

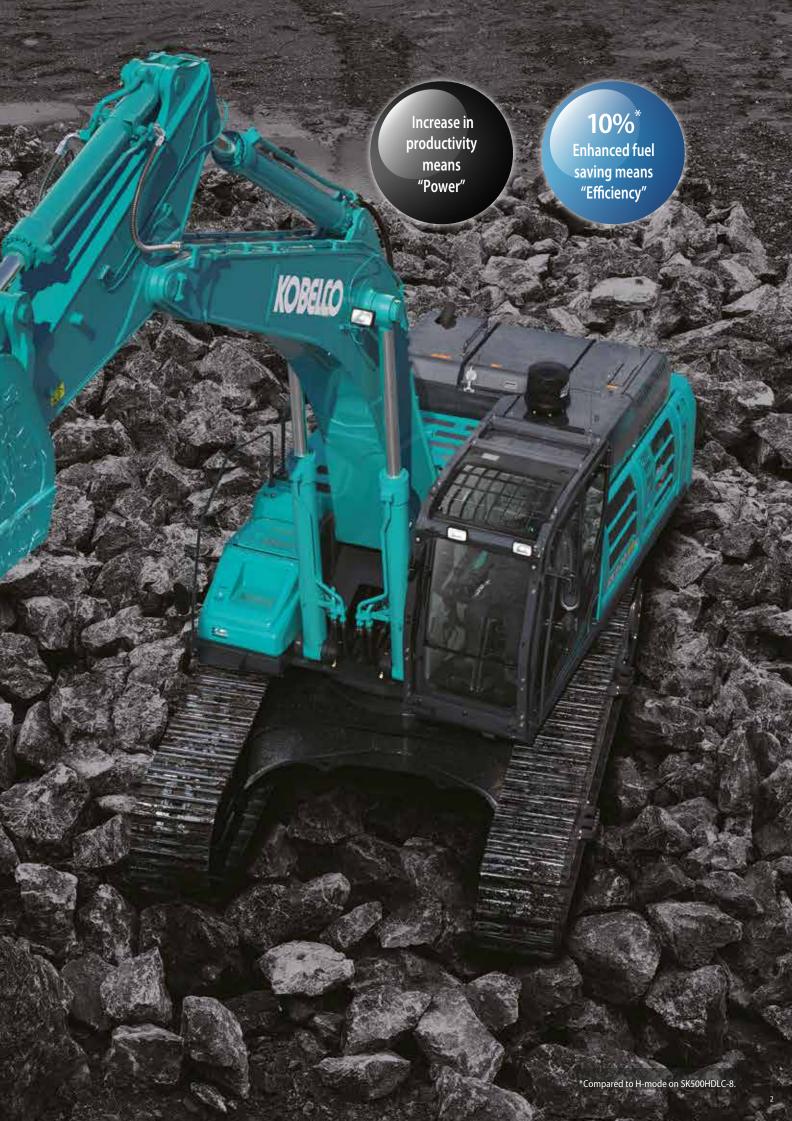
Power Meets Efficiency

In line with KOBELCO's concept of mining-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.

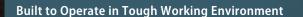
The latest hydraulics technology delivers both high-powered output and lower fuel consumption.

As the 10th generation model of KOBELCO's SK series, the SK500XDLC/SK520XDLC meets the needs of the most punishing mining sites with a performance that simply astounds.





Even Stronger Attachment & Component



Hydraulic Drive for Engine Cooling Fan; Independent Oil Cooler Fan

Hydraulic drive optimizes the cooling fan rotation speed to improve fuel economy and reduce noise. Also, the independent oil cooler fan better matches cooling to the hydraulic oil temperature, for optimal oil temperature control.



Cooling fan for intercooler & radiator



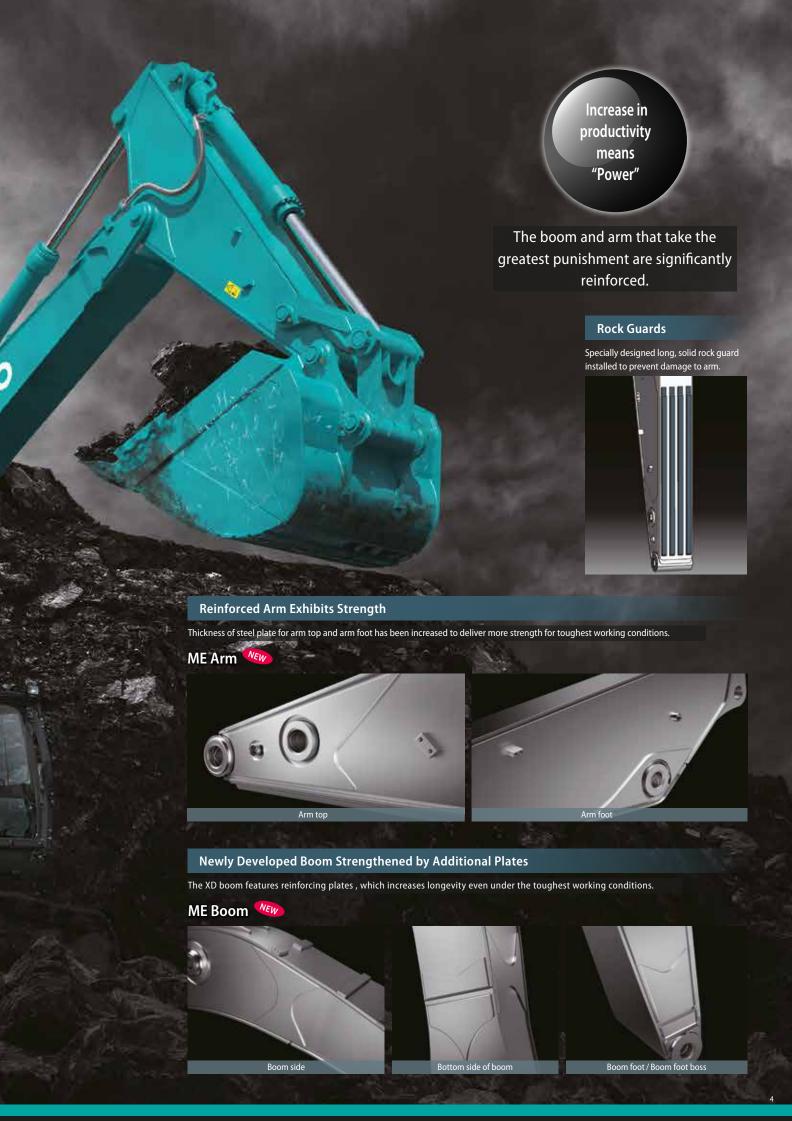
SK520 IDe

Cooling fan for oil cooler



Upper Under Covers

Thick covers with increased durability compared to SK500HDLC-8.



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.

Reinforced Guide Frame 2



Inside of guide frame is reinforced.

Track Guides



Large, reinforced track guides are installed in four locations.

Double-Support Outer Flange Upper Rollers



Double-support outer flanged upper rollers can withstand powerful vibrations.

Thicker Steel Plate for Shoes



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

Track Links



The durability of the track link is increased compared to SK500HDLC-8.

Lower Frame Guard



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

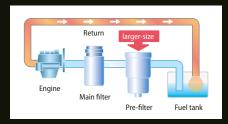


The improved filtration systems reduce the risk of mechanical trouble and enhance longevity and durability.

Fuel Filter NEW



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



Hydraulic NEW 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**

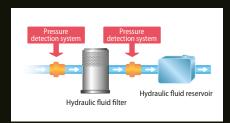
Metal mesh cover ensures strength and durability.



Enlarged filter image

Hydraulic Fluid Filter Clog Detector **NEW**

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.



Evolution Continues, with Improved Fuel Efficiency

SX520 11 s

10%* Enhanced 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.

This improves fuel efficiency.

*Compared to U made on SK500UDI C 9

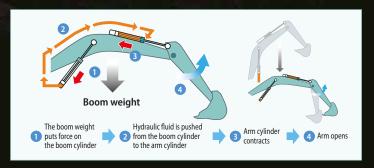
*Compared to H-mode on SK500HDLC-8

Hydraulic System: Revolutionary Technology Saves Fuel

Arm Interflow System



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.

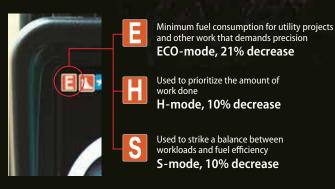


Energy Saving System Saves Fuel Further

Fuel Efficient Work Mode ECO-Mode

·LW

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



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Max. Bucket Digging Force

282 kN Normal:

With Power Boost: 308 kN

Max. Arm Digging Force

239 kN Normal:

With Power Boost: 261 kN

Short 3.0 m Arm

Max. Bucket Digging Force

267 kN Normal:

With Power Boost: 292 kN

Max. Arm Digging Force

223 kN

With Power Boost: 244 kN

Max. Digging Reach:

Max. Digging Depth:

6,820 mm

Max. Vertical Digging Depth:

6,090 mm

11,250 mm

Max. Digging Reach:

11,690 mm

Max. Digging Depth:

7,360 mm

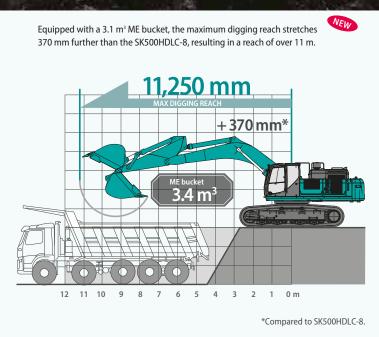
Max. Vertical Digging Depth:

6,580 mm

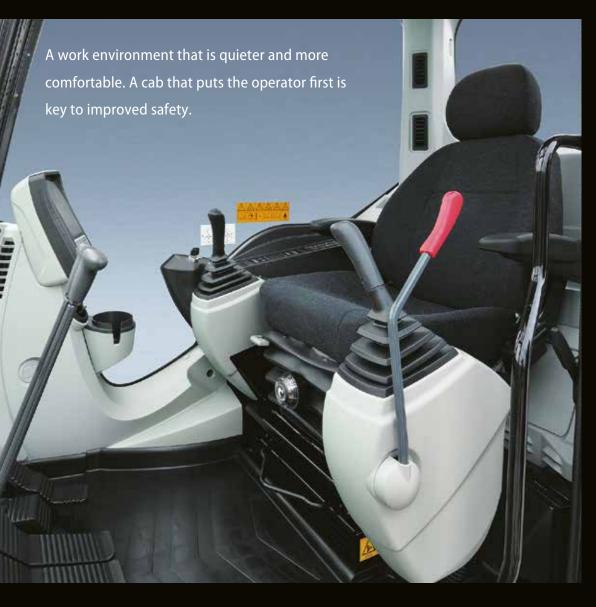
Top Class Traveling Force

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: 415 kN



Comfortable Cab Is Now Safer than Ever



Large Cab



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

Air Conditioner NEW 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 WEW



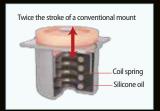


The high level of air-tightness keeps dust out of the cab.

Low Vibration



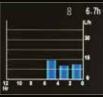
Coil springs absorb small vibrations, and high suspension mounts filled with silicone oil reduce heavy vibration. The long stroke achieved by this system provides excellent protection from vibration.



Multi-Display in Color



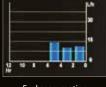
Brilliant colors and graphic displays are easy to recognize on the LCD multi-display in the console. The display shows fuel consumption, maintenance intervals, and



MAINTENANCE YO. FLITER 1000 995



Breaker mode



Fuel consumption

Maintenance

- Analog gauge provides an intuitive reading of fuel level and engine
- Green indicator light shows low fuel consumption during operation
- 3 Fuel consumption/Switch indicator for rear camera images
- 4 Digging mode switch
- 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.

Comfort

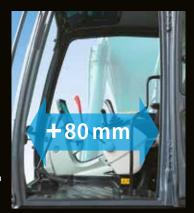


Broad View New Helps the Operator

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 Out of

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



More Comfortable Seat Means Higher Productivity







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.

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.

Wide View During Operations WEW High Visibility for Safety





Greater safety assured by rearview mirrors on left and right.



Rear View Camera (optional)



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





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.



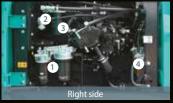
Maintenance Work, Daily Checks, Etc., Can Be Done from Ground Level

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.

1 Engine oil filter

- 2 Pilot filter
- 3 Pump drain filter
 - 4 Fuel filter with built-in water separator

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.



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



Engine oil pan equipped with drain valve.



More Efficient Maintenance inside the Cab

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







Specifications



Engine

Model	HINO P11C-WF
Туре	Water-cooled, 4-cycle 6-cylinder direct injection type diesel engine with intercooler turbo-charger
No. of cylinders	6
Bore and stroke	122 mm × 150 mm
Displacement	10.52 L
Rated power output	257 kW/1,850 min ⁻¹ (ISO 14396)
Max. torque	1,400 N·m / 1,400 min ⁻¹ (ISO 14396)



Hydraulic System

Pump		
Туре	Two variable displacement pumps + One gear pump	
Max. discharge flow	2 × 370 L/min	
Relief valve setting		
Excavating circuits (main)	31.4 MPa	
Power Boost	34.3 MPa	
Travel circuit	34.3 MPa	
Swing circuit	26.0 MPa	
Pilot control circuit	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	Wet multiple plate, hydraulic operated automatically
Swing speed	7.6 min ⁻¹



Attachments

Backhoe bucket and combination

AV.	
7	
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Travel System

Travel motors	Variable displacement piston pump
Travel brakes	Hydraulic
Parking brakes	Wet multiple plate
Travel shoes	50 each side
Travel speed (high/low)	5.4/3.4 km/h
Drawbar pulling force	415 kN
Gradeability	70% (35 deg)



Cab & Control

International Comfort Cab with dust free enclosure and with internal pressure of 97 Pa (earlier cab 27 Pa). 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		170 mm × 1,590 mm
Arm cylinder		190 mm × 1,970 mm
Duelot gulindos	ME 2.6 m arm	170 mm × 1,429 mm
Bucket cylinder	Short 3.0 m arm	160 mm × 1,410 mm



Refilling Capacities & Lubrications

Fuel tank	638 L
Cooling system	47.4 L
Engine oil	42.5 L
Travel reduction gear	2×15 L
Swing reduction gear	2×5L
Hydraulic oil tank	371 L tank oil level
nyuraunc on tank	631 L hydraulic system

Use —			Backhoe bucket				
		Gener	al digging	Heavy digging		Mass Excavating	
Bucket capacity	ISO heaped	n³	2.1	2.5	3.1		3.4
0	With side cutters m	m 1	1,570	1,820	1,760		1,900
Opening width	Without side cutters m	m 1	1,470	1,700	1,670		1,810
No. of teeth			5	5	5		6
Bucket weight kg		kg 2	2,470	2,850	2,320		2,410
	ME 6.5 m boom and ME 2.6 m arm		_	_	0		0
Combination	Short arm 3.0 m with 9,800 kg counterweight		0	_	_		_
	Short arm 3.0 m with 11,200 kg counterweight		0	0	_		_

[○] Recommended — Not applicable

Specifications



Working Ranges

Unit: m

Boom	ME 6.5 m	7.0 m
Arm Range	ME 2.6 Arm	Short 3.0 Arm
a- Max. digging reach	11.25	11.69
b- Max. digging reach at ground level	11.01	11.45
c- Max. digging depth	6.82	7.36
d- Max. digging height	11.12	10.85
e- Max. dumping clearance	7.18	7.49
f- Min. dumping clearance	3.07	3.23
g- Max. vertical wall digging depth	6.09	6.58
h- Min. swing radius	4.96	5.31
i- Horizontal digging stroke at ground level	3.87	5.12
j- Digging depth for 2.4 m (8') flat bottom	6.66	7.20
Bucket capacity ISO heaped m ³	3.40	2.10

Digging Force (ISO 6015)

Unit: kN

Arm length	ME 2.6 Arm	Short 3.0 Arm
Bucket digging force	282/308*	267/292*
Arm crowding force	239/261*	223/244*

*Power Boost engaged.



Dimensions

Unit:	mm
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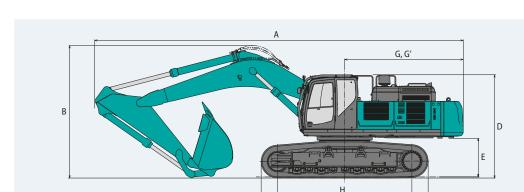
							Ollic IIIII	
I th	ME	Short		G	Tail swing radius	SK500XDLC	3,800	
rm length	2.6 Arm	3.0 Arm		u	Tall swilly radius	SK520XDLC	3,880	
Overall length	12,060	12,210		G'	Distance from center of swing to rear end	SK500XDLC	3,800	
Overall height (to top of boom)	4,330	3,780	-	d	Distance from center of swing to real end	SK520XDLC	3,880	
Overall width	3,580			Н	Tumbler distance	4,400		
Overall height (to top of cab)		380		1	Overall length of crawler		5,460	
Ground clearance of rear end* 1,260*		60*		J	Track gauge		2,750	
Ground clearance* 510*			K	Shoe width	600			
				L	Overall width of upperstructure		2,980	

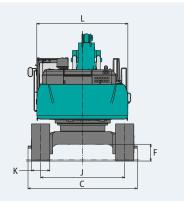
13 m 12 11 10 9

Short 3.0 m Arm

*Without including height of shoe lug.

■ ME 2.6 m Arm





Operating Weight & Ground Pressure In standard trim, with ME 6.5 m boom, ME 2.6 m arm, 3.4 m³ ISO heaped bucket, and 11,200 kg counterweight

Shaped	Triple grouser shoes (even height)
Shoe width mm	600
Overall width of crawler mm	3,350
Ground pressure kPa	90
Operating weight kg	52,700

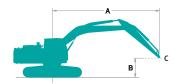
In standard trim, with 7.0 m boom, 3.0 m arm, 2.1 $\mathrm{m^3}$ ISO heaped bucket, and 9,800 kg counterweight

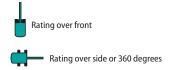
Shaped	Triple grouser shoes (even height)
Shoe width mm	600
Overall width of crawler mm	3,350
Ground pressure kPa	88
Operating weight kg	51,200

Lift Capacities









A: Reach from swing centerline to arm top B: Arm top height above/below ground C: Lift point Relief valve setting: 31.4 MPa

SK500XDLC	(500XDLC Boom: 7.0 m Arm: 3.0 m Bucket: without Counterweight: 9,800 kg Shoe: 600 mm HD													
A		3.0	m	4.5 m		6.0 m		7.5 m		9.0 m		At Max. Reach		
В		Ī				<u> </u>				L				Radius
9.0 m												*9,660	*9,660	7.25 m
7.5 m	kg							*9,450	*9,450			*9,000	*9,000	8.41 m
6.0 m	kg							*9,900	*9,900	*9,400	8,360	*8,770	8,050	9.18 m
4.5 m	kg			*17,250	*17,250	*12,830	*12,830	*10,770	*10,770	*9,690	8,170	*8,810	7,270	9.65 m
3.0 m	kg					*14,720	14,020	*11,780	10,280	*10,190	7,900	*9,100	6,850	9.88 m
1.5 m	kg					*16,150	13,300	*12,660	9,850	*10,660	7,660	*9,660	6,730	9.86 m
G.L.	kg			*16,970	*16,970	*16,830	12,930	*13,190	9,570	*10,910	7,520	*10,140	6,900	9.62 m
-1.5 m	kg	*13,370	*13,370	*22,030	19,750	*16,710	12,850	*13,180	9,480	*10,620	7,520	*10,410	7,410	9.11 m
-3.0 m	kg	*23,860	*23,860	*20,270	20,070	*15,710	13,000	*12,350	9,610			*10,620	8,490	8.31 m
-4.5 m	kg	*21,890	*21,890	*17,130	*17,130	*13,320	*13,320					*10,520	*10,520	7.10 m

SK520XDLC	SK520XDLC Boom: ME 6.5 m Arm: ME 2.6 m Bucket: without Counterweight: 11,200 kg Shoe: 600 mm HD													
A		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		At Max. Reach		
В		1									-			Radius
9.0 m												*11,140	*11,140	6.24 m
7.5 m	kg							*10,760	*10,760			*9,660	*9,660	7.56 m
6.0 m	kg					*11,590	*11,590	*10,570	*10,570			*8,980	*8,980	8.41 m
4.5 m	kg					*13,110	*13,110	*11,200	*11,200			*8,700	*8,700	8.93 m
3.0 m	kg					*14,840	*14,840	*12,050	11,050	*10,630	8,480	*8,720	8,240	9.17 m
1.5 m	kg					*16,170	14,450	*12,790	10,660	*10,850	8,320	*9,010	8,130	9.15 m
G.L.	kg					*16,720	14,110	*13,150	10,430			*9,640	8,410	8.88 m
-1.5 m	kg			*21,550	*21,550	*16,350	14,090	*12,790	10,430			*10,810	9,220	8.34 m
-3.0 m	kg	*24,720	*24,720	*19,170	*19,170	*14,750	14,360					*10,670	*10,670	7.45 m
-4.5 m	kg			*14,540	*14,540							*9,500	*9,500	6.06 m

- 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.
- 3. Arm top defined as lift point.
- $4. \ \ The above lift capacities are in compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. They do not exceed 87\% of hydraulic lift and the compliance with ISO 10567. The compliance with ISO 1$
- capacity or 75% of tipping load. Lift 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.
- 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.

SK500XDLC-10

STANDARD EQUIPMENT

FNGINE

- HINO P11C-WF diesel engine with turbocharger and intercooler
- Automatic engine deceleration
- Auto Idle Stop (AIS)
- Batteries (2 x 12 V 112 Ah)
- Starting motor (24 V 6 kW), 60 amp alternator
- Automatic engine shut-down for low engine oil pressure
- Engine oil pan drain valve
- Double element air cleaner
- Battery shut down
- Pre-air cleaner
- Emergency engine shut-off switch

BOOM, ARM & BUCKET

- 7.00 m SHD boom
- 3.00 m SHD arm
- 6.50 m ME boom (only for SK520XDLC)
- 2.60 m ME arm (only for SK520XDLC)

CONTROL

- Working mode selector (H-mode, S-mode and ECO-mode)
- Power Boost

SWING SYSTEM & TRAVEL SYSTEM

- Swing rebound prevention system
- Two-speed travel with automatic shift down
- Sealed & lubricated track links
- Grease-type track adjusters
- 600 mm HD triple grouser shoe
- Lower frame guard
- Traveling alarm
- Automatic swing brake
- Tow eyes
- Four track guides each side
- Straight propel system

HYDRAUI IC

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

MIRRORS & LIGHTS

- Two rear view mirrors, right bottom clearance mirror
- Five front working lights (Two for boom, one for right storage box and two for cab)

CAB & CONTROL

- Two control levers, pilot-operated
- Horn, electric
- Cab light (interior)
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- Headrest
- Handrails
- 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 color monitor
- Automatic air conditioner
- Emergency escape hammer
- **KOMEXS**
- Mechanical suspension seat
- 12 V outlet
- Heavy counterweight for ME specification

OPTIONAL EQUIPMENT

- Refueling pump
- N&B Piping (foot control)
- Rear view camera Air suspension seat Front guard
- 600 mm HD double grouser shoe

- Top guard Walk way
 - Yellow rotating warning light
- 2.1m3 HD bucket 2.5m3 Reinforced bucket
- 3.1m3 ME bucket
- 3.4m3 ME bucket

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

EXCAVATOR REMOTE MONITORING SYSTEM

KOMEXS (Kobelco Monitoring Excavation 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

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).



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 servicina

Security System

Engine Start Alarm

Sends a notification if the engine is started outside of

Area Alarm

Sends a notification if the machine leaves a pre-defined

Note: This catalogue may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. Please consult your nearest KOBELCO distributor for those items you require. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice.

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

KOBELCO CONSTRUCTION MACHINERY EUROPE B.V.

www.kobelco-europe.com



Enquiries To: