Operation Mode

Fuel consumption is lower in H-mode/S-mode/ECO-mode in comparison with the previous model (Generation 8).



Always and Forever. Yesterday, Today, and Tomorrow. Obsessed with Fuel Efficiency.

Over the past 10 years, Kobelco has achieved an average reduction of about 38% in fuel consumption. And we vow to continue to lead in fuel efficiency.

60 sec



Pull up safety lock lever

Engine deceleration

Alarm
Engine stops

Alarm
Engine stops

Alarm
Engine emissions as well.

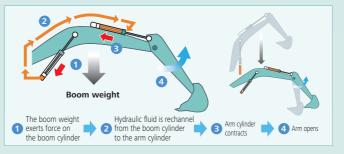
Alarm
Engine stops

Elapsed

Hydraulic System: Revolutionary Technology Saves Fuel

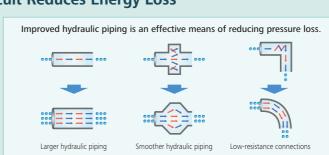
Arm Interflow System VEW

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

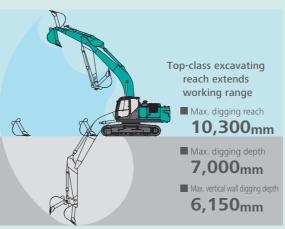
High-pressure injection atomizes the fuel, and more precise injection improves combustion efficiency. This also contributes to better fuel economy.



More Power and Higher Efficiency.



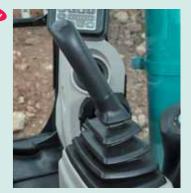
Get More Done Faster with Superior Operability



*Values are for STD arm (2.98m)

A Light Touch on the VEW 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





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: 244kN

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











One-Touch Attachment Mode Switch

A simple touch of a button, switches the hydraulic circuit and flow amount to match attachment

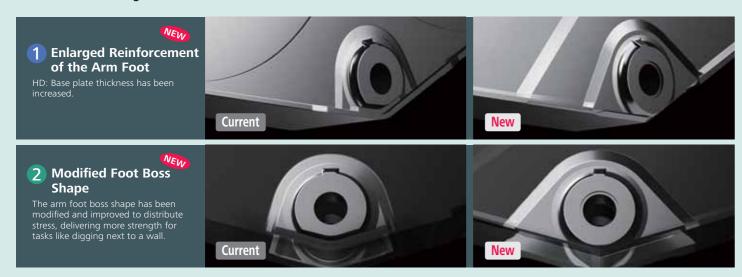
changes. Icons help the operator to confirm the proper configuration at a glance.





Built to Operate in Tough Working Environments

The attachment has been reinforced to handle a higher work volume, with greater power and excellent durability that can withstand demanding work conditions.



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.

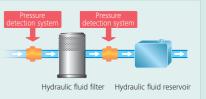
Hydraulic Fluid Filter Www

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



Hydraulic Fluid Filter Clog Detector

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





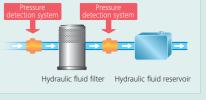
Metal Mesh Cover WEW **Air Cleaner**

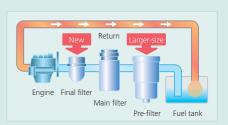
Metal mesh cover ensures strength and durability.



Fuel Filter

The pre-filter with built-in water separator has 1.6 times more filter area compared to the previous models and with a new final stage maintenance free fuel filter to maximize filtering performance.





Comfortable Cab Is Now Safer than Ever.



Comfort

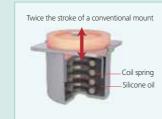
Large Cab Is Easy to Get in and Out of



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

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 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.

Quiet Inside

The high level of air-tightness ensures a quiet, comfortable cabin interior.

More Comfortable Seat Means Higher Productivity





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.



Rear view shows the area directly behind the cab.







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

9





KOMEXS uses satellite communication and internet to relay data, and therefore can be deployed in areas where other forms of communication are difficult.

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.

Direct Access to Operational Status

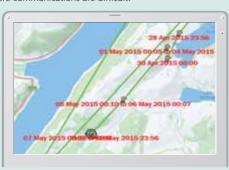
Location Data

Latest location

Customer

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

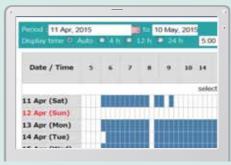




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Type of Operation	Working Hrs		Ratio
Total Working Hrs		169 Hs	100 9
Digging Hrs	-	72.2 Hrs	43 %
Traveling Hrs		18.3 Hrs	11.9
Idie Hrs	1	15.9 Hrs.	0.1
Opt Att Hrs	10	62.5 Hrs.	37 9
Crane Mode Hrs		0.16%	0.4

Operating Hours

- •A comparison of operating times of machines at multiple locations shows which locations are busier and more profitable.
- ·Operating hours on site can be accurately recorded, for running time calculations needed for rental machines, etc.



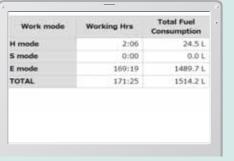
Daily report

Fuel Consumption Data

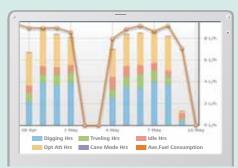
•Data on fuel consumption and idling times can be used to indicate improvements in fuel consumption.

Graph of Work Content •The graph shows how working hours are divided

among different operating categories, including digging, idling, traveling and optional operations.



Fuel consumption

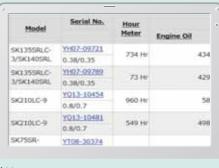


Work status

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.



Warning Alerts

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

Alarm Information Can Be Received through E-mail

· Alarm information or maintenance notice can be received through E-mail, using a computer or cell phone.



Daily/Monthly Reports

•Operational data downloaded onto a computer helps in formulating daily and monthly reports.

Security System

Engine Start Alarm

•The system can be set an alarm if the machine is operated outside designated time.



• It can be set an alarm if the machine is moved out of its designated area to another location.

Area Alarm



Engine start alarm outside prescribed work time Alarm for outside of reset area



Easy, On-the-Spot Maintenance VEW

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.











3 Engine oil filter



Simple layout for easy access to radiator and cooling system elements.

More Efficient Maintenance Inside the Cab



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

Easy Cleaning



Special crawler frame design for easy mud removal cleaning.



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



Engine oil pan equipped with drain valve.

2,000

Long-Interval Maintenance

Long-life hydraulic oil reduces cost and labor.



Highly Durable Premium-fine Filter

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







Model	HINO J05E	
Туре	Direct injection, water-cooled, 4-cycle diesel engine with turbocharger, intercooler	
No. of cylinders	4	
Bore and stroke	112 mm x 130 mm	
Displacement	5.123 L	
Dated navior autnot	132 kW/2,100 min ⁻¹ (ISO 9249)	
Rated power output	137 kW/2,100 min ⁻¹ (ISO 14396)	
May tarqua	639 N·m/1,600 min ⁻¹ (ISO 9249)	
Max. torque	654 N·m/1,600 min ⁻¹ (ISO 14396)	



Hydraulic System

Pump				
Туре	Two variable displacement piston pumps + one 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/cm ² }			
Power Boost	37.8 MPa {385 kgf/cm²}			
Travel circuit	34.3 MPa {350 kgf/cm²}			
Swing circuit	28.4 MPa {290 kgf/cm²}			
Control circuit	5.0 MPa {50 kgf/cm²}			
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	Wet multiple plate
Swing speed	10.8 min ⁻¹ {rpm}



Travel System

Travel motors	Variable displacement piston pump
Travel brakes	Hydraulic
Parking brakes	Wet multiple plate
Travel shoes	47 each side
Travel speed	6.1/3.8 km/h
Drawbar pulling force	244 kN (ISO 7464)
Gradeability	70 % {35°}
Ground clearance	460 mm



Cab & Control

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	135 mm x 1,235 mm
Arm cylinder	145 mm x 1,635 mm
Bucket cylinder	125 mm x 1,200 mm



Refilling Capacities & Lubrications

Fuel tank	403 L
Cooling system	21 L
Engine oil	21 L
Travel reduction gear	2 x 5 L
Swing reduction gear	5 L
node Personal	165 L tank oil level
Hydraulic oil tank	273 L hydraulic system



Attachments

Backhoe bucket and arm combination (reference only)

Seemon seemon and community (see ence only)					
Туре			Backhoe bucket		
Decelor and alter	ISO heaped	m³	1.0	1.2	1.4
Bucket capacity	ISO Struck	m³	0.76	0.84	1.0
With side cutter	With side cutter	mm	1,270	1,440	_
Opening width	Without side cutter	mm	1,180	1,340	1,510
No. of teeth		5	5	6	
Bucket weight	ight kg 810 850 89		890		
Cambination	2.50 m short arm		0	0	Δ
Combination 2.98 m standard arm			0	Δ	×

 $[\]bigcirc$ Recommended \triangle Loading only imes Not recommended



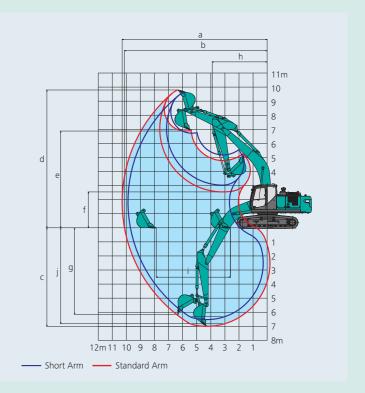
Working Ranges

Unit: m Short 2.5 m Standard 2.98 m a-Max. digging reach 9.89 10.3 b-Max. digging reach at ground level 9.72 10.14 6.52 7.00 c- Max. digging depth 9.65 9.79 d-Max. digging height e-Max. dumping clearance 6.72 6.88 2.55 f- Min. dumping clearance 3.03 5.82 6.15 g-Max. vertical wall digging depth h-Min. swing radius 3.91 3.91 4.20 5.26 i- Horizontal digging stroke at ground level j- Digging depth for 2.4 m (8') flat bottom 6.32 6.82 Bucket capacity ISO heaped m³ 1.2 1.0

Digging Force (ISO 6015)

		OTHE. KIV
Arm length	Short 2.5 m	Standard 2.98 m
Bucket digging force	170 187*	170 187*
Arm crowding force	142 156*	122 134*

*Power Boost engaged.

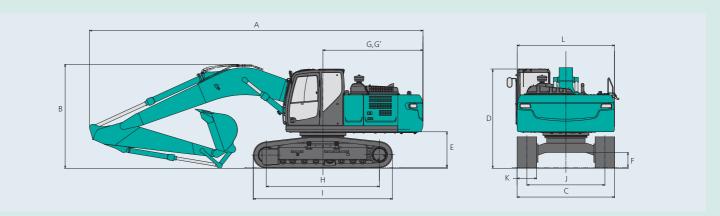


Dimensions

Aı	rm length	Short 2.5 m	Standard 2.98 m	
Α	Overall length	10,270	10,210	
В	Overall height (to top of boom)	3,340	3,180	
C	Overall width of crawler	2,990		
D	Overall height (to top of cab)	3,040		
Ε	Ground clearance of rear end*	1,090		
F	Ground clearance*	460		

		Unit: mm
G	Tail swing radius	3,100
G'	Distance from center of swing to rear end	3,070
Н	Tumbler distance	3,470
1	Overall length of crawler	4,260
J	Track gauge	2,390
K	Shoe width	600
L	Overall width of upperstructure	2,980

*Without including height of shoe lug



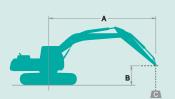
Operating Weight & Ground Pressure

In standard trim, with standard boom, 2.98 m arm, and 1.00 m³ ISO heaped bucket

Shaped		Triple grouser shoes (even height)						
Shoe width	mm	600	800					
Overall width of crawler	mm	2,990	3,190					
Ground pressure	kPa	54	42					
Operating weight	kg	24,900	25,400					

15







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)

SK250		Short Arm: 2.50 m Bucket: Without Shoe: 600 mm Counterweight: 5,580 kg											
	В	3.0) m	4.5	m	6.0	m	7.5	m	At Max	. Reach		
A		<u> </u>	—	<u> </u>	-	<u> </u>	—	<u> </u>	-	<u> </u>		Radius	
7.5 m	kg					*5,730	*5,730			*5,800	*5,800	6.14 m	
6.0 m	kg					*5,700	*5,700			*5,750	4,670	7.26 m	
4.5 m	kg			*7,610	*7,610	*6,360	6,160	5,850	4,340	5,620	3,940	7.94 m	
3.0 m	kg			*9,760	8,700	*7,320	5,800	6,010	4,190	5,140	3,580	8.29 m	
1.5 m	kg			*11,490	8,080	8,080	5,480	5,840	4,030	4,980	3,450	8.36 m	
G.L.	kg			*12,180	7,840	7,860	5,280	5,720	3,920	5,100	3,510	8.16 m	
-1.5 m	kg	*10,370	*10,370	*12,070	7,830	7,800	5,220	5,710	3,910	5,560	3,810	7.66 m	
-3.0 m	kg	*15,490	*15,490	*11,230	7,970	7,890	5,310			6,660	4,550	6.79 m	
-4.5 m	kg	*12,500	*12,500	*9,150	8,320					*7,350	6,490	5.38 m	

SK250		Standar	Standard Arm: 2.98 m Bucket: Without Shoe: 600 mm Counterweight: 5,580 kg											
	В	1.5	m	3.0) m	4.5	m	6.0	m	7.5	m	At Max	. Reach	
A				1	—	1	—	1		1		1	—	Radius
7.5 m	kg											*4,470	*4,470	6.70 m
6.0 m	kg							*5,220	*5,220	*5,280	4,530	*4,230	*4,230	7.73 m
4.5 m	kg							*5,930	*5,930	*5,500	4,430	*4,190	3,680	8.37 m
3.0 m	kg					*9,070	8,980	*6,950	5,920	*5,980	4,260	*4,310	3,360	8.71 m
1.5 m	kg					*11,020	8,280	*7,970	5,570	5,890	4,080	*4,590	3,240	8.78 m
G.L.	kg					*12,050	7,930	7,920	5,330	5,750	3,940	4,750	3,280	8.58 m
-1.5 m	kg	*6,690	*6,690	*10,500	*10,500	*12,220	7,840	7,810	5,230	5,690	3,890	5,120	3,520	8.11 m
-3.0 m	kg	*11,820	*11,820	*16,590	15,470	*11,660	7,920	7,850	5,270			5,980	4,100	7.30 m
-4.5 m	ka			*14.010	*14,010	*10,070	8,180	*7,220	5.500			*7.190	5.490	6.01 m

SK250		Standard	Standard Arm: 2.98 m Bucket: Without Shoe: 800 mm Counterweight: 5,580 kg											
	В	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		
A			—	1	—	<u> </u>		<u> </u>	—	<u> </u>	—	<u> </u>	—	Radius
7.5 m	kg											*4,470	*4,470	6.70 m
6.0 m	kg							*5,220	*5,220	*5,280	4,610	*4,230	*4,230	7.73 m
4.5 m	kg							*5,930	*5,930	*5,500	4,520	*4,190	3,750	8.37 m
3.0 m	kg					*9,070	*9,070	*6,950	6,030	*5,980	4,340	*4,310	3,430	8.71 m
1.5 m	kg					*11,020	8,440	*7,970	5,680	6,010	4,160	*4,590	3,310	8.78 m
G.L.	kg					*12,050	8,090	8,080	5,440	5,870	4,030	4,850	3,350	8.58 m
-1.5 m	kg	*6,690	*6,690	*10,500	*10,500	*12,220	8,000	7,970	5,340	5,810	3,970	5,230	3,600	8.11 m
-3.0 m	kg	*11,820	*11,820	*16,590	15,770	*11,660	8,080	8,010	5,380			6,100	4,180	7.30 m
-4.5 m	kg			*14,010	*14,010	*10,070	8,340	*7,220	5,610			*7,190	5,590	6.01 m

- 1. Do not attempt to lift or hold any load that is greater than these lifting capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lifting capacities.
- 2. Lifting 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 top pin is 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 at all times.
- Lifting capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

STANDARD EQUIPMENT

- Engine, HINO J05E, diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12V 96Ah)
- Starting motor (24V 5 kW), 60 amp alternator
- Automatic engine shut-down
- 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
- Automatic swing brake

HYDRAULIC

- Boom regeneration system
- Arm interflow system
- Auto warm up system
- Aluminum hydraulic oil cooler
- Hydraulic fluid filter clog detector

MIRRORS & LIGHTS

- Two rear view mirrors
- Four front working lights (one for boom, one for boom cylinder, one for right storage box and one for cab)
- Swing flashers

CAB & CONTROL

- Two control levers, pilot-operated
- Tow eyes
- Horn, electric
 Cab light (interior)
- Suspension seat
- Luggage tray
- Large cup holder Detachable two-piece floor mat
- Headrest
- Handrails
- Intermittent windshield wiper with double-spray washer
- Tinted safety glass
- Pull-up type front window and removable lower front window
- Easy-to-read multi-display color monitor
- Automatic air conditioner
- Emergency escape hammer
- KOMEXS
- 24V outlet

OPTIONAL EQUIPMENT

- Additional track guide
- Cab guards
- N & B piping

■ Refilling pump

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