KOBELCO

Bucket Capacity :

2.1 – 3.4 m³ (ISO heaped)

Engine Power :

257 kW/1,850 min⁻¹ (ISO 14396)

Operating Weight :
51,200 – 52,700 kg



SK500 XDLC SK520 XDLC

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.



Increase in productivity means "Power"

KOBELLO

-

10%^{*} Enhanced fuel saving means "Efficiency"

*Compared to H-mode on SK500HDLC-8.

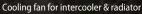
Even Stronger Attachment & Component

Built to Operate in Tough Working Environment

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 oil cooler



Upper Under Covers Thick covers with increased durability compared to SK500HDLC-8.



NOFEL

Increase in productivity means "Power"

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

Rock Guards

Specially designed long, solid rock guard installed to prevent damage to arm.



Reinforced Arm Exhibits Strength

Thickness of steel plate for arm top and arm foot has been increased to deliver more strength for toughest working conditions.







Newly Developed Boom Strengthened by Additional Plates

The XD boom features reinforcing plates , which increases longevity even under the toughest working conditions.

ME Boom NEW

Boom side





DULLUI

Boom foot / Boom foot boss

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 ①



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

Thicker Steel Plate for Shoes



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

Reinforced Guide Frame **2**



Inside of guide frame is reinforced.

Track Links



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

Track Guides



Large, reinforced track guides are installed in four locations.

Lower Frame Guard



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

Double-Support Outer Flange Upper Rollers



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

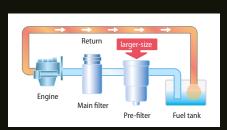


Improved Filtration System Reliability

Clean, contaminant-free fuel and hydraulic fluid are essential to stable performance. The improved filtration systems reduce the risk of mechanical trouble and enhance longevity and durability.

Fuel Filter

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



Hydraulic Fluid Filter

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



Metal Mesh NEW **Cover Air Cleaner**

Metal mesh cover ensures strength and durability.



Enlarged filter image



Hydraulic 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

10%^{*} Enhanced fuel saving means "Efficiency"

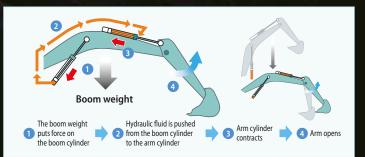
The new arm interflow system more efficiently controls hydraulic fluid flow, and significant reduction of in-line resistance and pressure loss. This improves fuel efficiency. *Compared to H-mode on SK500HDLC-8.

SK520 10:

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 🧧

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



Minimum fuel consumption for utility projects and other work that demands precision **ECO-mode, 21% decrease**

NOBELCO

Used to prioritize the amount of work done **H-mode, 10% decrease**

S S

Used to strike a balance between workloads and fuel efficiency **S-mode, 10% decrease**



Get More Output Faster with Superior Operability

ME 2.6 m Arm

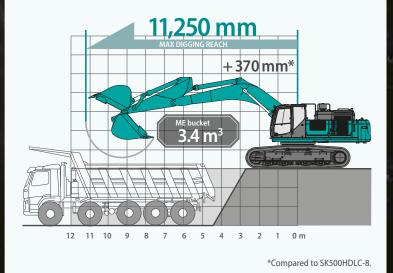
Max. Bucket Digging Force				
Normal:	282	kΝ		
With Power Boost:	308	kΝ		
Max. Arm Digging	Force			
Normal:	239	kΝ		
With Power Boost:	261	kN		

Max. Digging Reach: **11,250 mm** Max. Digging Depth: **6,820 mm** Max. Vertical Digging Depth: **6,090 mm**

Short 3.0 m Arm

Max. Bucket Digging Force				
Normal:	267	kΝ		
With Power Boost:	292	kΝ		
Max. Arm Digging	Force			
Normal:	223	kΝ		
With Power Boost:	244	kΝ		

Max. Digging Reach: 11,690 mm Max. Digging Depth: 7,360 mm Max. Vertical Digging Depth: 6,580 mm Equipped with a 3.1 m^3 ME bucket, the maximum digging reach stretches 370 mm further than the SK500HDLC-8, resulting in a reach of over 11 m.



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.

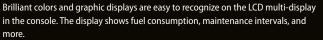
Drawbar Pulling Force: 415 kN

NEW

Comfortable Cab Is Now Safer than Ever

A work environment that is quieter and more comfortable. A cab that puts the operator first is key to improved safety.

Multi-Display in Color 🛛 🕬

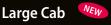




 Analog gauge provides an intuitive reading of fuel level and engine water temperature

 Green indicator light shows low fuel consumption during operation

- 3 Fuel consumption/Switch indicator for rear camera images
- 4 Digging mode switch
- 5 Monitor display switch



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

Air Conditioner Louvers behind the Seat



The large air-conditioner has louvers on the back pillars that blow from behind and to the right and left of the operator's seat. They can be adjusted to put a direct flow of cool/warm air on the operator, which means a more comfortable operating environment.

Super-Airtight Cab 👐



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

Low Vibration



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



One-Touch Attachment Mode Switch

A simple touch of a button, switches the hydraulic circuit and flow amount to match attachment changes. Icons help the operator to confirm the proper configuration at a glance.

Comfort



More Comfortable Seat Means Higher Productivity







Large Cab Is Easy 🤎 to Get In and Out of

smoother entry and exit.

The expanded cab provides plenty of room for a large door, more headroom and

Interior Equipment Adds to Comfort and Convenience





A Light Touch on the 🛛 🖊 Lever Means Smoother, **Less Tiring Work**



It takes 38% less effort to work the operation lever, which reduces fatigue over long working hours or continued operations.

Safety

ROPS Cab



ROPS (Roll-Over-Protective Structure)-compliant cab clears ISO standards (ISO-12117-2: 2008) and ensures greater safety for the operator should the machine tip over.





High Visibility for Safety

Wide View During Operations

Greater safety assured by rearview mirrors on left and right.



for emergency exit

Rear View NEW 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.

Efficient Maintenance Keeps the Machine in Peak Operating Condition

CO BELCO

MAINTENANCE

0		8	5.4h
	INTERNAL	RENUMBER THE	EXCHANGE DAY
ENGINE OIL	250	246	
FUEL FILTER	500	496	//
HYD. FILTER	1000	996	//
HYD. OIL	2000	1996	

Examples of displaying maintenance information

Machine Information Display Function

- Displays only the maintenance information that's needed, when it's needed
- Self-diagnostic function provides early-warning detection and display of electrical system malfunctions
- Service-diagnostic function makes it easier to check the status of the machine
- Record function of previous breakdowns including irregular and transient malfunction

Easy, On-the-Spot Maintenance

100

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.



Left side

and cooling system elements.



Simple layout for easy access to radiator

- 1 Engine oil filter 2 Pilot filter
- 3 Pump drain filter
- Fuel filter with built-in water separator

Easy Cleaning



Special crawler frame design for easy mud removal cleaning.

More Efficient Maintenance inside the Cab

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



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





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



Engine oil pan equipped with drain valve.



Double-element air cleane







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

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

Cab

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
Dusket sulinder	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
	631 L hydraulic system

Attachments

Backhoe bucket and combination

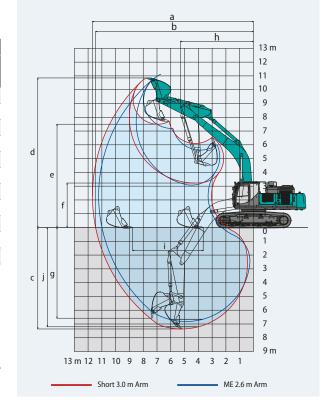
Use		Backhoe bucket				
		General digging	Heavy digging	Mass Ex	cavating	
Bucket capacity	ISO heaped	m³	2.1	2.5	3.1	3.4
Opening width	With side cutters	mm	1,570	1,820	1,760	1,900
	Without side cutters	mm	1,470	1,700	1,670	1,810
No. of teeth		5	5	5	6	
Bucket weight		kg	ig 2,470 2,850 2,320 2,410		2,410	
	ME 6.5 m boom and ME 2.6 m arm			—	0	0
	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



		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)

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.

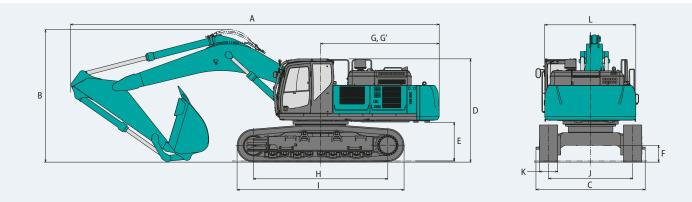
Unit: kN

Dimensions

Ar	m length	ME 2.6 Arm	Short 3.0 Arm		
Α	Overall length	12,060	12,210		
В	Overall height (to top of boom)	4,330	3,780		
С	Overall width	3,580			
D	Overall height (to top of cab)	3,380			
Е	Ground clearance of rear end*	1,260*			
F	Ground clearance*	510*			

			Unit: mm
G	Tail swing radius	SK500XDLC	3,800
G		SK520XDLC	3,880
G'	Distance from contex of suring to your and	SK500XDLC	3,800
G	Distance from center of swing to rear end	SK520XDLC	3,880
Н	Tumbler distance	4,400	
Т	Overall length of crawler	5,460	
J	Track gauge	2,750	
Κ	Shoe width	600	
L	Overall width of upperstructure	2,980	
		×14/5-1	

*Without including height of shoe lug.



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 m³ 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



SK520XDLC-10

в

Rating over front

Rating over side or 360 degrees

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		Boom: 7.	0 m Arm: 3.	0 m Bucket	without C	Counterweight: 9,800 kg Shoe: 600 mm HD								
A		A 3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		At Max. Reach		
В		L	#		₫—		,	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	DLC Boom: ME 6.5 m Arm: ME 2.6 m Bucket: without Counterweight: 11,200 kg Shoe: 600 mm HD													
\sim		3.0) m	4.5	m	6.0) m	7.5	5 m	9.0	m	At Max.	Reach	
В		ł	4 -	L		ł	₫		—		₫-		4 -	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

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 top defined as lift point.
- 4. The above lift capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic lift

capacity or 75% of tipping load. Lift capacities marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

- 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

SK520XDLC-10

Arm interflow system Auto warm up system Aluminum hydraulic oil cooler Hydraulic fluid filter clog detector IRRORS & 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) AB & CONTROL Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder Detachable two-piece floor mat
Aluminum hydraulic oil cooler Hydraulic fluid filter clog detector IRRORS & 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) AB & CONTROL Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder
Hydraulic fluid filter clog detector IRRORS & 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) AB & CONTROL Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder
IRRORS & 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) AB & CONTROL Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder
Two rear view mirrors, right bottom clearance mirror Five front working lights (Two for boom, one for right storage box and two for cab) AB & CONTROL Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder
Five front working lights (Two for boom, one for right storage box and two for cab) AB & CONTROL Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder
Five front working lights (Two for boom, one for right storage box and two for cab) AB & CONTROL Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder
and two for cab) AB & CONTROL Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder
Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder
Two control levers, pilot-operated Horn, electric Cab light (interior) Luggage tray Large cup holder
Horn, electric Cab light (interior) Luggage tray Large cup holder
Cab light (interior) Luggage tray Large cup holder
Luggage tray Large cup holder
Large cup holder
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
,

Refueling pump Rear view camera

600 mm HD double grouser shoe

N&B Piping (foot control) Air suspension seat

Front guard

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 for rental machines, etc.

Fuel Consumption Data

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

Graph of Work Content

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

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



Machine Maintenance Data Provides maintenance status of separate machines operating at multiple sites.

Maintenance data is also relaved to KOBELCO service personnel, for more efficient planning of periodic servicing

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.

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.

Copyright by KOBELCO CONSTRUCTION MACHINERY CO., LTD. No part of this catalogue may be reproduced in any manner without notice.

KOBELCO CONSTRUCTION MACHINERY EUROPE B.V.

Veluwezoom 15 1327 AF Almere The Netherlands www.kobelco-europe.com

AB	
1000 V	L'AL
Hydraulic excavator	Base station
	Web server

Enquiries To: