

SK220	A	Boom: 5.65 m Arm: 2.94 m Bucket: without Shoe: 600 mm (Power Boost)									
		1.5 m	3.0 m	4.5 m	6.0 m	7.5 m	At Max. Reach	Radius			
B											
7.5 m	kg										
6.0 m	kg										
4.5 m	kg										
3.0 m	kg										
1.5 m	kg										
G.L.	kg										
-1.5 m	kg	*6,730	*6,730	*11,090	10,030	9,050	5,260	5,770	3,510	4,200	2,600
-3.0 m	kg	*11,760	*11,760	*14,680	10,250	9,140	5,330	5,830	3,560		
-4.5 m	kg			*10,880	10,680	*7,970	5,590				

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 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.
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 EQUIPMENT

ENGINE

- Engine, HINO J05ETA*/J05ETG**, Diesel engine with turbocharger and intercooler (Tier3-compliant engine*)

- Automatic engine deceleration

- Auto Idle Stop (AIS)

- Batteries (2 x 12 V - 104 Ah)

- Starting motor (24V - 5 kW), 50 amp alternator

- Removable clean-out screen for radiator

- Automatic engine shut-down for low engine oil pressure

- Engine oil pan drain valve

- Double element air cleaner

- Pre-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 track links

- Grease-type track adjusters

- Automatic swing brake

- Two track guides**

HYDRAULIC

- Boom and Arm regeneration system

- Aluminum hydraulic oil cooler

- Hydraulic Fluid Filter Clog Detector

- Pilot line filter

MIRRORS & LIGHTS

- Two rearview mirrors
- Five front working lights (one for boom, one for boom cylinder, one for right storage box and two for cab)*
- Three front working lights (one for cab, one for boom, one for right storage box)**

CAB & CONTROL

- Two control levers, pilot-operated
- Horn, electric
- Integrated left-right slide-type control box
- Cab, all-weather sound suppressed type
- Cab light (interior)
- Coat hook
- Luggage tray
- Large cup holder
- Detachable two-piece floor mat
- Double slide seat
- 7-way adjustable suspension seat
- 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 color monitor
- Automatic air conditioner*
- Emergency escape hammer

OPTIONAL EQUIPMENT

- Radio, AM/FM Stereo with speakers*

- Wide range of buckets

- Front,Top guard protective structures

- Piping for additional attachment*

- Refilling pump

- Travel alarm

- Automatic air conditioner**

*for SK220XD and SK220XDLC **for SK220

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

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 notice.

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Tel : +91-120-4079900

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info@kobelconet.in

Inquiries To:

■ Bucket Capacity :

0.8 - 1.2m³ (ISO heaped)

■ Engine Power :

158HP (118kW)/2,000min⁻¹
(ISO 14396)

■ Operating Weight :

20,600 - 22,800 kg



Power Meets Efficiency

In line with KOBELCO's concept of robust 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 SK220 meets the needs of civil engineering and the SK220XD/SK220XDLC meets the needs of the most punishing mining sites with a performance that simply astounds.

Increase in productivity means "Power"

19%*
Higher fuel Saving means "Efficiency"



*in ECO-mode compared to S-mode on the SK210HDLC-8

Even stronger attachment

Increase in productivity means "Power"

Reinforced arm exhibits strength

Thick steel plate ^{NEW}



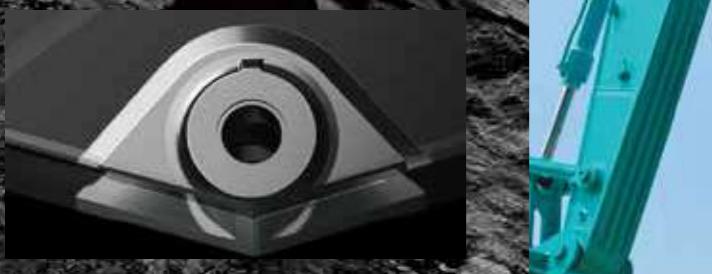
Arm top

Arm foot

Thickness of steel plate has been increased.

Base plate thickness has been increased.

Modified Foot Boss Shape ^{NEW}



The arm foot boss shape has been modified and improved to distribute stress, delivering more strength for tasks like digging next to a wall.

Rock Guards*

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

*for SK220XD and SK220XDLC



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

Newly developed mining boom made of thicker steel plate

Big cross-section boom



Big cross-section boom for unbeatable durability under harsh working conditions

Upper under covers protect machine body

Upper Under Covers



Thick covers with increased durability compared to standard models.

Increase in productivity means "Power"

Powerful travel system for easy transit over loose rocks, and highly reliable filtration system ensure higher machine performance.

Crawlers Built for Unbeatable Durability (for SK220XD and SK220XDLC)



Reinforced Guide Frame

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



Track Guides

Large, reinforced track guides are installed in three locations.



Thicker steel plate for shoes

Reinforced HD shoes of thickness has been increased 1.2 times compared to SK210HDLC-8.



Reinforced Travel Motor Cover

The plate of reinforced travel motor cover is 1.7 times thicker than that of SK210HDLC-8.



Lower Frame Underside Cover

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



Track Links

The size of the track link are increased by 8% compared to SK210HDLC-8.

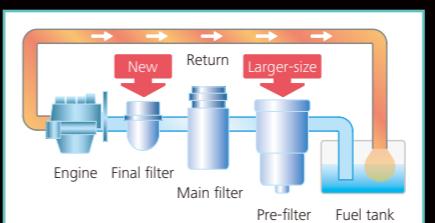
Improved Filtration System Reliability

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.

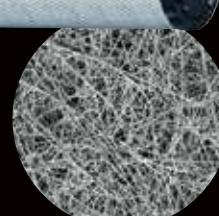
Fuel filter NEW

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.



Hydraulic Fluid Filter NEW

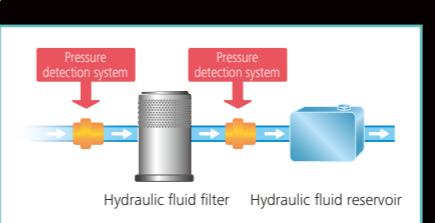
Recognized as the best in the industry, our super-fine filter separates out even the smallest particles. New cover prevents contamination when changing filters.



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.

19%*
Higher fuel Saving means "Efficiency"

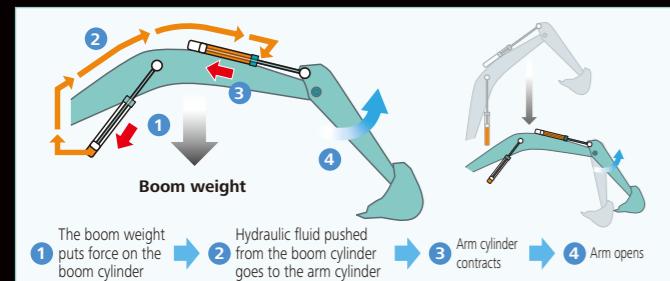
The new arm regeneration flow system more efficiently controls hydraulic fluid flow, and significant reduction of in-line resistance and pressure loss boosts fuel efficiency by about 19%*.

* in ECO-mode compared to S-mode on the SK210HDLG-8

Hydraulic System: Revolutionary Technology Saves Fuel

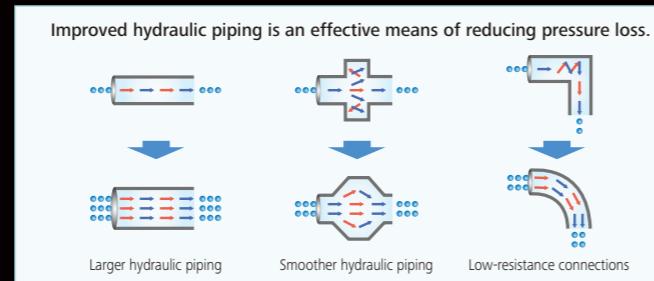
Arm Regeneration System NEW

When lowering the boom, this system uses the downward force generated by the boom's weight to push fluid to the excavator arm cylinder. This greatly reduces the need to apply power from outside the system.



Hydraulic circuit reduces energy loss NEW

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.



2.4 m arm (Bucket capacity 0.93 m³)

■ Max. Bucket Digging Force	Normal: 143kN
	With power boost: 157kN
■ Max. Arm crowding Force	Normal: 121kN
	With power boost: 133kN

■ Max digging reach:	9,420 mm
■ Max digging depth:	6,160 mm
■ Max vertical digging depth:	5,570 mm

In Pursuit of Improved Fuel Efficiency

Operation Mode NEW

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

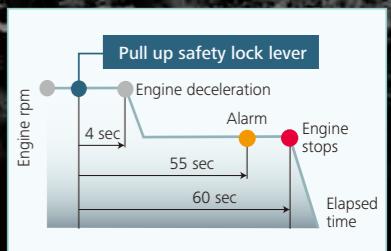
■ Compared to previous models



H	H-mode ... About 16% improvement
S	S-mode ... About 14% improvement
E	ECO-mode ... About 19% improvement

AIS (Auto Idle Stop)

If the boarding/dismounting lever is lifted up, the engine will stop automatically. This eliminates wasteful idling during standby, saving fuel and reducing CO₂ emissions as well.



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.



Efficient Maintenance Keeps the Machine in Peak Operating Condition.

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.



Generous space for maintenance work



Step/Hand rail

More Efficient Maintenance Inside the Cab



Air conditioner filters



The filter for breaker piping

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

Easy Maintenance



Air conditioner filters



The filter for breaker piping

The kobelco original filter for breaker piping is installed with breaker hydraulic line.

GEOSCAN

GEOSCAN allows you to use the Internet to manage information from your office for machines operating in all areas. This provides a wide range of support for your business operations.



GEO SCAN

KOBELCO service personnel/dealer/customer

Easy Cleaning



Air conditioner filters

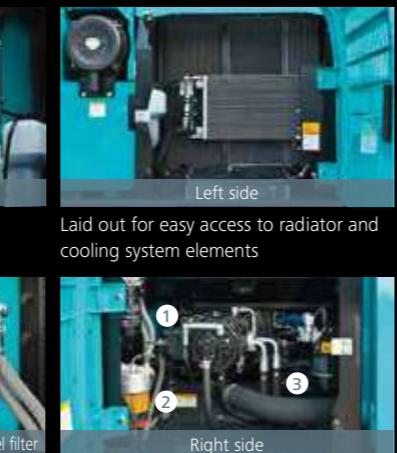


The filter for breaker piping

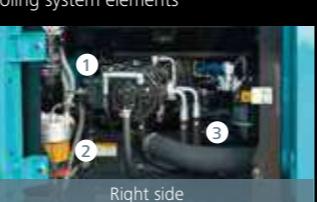
Internal and external air conditioner filters can be easily removed without tools for cleaning.

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

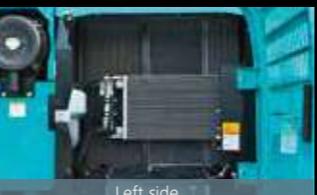
Engine oil pan equipped with drain valve.



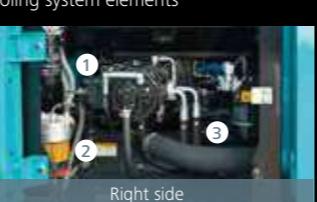
- 1 Fuel filter
- 2 Fuel filter with built-in water-separator
- 3 Engine oil filter



Right side



Double-element air cleaner



Left side

Engine

Model	J05ETA*/J05ETG**
Type	Direct injection, water-cooled, 4-cycle diesel engine with turbocharger, intercooler (Tier3-compliant engine*)
No. of cylinders	4
Bore and stroke	112 mm x 130 mm
Displacement	5.123 L
Rated power output	158 HP (118kW)/2,000min ⁻¹ (ISO14396)
Max. torque	592 N·m/1,600 min ⁻¹ (ISO 14396)

*for SK220XD and SK220XDLC **for SK220

Hydraulic System

Pump	
Type	Two variable displacement pumps + one gear pump
Max. discharge flow	2 x 220 L/min, 1 x 20 L/min
Relief valve setting	
Boom, arm and bucket	34.3 MPa {350 kgf/cm ² }
Power Boost	37.8 MPa {385 kgf/cm ² }
Travel circuit	34.3 MPa {350 kgf/cm ² }
Swing circuit	29.0 MPa {296 kgf/cm ² }
Control circuit	5.0 MPa {50 kgf/cm ² }
Pilot control pump	Gear type
Oil cooler	Air cooled type

Swing System

Swing motor	Axial piston motor
Brake	Hydraulic; locking automatically when the swing control lever is in neutral position
Parking brake	Oil disc brake, hydraulic operated automatically
Swing speed	13.3 min ⁻¹ {rpm}
Tail swing radius	2,910 mm
Min. front swing radius	3,560 mm

Attachments

Backhoe bucket and combination

Application	Working Conditions	Bucket Capacity (m ³)	Width (with side cutter) (mm)	Weight (with side cutter) (kg)	SK220XDLC		SK220XD		SK220	
					2.4m Arm	2.94m Arm	2.4m Arm	2.94m Arm	2.4m Arm	2.94m Arm
General Digging	Sand, Gravel, Clay, Trenching and Loading & General Construction Job	1.1	1,495	970	○	□	□	△	△	×
		0.8	1,160	780	—	—	—	—	○	□
		1.2	1,610	1,020	□	×	△	×	×	×
Light Duty Digging	Dry, Loose soil and Loading	1.1	1,495	970	○	□	□	△	△	×
		0.93	1,390	870	—	—	—	—	—	×
Rock	Blue Metal Quarry	0.93	1,390	870	○	×	×	×	×	×
Heavy Duty	Granite / Marble Quarry	1.1	1,495	970	○	×	—	—	—	×
		0.93	1,390	870	○	×	—	—	—	×
Coal	Coal Re-Handling	1.2	1,610	1,020	□	△	△	△	△	×
		1.1	1,495	970	□	△	△	△	△	×

○:General purpose use, material weight up to 1.8t/m³ □:General purpose use, material weight up to 1.6t/m³ △:Light duty work, material weight up to 1.2t/m³ ×: Not usable

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	SK220XDLC 49 each side
Travel speed	6.0/3.6 km/h
Drawbar pulling force	SK220XDLC 227 kN (ISO 7464)
Drawbar pulling force	SK220XD/SK220 228 kN (ISO 7464)
Gradeability	70% {35°}

Cab & Control

Cab	International Comfort Cab with dust free enclosure and with internal pressure of 97pa (earlier cab 27pa). 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	120 mm x 1,355 mm
Arm cylinder	135 mm x 1,558 mm
Bucket cylinder	120 mm x 1,080 mm

Refilling Capacities & Lubrications

Fuel tank	320 L
Cooling system	18 L
Engine oil	20.5 L
Travel reduction gear	2 x 5 L
Swing reduction gear	3 L
Hydraulic oil tank	140 L tank oil level
	244 L hydraulic system

Specifications

SK220
SK220-10

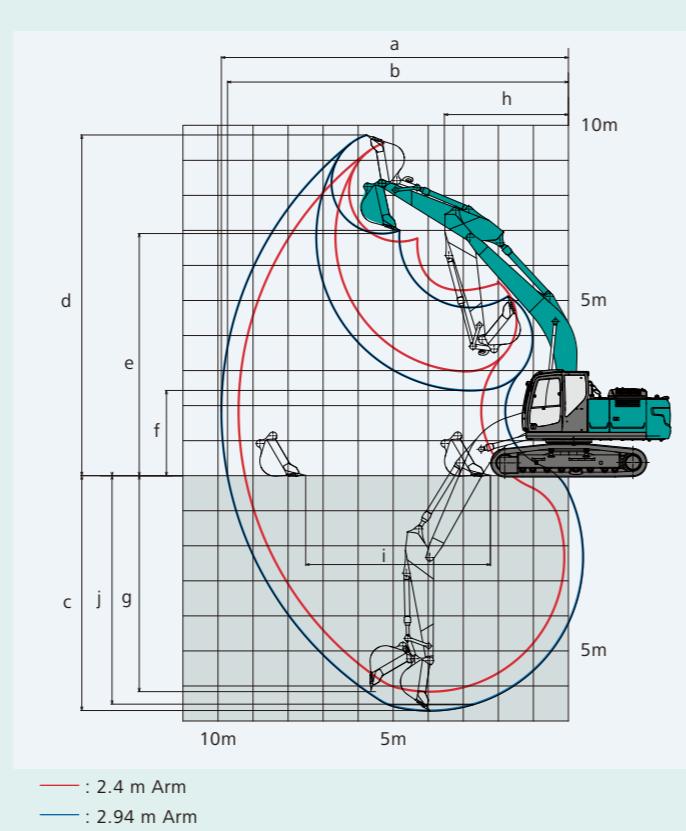
SK220XD
SK220XD-10

SK220XDLC
SK220XDLC-10



Working Ranges

Boom	5.65 m		
	Arm	2.4 m	2.94 m
Range			
a- Max. digging reach	9.42	9.9	
b- Max. digging reach at ground level	9.24	9.73	
c- Max. digging depth	6.16	6.7	
d- Max. digging height	9.51	9.72	
e- Max. dumping clearance	6.68	6.91	
f- Min. dumping clearance	2.98	2.43	
g- Max. vertical wall digging depth	5.57	6.1	
h- Min. swing radius	3.56	3.55	
i- Horizontal digging stroke at ground level	4.08	5.27	
j- Digging depth for 2.4 m (8')	5.95	6.52	
Bucket capacity ISO heaped m ³	0.93	0.8	



*Power Boost engaged.

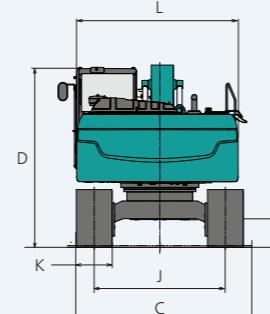
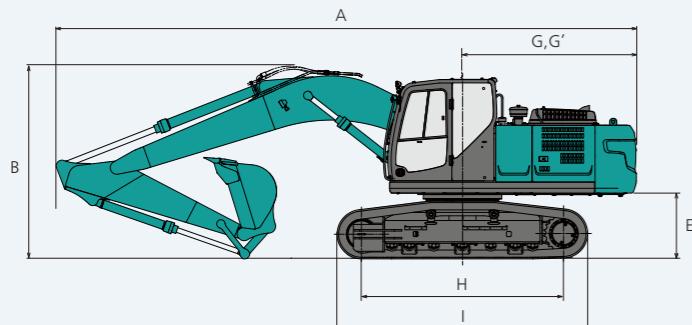


Dimensions

Arm length	2.4 m	2.94 m
A Overall length	9,680	9,600
B Overall height (to top of boom)	3,220	2,980
C Overall width of crawler	SK220XDLC 2,990	SK220XD/SK220 2,800
D Overall height (to top of cab)	3,020	
E Ground clearance of rear end*	1,070	
F Ground clearance*	435	
G Tail swing radius	2,910	

G'	Distance from center of swing to rear end	2,900
H	Tumbler distance	SK220XDLC 3,660
	SK220XD/SK220	3,370
I	Overall length of crawler	SK220XDLC 4,460
	SK220XD/SK220	4,180
J	Track gauge	SK220XDLC 2,390
	SK220XD/SK220	2,200
K	Shoe width	600
		800 (option)
L	Overall width of upperstructure	2,710

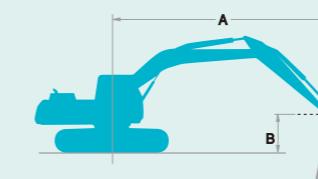
*Without including height of shoe



Operating Weight & Ground Pressure

In standard trim, with standard boom, 2.4 m arm, and 0.93 m³ ISO heaped bucket

Shaped	Triple grouser shoes (even height)	
Shoe width	mm	600 800
Overall width of crawler	SK220XDLC	mm 2,990 3,190
	SK220XD	mm 2,800 3,000
	SK220	mm 2,800 3,000
Ground pressure	SK220XDLC	kPa 46 36
	SK220XD	kPa 49 38
	SK220	kPa 46 35
Operating weight	SK220XDLC	kg 22,200 22,800
	SK220XD	kg 21,800 22,300
	SK220	kg 20,600 21,100



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: 37.8MPa (385kgf/cm²)

SK220XDLC		Boom: 5.65 m	Arm: 2.4 m	Bucket: without	Shoe: 600 mm (Power Boost)	At Max. Reach	Radius
A	B	3.0 m	4.5 m	6.0 m	7.5 m		
7.5 m	kg					*6,330	5,890
6.0 m	kg					*5,770	4,240
4.5 m	kg		*8,320	7,950	*6,980	5,100	5,490
3.0 m	kg		*10,170	7,330	7,680	4,840	3,540
1.5 m	kg		*11,600	6,850	7,410	4,600	2,920
G.L.	kg		11,450	6,640	7,240	4,450	2,520
-1.5 m	kg	*11,480	*11,480	11,430	6,630	7,210	4,420
-3.0 m	kg	*13,240	13,190	*9,950	6,760	*7,240	4,530
-4.5 m	kg			*6,270	*6,270		

SK220XDLC		Boom: 5.65 m	Arm: 2.94 m	Bucket: without	Shoe: 600 mm (Power Boost)	At Max. Reach	Radius
A	B	1.5 m	3.0 m	4.5 m	6.0 m	7.5 m	
7.5 m	kg					*5,330	4,270
6.0 m	kg					*5,330	3,950
4.5 m	kg					*5,900	3,870
3.0 m	kg					*6,440	3,870
1.5 m	kg					*11,070	3,940
G.L.	kg					9,380	2,890
-1.5 m	kg	*6,730	*6,730	*11,090	*11,090	11,310	2,880
-3.0 m	kg	*11,760	*11,760	*14,680	*14,680	12,880	2,880
-4.5 m	kg			*10,880	*10,880	*10,880	

SK220XD		Boom: 5.65 m	Arm: 2.4 m	Bucket: without	Shoe: 600 mm (Power Boost)	At Max. Reach	Radius
A	B	3.0 m	4.5 m	6.0 m	7.5 m		
7.5 m	kg					*6,330	5,340
6.0 m	kg					*5,770	3,840
4.5 m	kg					*8,320	4,890
3.0 m	kg					*10,170	3,190
1.5 m	kg					10,140	2,920
G.L.	kg					9,900	2,590
-1.5 m	kg	*11,480	11,230	9,880	8,360	7,330	2,590
-3.0 m	kg	*13,240	11,470	*9,950	6,000	6,460	2,590
-4.5 m	kg			*6,270	*6,270		

SK220XD		Boom: 5.65 m	Arm: 2.94 m	Bucket: without	Shoe: 600 mm (Power Boost)	At Max. Reach	Radius
A	B	1.5 m	3.0 m	4.5 m	6.0 m	7.5 m	
7.5 m	kg					*5,330	4,270
6.0 m	kg					*5,900	3,950
4.5 m	kg					*6,440	3,870
3.0 m	kg					*9,380	2,880
1.5 m	kg					10,210	2,920
G.L.	kg					6,330	2,590
-1.5 m	kg	*6,730</					