

SUMITOMO

# SUMITOMO

## SH210-6 SH220LC-6 SH220NLC-6

- Engine Rated Power (Net): 117.3 kW·159.5 PS
- Operating Weight:  
SH210-6 ..... 20,100 kg  
SH220LC-6 ..... 20,400 kg  
SH220NLC-6 ..... 21,200 kg
- Bucket Capacity (ISO Heaped): 0.5~1.1 m<sup>3</sup>

LEGEST  
HYDRAULIC EXCAVATOR FOR REAL PERFORMANCE



SUMITOMO CONSTRUCTION  
MACHINERY CO., LTD.

731-1 Naganumahara-cho, Inage-ku, Chiba, 263-0001 Japan  
For further information please contact: Phone : +81-43-420-1829 Facsimile : +81-43-420-1907

We are constantly improving our products and therefore reserve the right to change designs and specifications without notice.  
Illustrations may include optional equipment and accessories and may not include all standard equipment.

# *Performance Refined. Evolution Defined.*



## JAPANESE TECHNOLOGY

The world knows that Japanese designed and engineered products represent the highest quality, especially for Industrial Products. The hydraulic excavator is no exception when a totally integrated concept is required in design work involving key components, manufacturing engineering, and product quality assurance in the factory. SUMITOMO hydraulic excavators are designed and manufactured today to meet the global demands of our many customers with the concept of Performance, Reliability, and Fuel Efficiency foremost in our minds. This proven Japanese technology and quality gives SUMITOMO excavator customers total peace of mind and provide a complete solution for the demands of the construction industry.

## Engine and Hydraulics 04-07

- New Generation Engine System "SPACE 5+"
- New Hydraulic System "SIH:S+"
- SUMITOMO Fuel Efficiency Technology
- Dramatically Increased Productivity

## Durability and Maintenance 08-11

- High Rigidity Attachments
- EMS
- Ground Level Maintenance

## Safety and Operator Comfort 12-17

- Stylish and Spacious Cabin
- High-Definition Full Colour LCD Monitor
- FVM® (Field View Monitor) (option)

## Specifications 18-26



**Performance Refined.  
Evolution Defined.**



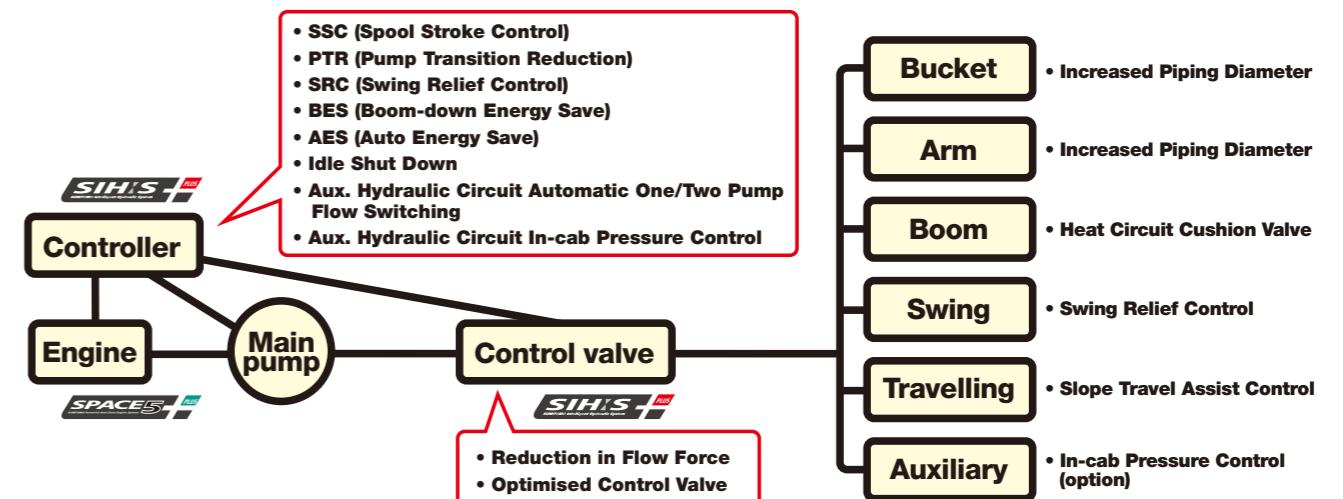
New Engine System **SPACE 5+<sup>PLUS</sup>** + New Hydraulic System **SIHIS<sup>PLUS</sup>** = **14% Reduction in Fuel Consumption**  
(as compared with SH210-5 [H mode])

#### New Generation Engine System "SPACE 5+"

The new engine system optimises fuel efficiency and environmental performance via the advanced common rail fuel injection system, cooled EGR system, and turbocharger. At the same time, excellent response times are achieved.

## Engine and Hydraulics

SH210-6 has achieved a 14% reduction in fuel consumption in comparison with our DASH 5 series, by fusing the new generation engine system "SPACE 5+" and the new hydraulic system "SIHIS+", further refining fuel efficiency. At the same time the newly developed ISUZU engine, contributes greatly to the environment.



#### Mode Selection by Throttle SUMITOMO UNIQUE DESIGN

There are three working modes available:  
SP (Super Power) for heavy duty applications,  
H (Heavy) for normal working conditions,  
A (Auto) for a wide range of operations.



#### SUMITOMO Technology for Fuel Efficiency

● **SSC (Spool Stroke Control)** SUMITOMO UNIQUE DESIGN  
Reduces engine load upon heavy duty operation.

● **BES (Boom-down Energy Save)** SUMITOMO UNIQUE DESIGN  
Lowers engine speed upon boom-down and swing operation which does not require large oil flow.

● **AES (Auto Energy Save)** SUMITOMO UNIQUE DESIGN  
Lowers engine speed accordingly when low engine load is sensed.

● **PTR (Pump Transition Reduction)**  
Decreases engine load when the pump flow requirement is reduced upon abrupt pump load.

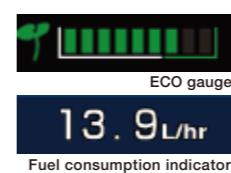
#### ● Idle Shut Down & Auto Idle

Upon activation, idle shut down automatically shuts the engine down when the machine is not in operation for set amount of time. Auto Idle is also available, which makes the engine begin idling approximately five seconds after the operation levers are in neutral position.



#### ECO Gauge Showing Low Energy Operation

The energy saving conditions can be seen at a glance, as well as the fuel consumption indicator shown on the monitor.





## Engine and Hydraulics



SUMITOMO's original technology Spool Stroke Control (SSC), perfectly matches the engine and hydraulic power, and further improves the operational speed whilst maintaining smooth control of the machine.

### Work Efficiency Drastically Increased SUMITOMO UNIQUE DESIGN

Spool Stroke Control (SSC) variably controls spool port flow rate, depending on the condition of operation. Improved power, speed, and smoother controls mean that work efficiency is dramatically increased.

### Real Digging Power

The true digging force cannot be expressed by a maximum digging power figure listed in sales brochures. With an improved hydraulic system and with a large arm cylinder, the arm-in motion speed slowdown is minimised. The digging power when combined with the attachment speed in motion convert to the operator's "Real Digging Power".

### Speed and Power, Dramatically Increases Productivity

#### • SP mode

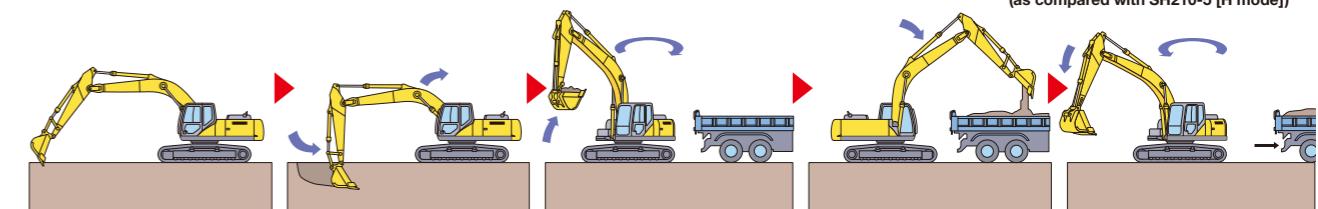
**4%** faster cycle time

#### • H mode

**4%** faster cycle time

#### • A mode

**5%** faster cycle time  
(as compared with SH210-5 [H mode])



\*Based on SUMITOMO's testing condition and results.

### Operating Condition Easily Viewable on Display

Various control such as working modes and auxiliary hydraulic setting can be easily selected by the universally designed switch panel, and what is being selected can be easily viewed on the 7" wide monitor.





# Durability and Maintenance

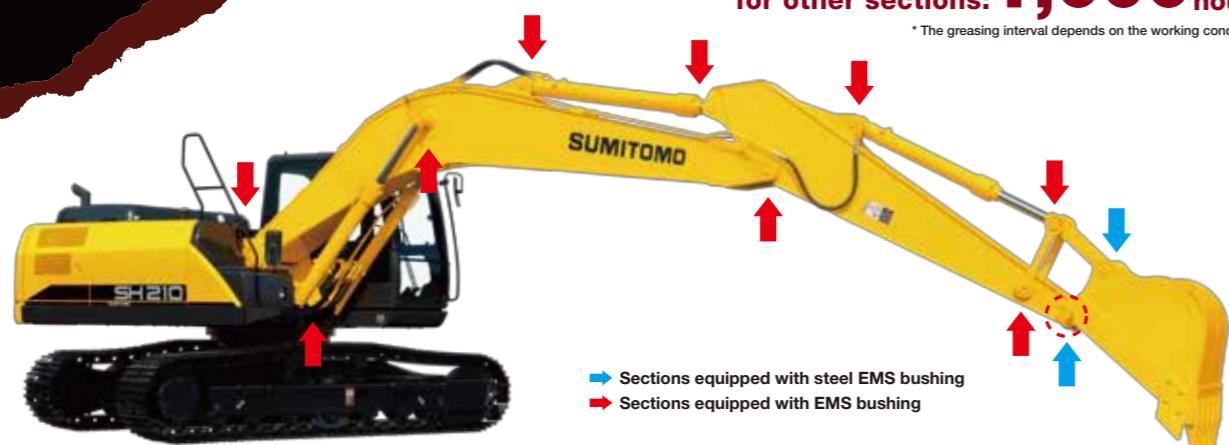
## EMS (Easy Maintenance System) as Standard

SUMITOMO's EMS keeps the pins and bushes fully lubricated at all times and prevents rattling. This system significantly extends the service life of the pins and bushes.

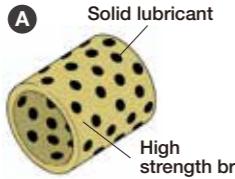
The lubrication interval around the bucket is 250 hours, and for the other sections is 1,000 hours, keeping the joints lubricated for a long time and extending the service life of parts by reducing abrasion and rattling.

- Bucket greasing interval: **250 hours**
- Greasing interval for other sections: **1,000 hours**

\* The greasing interval depends on the working conditions.



### ■ EMS bushing



A solid lubricant embedded in high strength brass forms a layer on the bushing surface to prevent contact between metals, maintaining an excellent lubricated state to reduce abrasion of joints.

B The surface of the pin is plated to increase the surface hardness and improve the wear resistance accordingly.

### Precautionary use of EMS

- ① Grease is enclosed, however greasing is necessary every 1000 hours or six months depending on the level of dusting conditions.
- ② Greasing is also necessary after any components have been submerged underwater for prolonged periods.
- ③ Greasing is also recommended after use with hydraulic breakers, crushers or other high impact attachments such as Rock Saws etc.
- ④ Bucket pins should be cleaned thoroughly when removing or attaching new buckets.

### ■ Steel EMS bushing

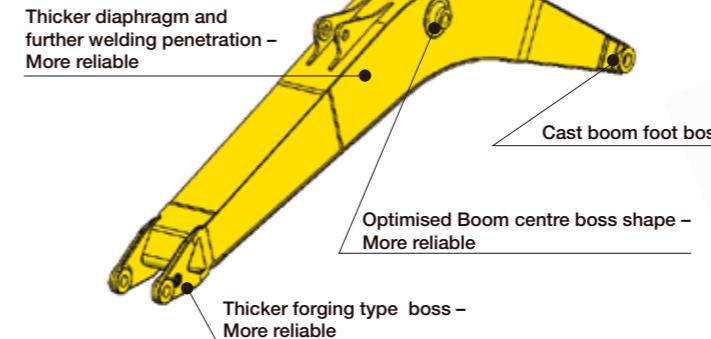


Steel EMS is installed around the bucket

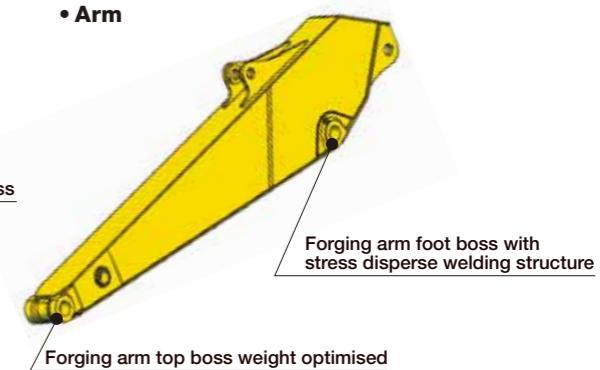
## High Rigidity Attachments

The structure of the boom and arm has been further improved, ensuring strength and durability. In addition, high strength castings are used for the boom base and arm end, improving reliability.

### • Boom

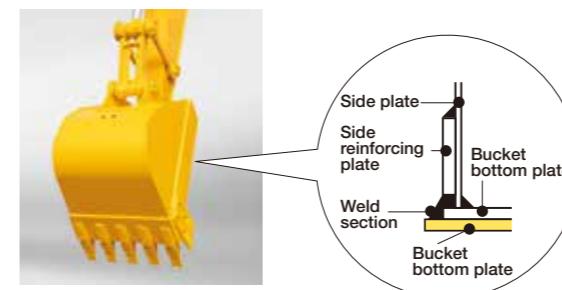


### • Arm



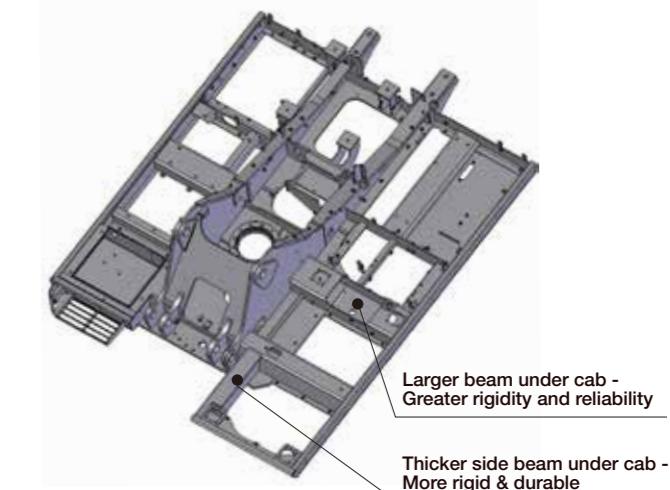
## Bucket

A one-piece wear plate covers the weld section to increase the wear life of the bucket.



## High Rigidity Swing Frame

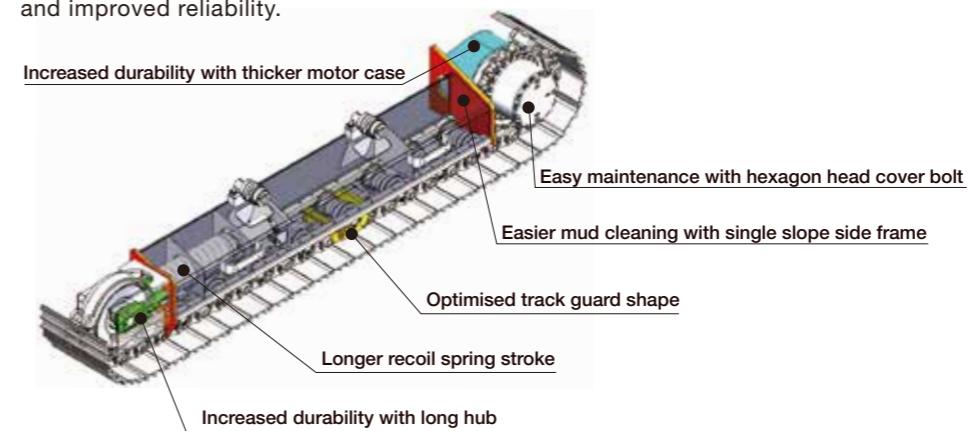
The swing frame has been strengthened to support the new cabin, as well as to increase durability.



This image shows the structure of SH210/220LC-6.

## High Rigidity Undercarriage

For improved mobility, the track system has been strengthened ensuring longer wear life, performance, and improved reliability.





## Durability and Maintenance

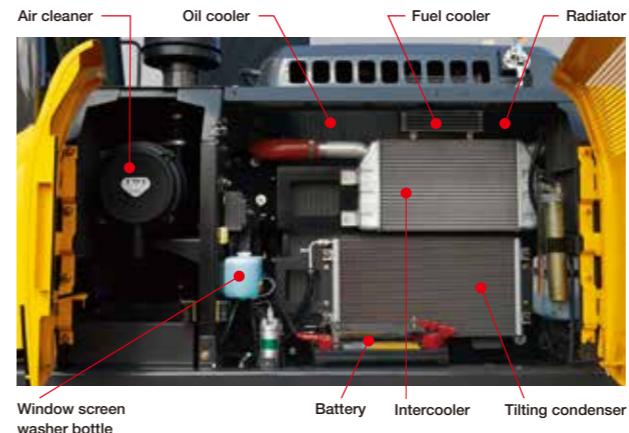
**Serviceability and durability are also important points of machine performance. Ground level access to the engine area makes daily maintenance extremely straightforward. Reliability has been further enhanced by increasing cooling capability and durability.**

### Ground Level Access to Engine Area Improves Preventative Maintenance

Parts cleaning and maintenance are possible from the ground without climbing onto the upper structure of the excavator body.

- **Increased Cooling Capability**

With the larger radiator and oil cooler, cooling capacity is increased, thus improving reliability. In addition, cleaning of the dust-proof net is simplified.



### High-Performance Return Filter

The hydraulic oil change interval is 5,000 hours, and the return filter change interval is 2,000 hours. One high performance return filter keeps the same level of filtering as a nephron.



- **Hydraulic oil change: 5,000 hours**

- **Life of filter: 2,000 hours**

\* The oil and filter change interval varies by the working conditions.

### Cab Floor Mat SUMITOMO UNIQUE DESIGN

The washable floor mat has been redesigned for ease of removing and cleaning.

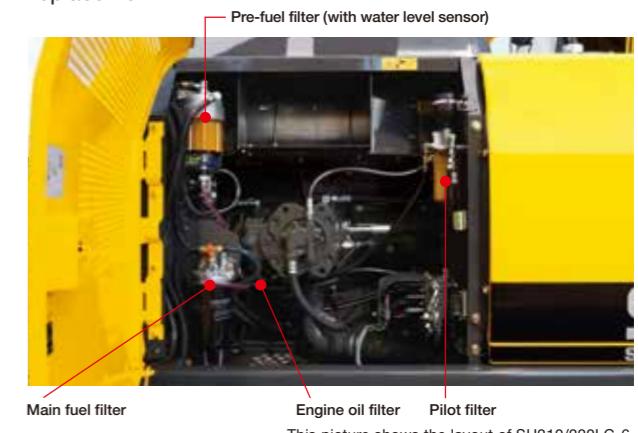


### New Side Frame Shape

The cross-sectional shape has been redesigned to make cleaning easier.

- **Easy Filter Replacement**

A fuel prefilter with water separator and water level sensor are provided as standard equipment to reduce maintenance trouble. In addition, the fuel and oil filters are installed at ground-accessible location to facilitate replacement.



This picture shows the layout of SH210/220LC-6.

### Pre-air cleaner

A pre air cleaner is provided as standard. The air cleaner cleaning frequency is minimised, even when operating in dusty conditions.



### Easy Access to A/C Filter

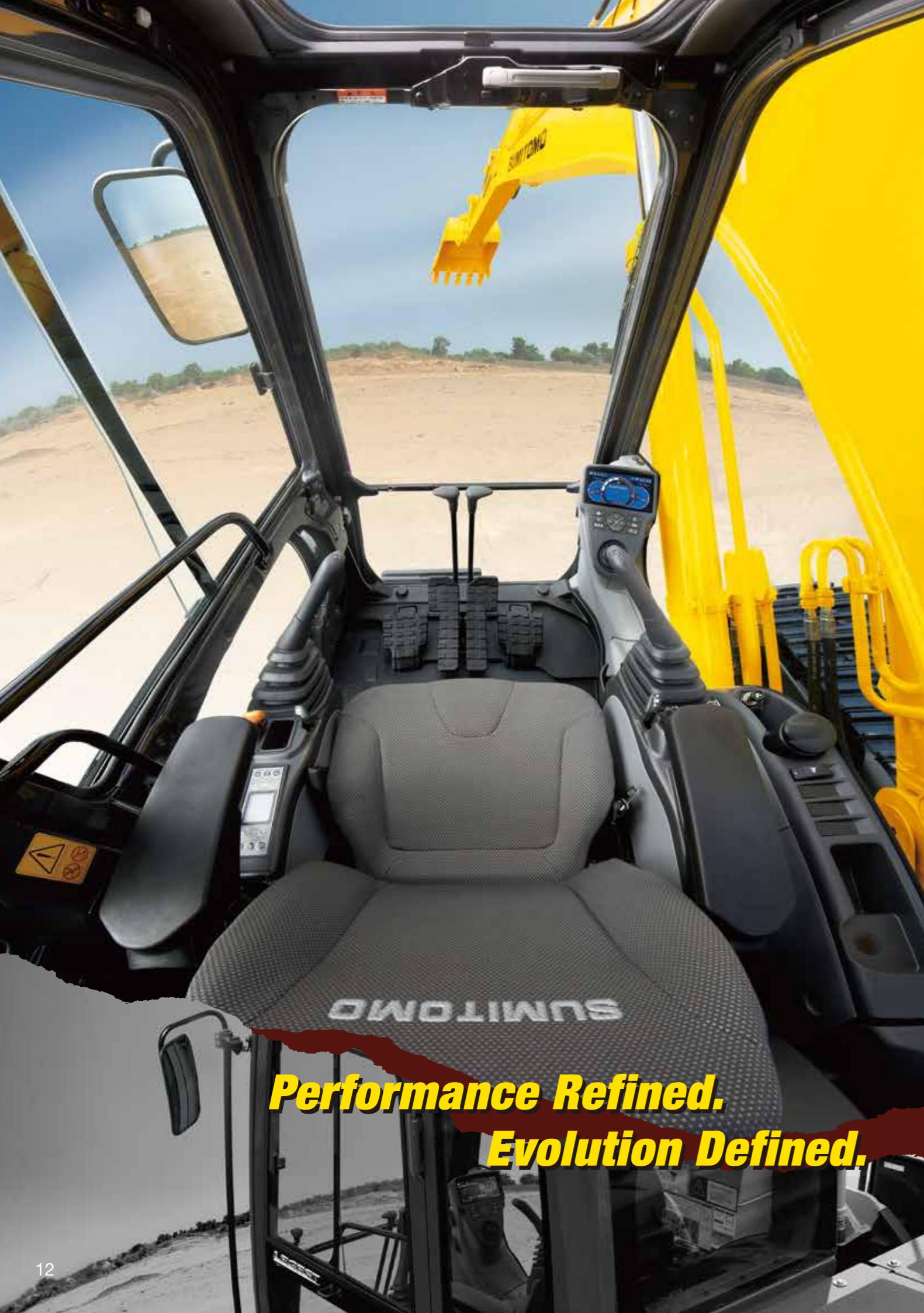
The air intake filter is located in a lockable compartment to make it easier to replace, and access to the inside cab filter has been simplified.



### Fuse Box Location

The fuse box has been located in a separate compartment behind the seat, allowing easier access.



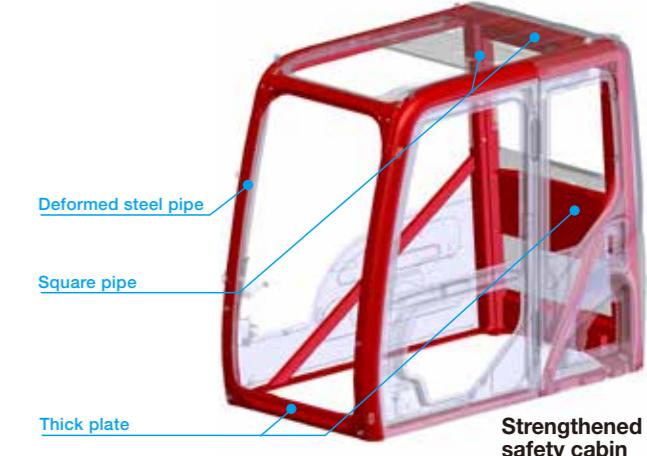


## Safety and Operator Comfort

A new strengthened safety cabin has been provided. The reinforced cabin greatly increases the operator's safety.

### Newly Designed Strengthened Safety Cabin

The optimised design and strengthened parts increase the overall cabin strength.



### Wide View Increases Safety of Work

In addition to the wide front view, the upper view has been widened to enhance work safety.



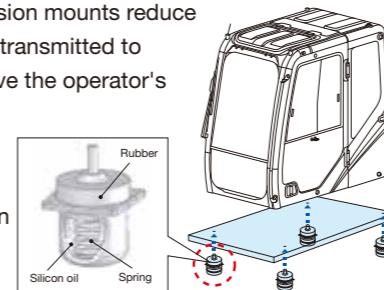
### Safe and Easy Entry into and Exit from the Cab

A large handrail for easy opening/closing of the door and increased floor space permit the operator to get in and out of the cab easily.



### New Cab Suspension Mounts

The new cab suspension mounts reduce vibration and impact transmitted to the cabin, and improve the operator's sitting quality and reduce operator fatigue. The sealed and pressurised cabin prevents entry of dust from outside.



### New OPG Level 2 Head Guard (option)

OPG Level 2 head guard is available as an option. The see-through grille has been redesigned for better protection and visibility.



### Easy Access to the Upper Structure



### Cab Front Guard (option)

The optional cab front guard increases safety from flying debris during demolition, breaker operation, etc.

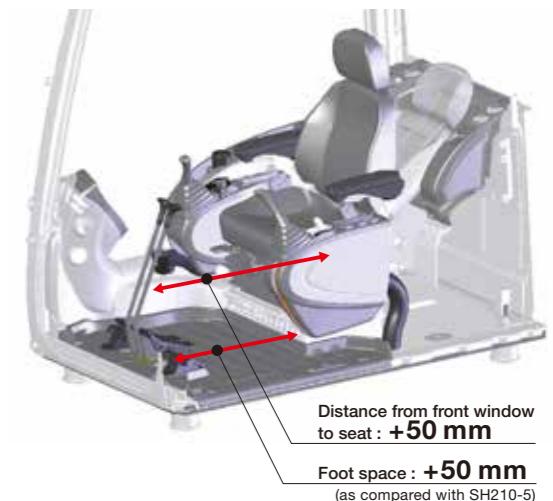


## Safety and Operator Comfort

**The spacious cab on suspension mounts and reclining suspension seat help reduce operator fatigue and provide a relaxed environment.**

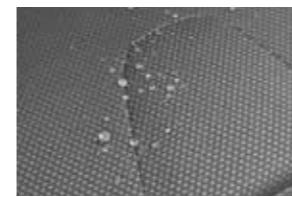
### Stylish and Spacious Cab

Wide cab space and floor space ensure more comfortable operation. In addition to the tilting console that is adjustable in four steps vertically, the increased sliding distance ensures optimum working conditions.



### Sophisticated Reclining Seat

The seat reclining system allows the operator to lay the seat flat and to rest on site without having to remove the headrest. The suspension seat eliminates vibration and fatigue. Air suspension is also available as option.



### Auxiliary Operation Pedal

The auxiliary operation pedal is lighter to depress and the pedal angle is adjustable.



### Comfortable Equipment



### Automatic Air Conditioner

Fully automatic climate control is available through the eight vents, with an 8% stronger A/C unit, and a 24% improvement in airflow. (as compared with SH210-5)



### Radio and Speaker with USB Port and MP3 Jack

In addition to the AM/FM radio and dual speaker system with improved sound quality, auxiliary audio port is provided standard for devices such as MP3 players.



### Lever Switches

One-touch idle, horn, radio mute, or one-touch wiper buttons are installed on the operation levers in consideration of improved operability while working.



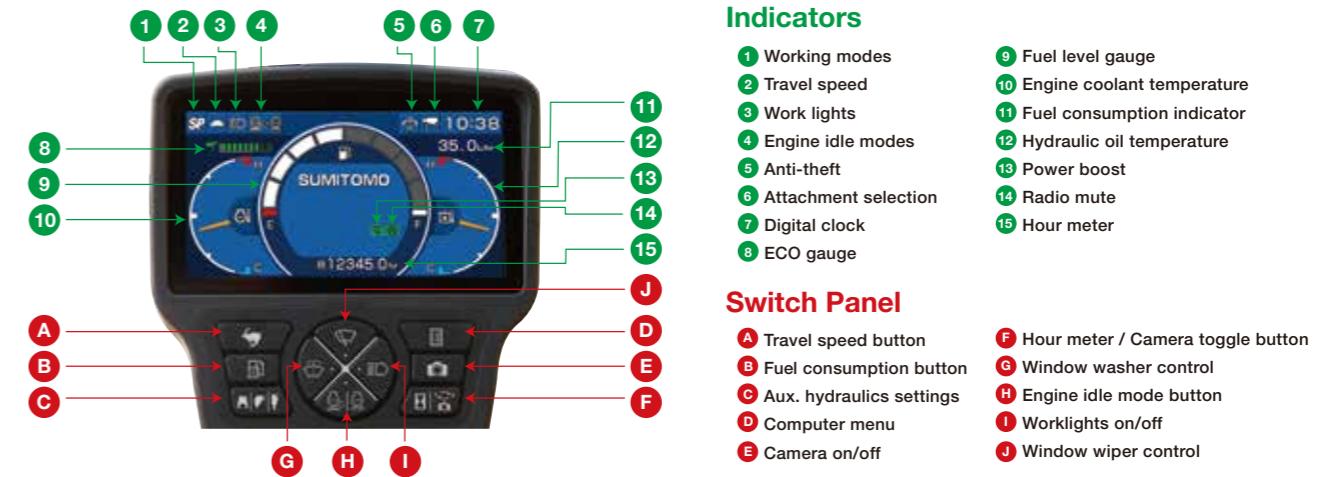


## Safety and Operator Comfort

To support the operator in the field, the DASH 6 incorporates a 7inch wide full-colour LCD monitor with numerous functions and universally designed switch panel. The cabin with enhanced operator comfort ensures a safe working environment.

### Large High-Definition LCD Monitor

A new large high-definition full colour LCD monitor has been introduced with better visibility and a switch panel which is easy to operate. Added functionality such as ECO gauge showing parameter of energy saving, display of operation status and warning messages, provides accurate information which improves work efficiency and safety.



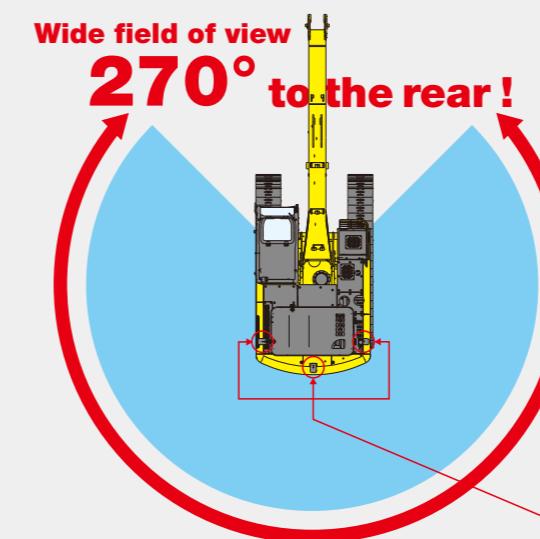
### FVM for Greater Worksite Safety (option\*)

SUMITOMO  
UNIQUE DESIGN

\*FVM is available for SH210/220LC-6.

As an additional option, the monitor can be upgraded to Sumitomo's proprietary FVM (Field View Monitor), which provides a clear, top-down view of the excavator around to 270° during the day and at night. This makes it so much easier for the operator to monitor the area nearby, enhancing overall safety on worksites. Different camera views can also be toggled on a single monitor.

\*The FVM is a support system for checking the safety of the surroundings; it does not prevent collisions with obstructions. Reliance on the FVM during operation should be avoided, and remember to work safely. FVM is a registered trademark of Sumitomo Heavy Industries.



FVM screen (daytime)

FVM screen (night time)



Rearview camera (option)



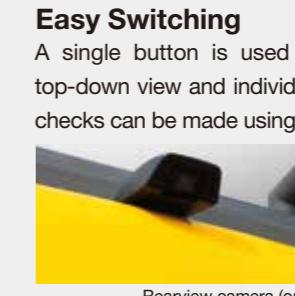
Side camera (option)



Rearview camera (option)



Side camera (option)



Rearview camera (option)



Side camera (option)

# Specifications

## SH210/220LC/220NLC-6 Technical Data

The electronic-controlled engine of SPACE 5+ and SIH:S+ with New Hydraulic System Includes: three working modes (SP, H and A), one-touch/automatic idling system, automatic power-boost, speed assistance system, power-swing system.

### Engine

SH210/220LC/220NLC-6	
Model	ISUZU GI-4HK1X
Type	Water-cooled, 4-cycle diesel, 4-cylinder in line, high pressure common rail system (electric control), turbocharger with air cooled intercooler.
Rated output	117.3 kW (159.5 PS) at 1,800 min <sup>-1</sup> (rpm)
Maximum torque	606 N·m at 1,500 min <sup>-1</sup> (rpm)
Piston displacement	5.19 ltr (5,193 cc)
Bore and stroke	115 mm x 125 mm
Starting system	24 V electric motor starting
Alternator	24 V, 50 A
Air filter	Double element

### Hydraulic pumps

Two variable displacement axial piston pumps provide power for boom/arm/bucket, swing, and travel. One gear pump for pilot controls.

SH210/220LC/220NLC-6	
Maximum oil flow	2 x 211 ltr/min
Pilot pump max. oil flow	18 ltr/min

### Hydraulic motors

For travel: Two variable displacement axial piston motors  
For swing: One fixed displacement axial piston motor

### Working circuit pressure

Boom/arm/bucket ..... 34.3 MPa (350 kgf/cm<sup>2</sup>)  
Boom/arm/bucket ..... 36.8 MPa (375 kgf/cm<sup>2</sup>) with auto power-up  
Swing circuit ..... 29.4 MPa (300 kgf/cm<sup>2</sup>)  
Travel circuit ..... 34.3 MPa (350 kgf/cm<sup>2</sup>)

### Control valve

With boom/arm holding valve  
One 4-spool valve for right track travel, bucket, boom and arm acceleration  
One 5-spool valve for left track travel, auxiliary, swing, boom acceleration and arm

### Oil filtration

Return filter ..... 6 microns  
Pilot filter ..... 8 microns  
Suction filter ..... 105 microns

### Hydraulic cylinders

SH210/220LC/220NLC-6		
Cylinder	Q'ty	Bore x rod diameter x stroke
Boom	2	120 mm x 85 mm x 1,255 mm
Arm	1	140 mm x 100 mm x 1,460 mm
Bucket	1	120 mm x 85 mm x 1,010 mm

Double-acting, bolt-up type cylinder tube-end; hardened steel bushings installed in cylinder tube and rods ends.

### Cabin & controls

The cabin is mounted on four fluid mountings. Features include safety glass front, rear and side windows, adjustable upholstered suspension seat with headrest and armrest, cigarette lighter, pop-up skylight window, and intermittent wiper with washer.

The front window slides upward for storage, and the lower front window is removable. Control levers are located in four positions with tilting control consoles. Built-in type full-colour monitor display. Membrane switch on monitor display.

### Swing

Planetary reduction is powered by an axial piston motor. The internal ring gear has a grease cavity for pinion. The swing bearing is a single-row shear type ball bearing. Dual stage relief valves are used for smooth swing deceleration and stops. A mechanical disc swing brake is included.

SH210/220LC/220NLC-6	
Swing speed	0~11.5 min <sup>-1</sup> (rpm)
Tail swing radius	2,750 mm
Swing torque	64 kN·m (6,526 kgf·m)

### Undercarriage

An X-style carbody is integrally welded for strength and durability. The grease cylinder track adjusters have shock absorbing springs. The undercarriage has lubricated rollers and idlers.

### Type of shoe: sealed link shoe

#### Upper rollers -

Heat treated, mounted on steel bushings with leaded tin bronze casting, sealed for lifetime lubrication.

#### Lower rollers -

Heat treated, mounted on steel bushings with leaded tin bronze casting, sealed for lifetime lubrication.

#### Track adjustment -

Idler axles adjusted with grease cylinder integral with each side frame; adjustment yoke mechanism fitted with heavy duty recoil spring.

### Number of rollers and shoes on each side

	SH210-6	SH220LC/220NLC-6
Upper rollers	2	2
Lower rollers	7	8
Track shoes	46	49

### Travel system

Two-speed independent hydrostatic system with compact axial motors for increased performance. Hydraulic motor powered output shaft coupled to a planetary reduction unit and track sprocket. All hydraulic components mounted within the width of side frame.

Travel speed can be selected by the switch panel on the monitor display. Hydraulically released disc parking brake is built into each motor.

SH210/220LC/220NLC-6		
Travel speed	High	5.6 km/h
	Low	3.4 km/h
Drawbar pull		188 kN (19,171 kgf)

### Lubricant & coolant capacity

	SH210/220LC-6	SH220NLC-6
Hydraulic system	240 ltr	220 ltr
Hydraulic oil tank	147 ltr	127 ltr
Fuel tank	410 ltr	320 ltr
Cooling system	30.8 ltr	30.8 ltr
Final drive case (per side)	5.0 ltr	5.0 ltr
Swing drive case	5.0 ltr	5.0 ltr
Engine crank case	23.1 ltr	23.1 ltr

Double-acting, bolt-up type cylinder tube-end; hardened steel bushings installed in cylinder tube and rods ends.

### Auxiliary hydraulic system

SH210/220LC/220NLC-6			
Auxiliary piping type (option)	For Breaker	For Double (breaker & crusher) acting	For D/A + Second option line
Arm type	STD	HD	HD
Bucket linkage type	HD	HD	HD
Auxiliary hydraulic pump flow	211 ltr/min	422 ltr/min	422+60 ltr/min

### Bucket

Model	SH210/220LC/220NLC-6									
	Bucket capacity (ISO/SAE/PCSA heaped)		0.8 m <sup>3</sup>		0.9 m <sup>3</sup>		1.0 m <sup>3</sup>		1.1 m <sup>3</sup>	
Bucket type	STD	Horizontal-pin	HD	Horizontal-pin	STD	Horizontal-pin	Reinforced	Horizontal-pin	STD	Horizontal-pin
Number of teeth	5		5		6		6		6	
Width	With side cutter	1,130 mm	1,136 mm	1,230 mm	1,360 mm	1,360 mm	1,260 mm	810 kg	1,460 mm	1,360 mm
Without side cutter		1,030 mm	1,036 mm	1,130 mm				771 kg		
Weight		645 kg	630 kg	727 kg	685 kg	750 kg	737 kg	810 kg		
Combination	2.40 m arm	○(○)[○]	○(○)[○]	●(○)[○]	○(●)[○]	○(●)[○]	○(○)[△]	○(○)[△]	△(△)[△]	△(△)[△]
2.94 m arm	●(○)[○]	●(○)[○]	●(○)[○]	○(●)[○]	○(●)[○]	○(●)[○]	○(○)[△]	○(○)[△]	△(△)[△]	△(△)[△]

○ Suitable for materials with density up to 2,000 kg/m<sup>3</sup> or less

● Suitable for materials with density up to 1,800 kg/m<sup>3</sup> or less

○ Suitable for materials with density up to 1,600 kg/m<sup>3</sup> or less

△ Suitable for materials with density up to 1,400 kg/m<sup>3</sup> or less

Figure in ( ) : LC type

Figure in [ ] : NLC type

### Weight & Ground Pressure

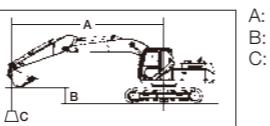
Model	SH210-6				Ground pressure
	Shoe type	Shoe width	Overall width	Operating weight	
Triple grouser shoe		600 mm	2,800 mm	20,100 kg	45 kPa
		700 mm	2,900 mm	20,400 kg	39 kPa
		800 mm	3,000 mm	20,600 kg	35 kPa

### SH2

## Lifting Capacity

Notes:

1. Ratings are based on ISO 10567
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. \*Indicates load limited by hydraulic capacity.
5. 0 m = Ground.



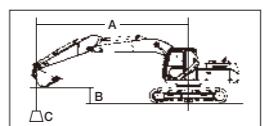
- : Radius of load
- : Bucket hook height
- : Lifting capacity

SH210-6												SHOE : 600 (mm)G		ARM LENGTH = 2.94 (m)		BOOM : 5.70 (m)		Load Radius Over Front		Load Radius Over Side		Unit: kg				
												BUCKET : SAE/PCSA 0.80 (m <sup>3</sup> )		MAXIMUM REACH = 9.90 (m)												
Bucket Hook Height	Max. Radius			9 m		8 m		7 m		6 m		5 m		4 m		3 m		2 m		1 m		Min. Radius				
8 m	2 270*	7.33	2 270*	7.33				3 140*	3 140*												(kg)	(m)	(kg)	(m)		
7 m	2 150*	8.12	2 150*	8.12			2 600*	2 510	3 690*	3 320											2 660*	6.29	2 660*	6.29		
6 m	2 090*	8.71	2 070	8.71			3 800*	2 510	4 040*	3 270											3 220*	6.24	3 220*	6.24		
5 m	2 080*	9.12	1 850	9.12	2 590*	1 910	3 780	2 470	4 300*	3 190	4 390*	4 170									4 080*	6.15	4 010	6.15		
4 m	2 100*	9.39	1 700	9.39	2 970	1 880	3 710	2 400	4 600*	3 080	5 120*	4 050	5 740*	5 410	6 010*	6 010*					4 420*	5.72	4 420*	5.72		
3 m	2 160*	9.54	1 610	9.54	2 920	1 830	3 620	2 320	4 570	2 970	5 780*	3 870	6 770*	5 230	8 470*	7 460	10 030*	10 030*			5 200*	3.57	5 200*	3.57		
2 m	2 240*	9.56	1 570	9.56	2 870	1 780	3 530	2 240	4 440	2 850	5 750	3 680	7 640*	4 920	10 140*	6 960	12 590*	10 970			7 500*	2.11	7 500*	2.11		
1 m	2 360*	9.48	1 570	9.48	2 820	1 740	3 450	2 160	4 320	2 730	5 550	3 510	7 480	4 650	10 890*	6 510	8 210*	8 210*			4 720*	2.42	4 720*	2.42		
0 m	2 530*	9.28	1 610	9.28	2 780	1 700	3 380	2 100	4 210	2 630	5 390	3 370	7 250	4 450	10 620	6 220	8 370*	8 370*	4 880*	4 880*	3 600*	2.28	3 600*	2.28		
-1 m	2 780	8.97	1 700	8.97			3 340	2 060	4 130	2 560	5 290	3 270	7 100	4 320	10 480	6 120	9 630*	9 540	6 710*	6 710*	5 880*	5 880*	4 100*	0.51	4 100*	0.51
-2 m	3 020	8.54	1 850	8.54			3 350	2 060	4 110	2 540	5 250	3 240	7 070	4 300	10 490	6 130	11 560*	9 750	8 420*	8 420*	7 470*	7 470*	5 880*	0.30	5 880*	0.30
-3 m	3 390	7.96	2 100	7.96				4 160	2 590	5 280	3 280	7 110	4 350	10 560	6 200	14 230*	10 190	10 520*	10 520*	8 930*	8 930*	7 690*	0.37	7 690*	0.37	
-4 m	3 980	7.23	2 480	7.23				4 250	2 670	5 390	3 380	7 220	4 450	10 590	6 340	14 220*	10 370	14 610*	14 610*	10 990*	10 990*	10 190*	0.72	10 190*	0.72	
-5 m	5 050	6.28	3 170	6.28					5 450	3 490	7 270	4 670	9 600*	6 550	12 390*	10 600*	16 950*	16 950*			14 800*	1.47	14 800*	1.47		
-6 m	5 960*	4.67	5 130	4.67									7 270*	6 540							8 280*	3.50	8 050	3.50		



kg

Notes: 1. Ratings are based on ISO 10567  
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.  
3. The load point is a hook (not standard equipment) located on the back of the bucket.  
4. \*Indicates load limited by hydraulic capacity.  
5. 0 m = Ground.



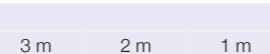
- A: Radius of load
- B: Bucket hook height
- C: Lifting capacity

SH210-6		SHOE : 800 (mm)G		ARM LENGTH = 2.94 (m)				BOOM : 5.70 (m)																	
		BUCKET : SAE/PCSA 0.80 (m <sup>3</sup> )		MAXIMUM REACH = 9.90 (m)																					
Bucket Hook Height		Radius of Load												Min. Radius											
		Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m													
	(kg) (m)	(kg) (m)												(kg) (m)	(kg) (m)										
8 m	2 270*	7.33	2 270*	7.33				3 140*	3 140*						2 660*	6.29	2 660*	6.29							
7 m	2 150*	8.12	2 150*	8.12		2 600*	2 580	3 690*	3 400						3 220*	6.24	3 220*	6.24							
6 m	2 090*	8.71	2 090*	8.71		3 800*	2 580	4 040*	3 360						4 080*	6.15	4 080*	6.15							
5 m	2 080*	9.12	1 910	9.12	2 590*	1 970	3 890	2 540	4 300*	3 270	4 390*	4 260*			4 420*	5.72	4 420*	5.72							
4 m	2 100*	9.39	1 760	9.39	3 070	1 940	3 820	2 470	4 600*	3 170	5 120*	4 150	5 740*	5 520*	6 010*	6 010*	5 200*	5.72	5 200*	5.72					
3 m	2 160*	9.54	1 670	9.54	3 020	1 900	3 730	2 390	4 700	3 050	5 780*	3 970	6 770*	5 360	8 470*	7 600	10 030*	10 030*	7 500*	2.11	7 500*	2.11			
2 m	2 240*	9.56	1 630	9.56	2 970	1 850	3 640	2 310	4 570	2 930	5 910	3 780	7 770*	5 050	10 140*	7 140	12 590*	11 230	4 720*	2.42	4 720*	2.42			
1 m	2 360*	9.48	1 630	9.48	2 920	1 800	3 560	2 240	4 450	2 810	5 710	3 610	7 690	4 780	11 130	6 680	8 210*	8 210*	3 600*	2.28	3 600*	2.28			
0 m	2 530*	9.28	1 670	9.28	2 880	1 760	3 490	2 170	4 340	2 720	5 550	3 470	7 460	4 570	10 920	6 400	8 370*	8 370*	4 880*	4 880*	3 700*	1.55	3 700*	1.55	
-1 m	2 780*	8.97	1 760	8.97		3 450	2 130	4 260	2 650	5 450	3 370	7 310	4 450	10 780	6 290	9 630*	9 630*	6 710*	6 710*	5 880*	5 880*	4 100*	0.51	4 100*	0.51
-2 m	3 120	8.54	1 920	8.54		3 460	2 140	4 240	2 630	5 410	3 340	7 280	4 430	10 790	6 310	11 560*	9 980	8 420*	8 420*	7 470*	7 470*	5 880*	0.30	5 880*	0.30
-3 m	3 500	7.96	2 170	7.96				4 290	2 680	5 440	3 380	7 320	4 480	10 860	6 380	14 230*	10 460	10 520*	10 520*	8 930*	8 930*	7 690*	0.37	7 690*	0.37
-4 m	4 100	7.23	2 560	7.23				4 380	2 750	5 550	3 480	7 420	4 580	10 810	6 510	14 220*	10 630	14 610*	14 610*	10 990*	10 990*	10 190*	0.72	10 190*	0.72
-5 m	5 210	6.28	3 270	6.28					5 590	3 590	7 450	4 790	9 600*	6 720	12 390*	10 830	16 950*	16 950*			14 800*	1.47	14 800*	1.47	
-6 m	5 960*	4.67	5 270	4.67									7 270*	6 710							8 280*	3.50	8 270	3.50	

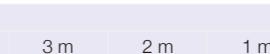


Unit: kg

SH210-6		SHOE : 600 (mm)G		ARM LENGTH = 2.40 (m)		BOOM : 5.70 (m)																				
		BUCKET : SAE/PCSA 0.90 (m <sup>3</sup> )		MAXIMUM REACH = 9.42 (m)																						
Bucket Hook Height		Radius of Load												Min. Radius												
		Max. Radius		9 m		8 m		7 m		6 m		5 m														
8 m		(kg) 3 390*	(m) 6.61	(kg) 3 390*	(m) 6.61										(kg) 3 100*	(m) 5.91	(kg) 3 100*	(m) 5.91								
7 m		3 190*	7.51	2 750	7.51			4 130*	3 190	3 870*	3 870*						3 400*	5.73	3 400*	5.73						
6 m		3 110*	8.14	2 310	8.14			3 710	2 400	4 360*	3 160	4 550*	4 170				4 560*	5.61	4 560*	5.61						
5 m		3 080*	8.59	2 030	8.59			3 680	2 380	4 620*	3 090	4 840*	4 070	5 340*	5 340*		4 780*	4.79	4 780*	4.79						
4 m		2 960	8.89	1 850	8.89			3 620	2 320	4 590	2 980	5 490*	3 910	6 300*	5 310	7 300*	7 300*	8 010*	3.42	8 010*	3.42					
3 m		2 820	9.05	1 740	9.05	2 860	1 770	3 540	2 250	4 460	2 870	5 790	3 730	7 350*	5 020	8 650*	7 150	6 380*	3.00	6 380*	3.00					
2 m		2 770	9.08	1 700	9.08	2 820	1 730	3 460	2 170	4 340	2 750	5 600	3 560	7 580	4 740	10 090*	6 640	6 020*	3.23	6 020*	3.23					
1 m		2 780	8.99	1 700	8.99			3 390	2 110	4 230	2 650	5 430	3 400	7 310	4 500	10 690	6 280	6 310*	3.12	6 310*	3.12					
0 m		2 880	8.78	1 760	8.78			3 340	2 060	4 140	2 570	5 310	3 290	7 130	4 340	10 470	6 100	7 350*	7 350*	5 690*	2.64	5 690*	2.64			
-1 m		3 060	8.45	1 880	8.45			3 330	2 050	4 100	2 530	5 240	3 230	7 060	4 280	10 460	6 100	9 600*	9 540	7 150*	7 150*	5 800*	1.50	5 800*	1.50	
-2 m		3 370	7.97	2 080	7.97				4 120	2 550	5 250	3 240	7 080	4 310	10 520	6 160	12 470*	9 870	9 270*	9 270*	7 720*	6 720*	0.95	6 720*	0.95	
-3 m		3 880	7.33	2 420	7.33				4 220	2 640	5 320	3 310	7 150	4 390	10 580	6 270	14 440*	10 320	12 110*	12 110*			9 690*	1.03	9 690*	1.03
-4 m		4 780	6.49	2 990	6.49					5 460	3 490	7 270	4 540	10 100*	6 440	12 920*	10 540	16 110*	16 110*			14 110*	1.47	14 110*	1.47	
-5 m		5 470*	5.36	4 130	5.36						6 360*	4 640	8 270*	6 560	10 530*	10 460					11 850*	2.55	11 850*	2.55		



SH210-6				SHOE : 800 (mm)G		ARM LENGTH = 2.40 (m)		BOOM : 5.70 (m)																		
				BUCKET : SAE/PCSA 0.90 (m <sup>3</sup> )		MAXIMUM REACH = 9.42 (m)																				
Bucket Hook Height	Radius of Load												Min. Radius													
	Max. Radius		9 m		8 m		7 m		6 m		5 m															
	1 m	2 m	3 m	4 m	5 m	6 m	7 m	8 m	9 m	10 m	11 m	12 m														
8 m	(kg) 3 390*	(m) 6.61	(kg) 3 390*	(m) 6.61						3 550*	3 550*			(kg) 3 100*	(m) 5.91	(kg) 3 100*	(m) 5.91									
7 m	3 190*	7.51	2 830	7.51					4 130*	3 280	3 870*	3 870*			3 400*	5.73	3 400*	5.73								
6 m	3 110*	8.14	2 380	8.14			3 790*	2 480	4 360*	3 250	4 550*	4 260			4 560*	5.61	4 560*	5.61								
5 m	3 080*	8.59	2 090	8.59			3 790	2 450	4 690*	3 170	4 840*	4 170	5 340*	5 340*			4 780*	4.79	4 780*	4.79						
4 m	3 060	8.89	1 910	8.89			3 730	2 390	4 720	3 070	5 490*	4 010	6 300*	5 440	7 300*	7 300*		8 010*	3.42	8 010*	3.42					
3 m	2 920	9.05	1 810	9.05	2 950	1 830	3 650	2 320	4 600	2 950	5 920*	3 830	7 350*	5 150	8 650*	7 330		6 380*	3.00	6 380*	3.00					
2 m	2 860	9.08	1 760	9.08	2 910	1 800	3 570	2 250	4 470	2 840	5 770	3 660	7 770*	4 860	10 090*	6 810		6 020*	3.23	6 020*	3.23					
1 m	2 880	8.99	1 760	8.99			3 510	2 180	4 360	2 730	5 600	3 500	7 520	4 630	10 990	6 450		6 310*	3.12	6 310*	3.12					
0 m	2 970	8.78	1 820	8.78			3 450	2 130	4 280	2 660	5 470	3 390	7 340	4 470	10 760	6 270	7 350*	7 350*		5 690*	2.64	5 690*	2.64			
-1 m	3 160	8.45	1 940	8.45			3 440	2 120	4 230	2 620	5 400	3 330	7 260*	4 410	10 760	6 280	9 600*	9 600*	7 150*	7 150*		5 800*	1.50	5 800*	1.50	
-2 m	3 480	7.97	2 150	7.97					4 250	2 640	5 410	3 340	7 280	4 440	10 810	6 340	12 470*	10 100	9 270*	9 270*	7 720*	7 720*	6 720*	0.95	6 720*	0.95
-3 m	4 000	7.33	2 490	7.33					4 350	2 730	5 480	3 410	7 360	4 510	10 840	6 440	14 440*	10 590	12 110*	12 110*			9 690*	1.03	9 690*	1.03
-4 m	4 920	6.49	3 090	6.49						5 600*	3 600	7 450*	4 660	10 100*	6 610	12 920*	10 800	16 110*	16 110*			14 110*	1.47	14 110*	1.47	
-5 m	5 470*	5.36	4 240	5.36							6 360*	4 770	8 270*	6 740	10 530*	10 530*					11 850*	2.55	11 850*	2.55		

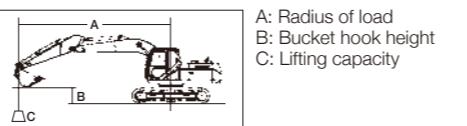


SH220NLC-6			SHOE : 500 (mm)G BUCKET : SAE/PCSA 0.80 (m <sup>3</sup> )		ARM LENGTH = 2.94 (m) MAXIMUM REACH = 9.91 (m)		BOOM : 5.70 (m)																					
Bucket Hook Height	Radius of Load																											
	Max. Radius		9 m		8 m		7 m		6 m		5 m		4 m		3 m		2 m		1 m		Min. Radius							
																												
8 m	(kg)	(m)	(kg)	(m)					2 970*	2 970*										(kg)	(m)	(kg)	(m)					
8 m	2 090*	7.37	2 090*	7.37					2 970*	2 970*										2 510*	6.22	2 510*	6.22					
7 m	1 980*	8.16	1 980*	8.16					2 490*	2 490*	3 420*	3 390									3 180*	6.26	3 180*	6.26				
6 m	1 930*	8.73	1 930*	8.73					3 490*	2 610	3 730*	3 380									3 740*	6.16	3 740*	6.16				
5 m	1 910*	9.14	1 910*	9.14	2 450*	2 000	3 680*	2 560	3 940*	3 290	4 030*	4 030*								4 060*	5.72	4 060*	5.72					
4 m	1 940*	9.40	1 780	9.40	3 310*	1 970	3 950*	2 490	4 230*	3 190	4 730*	4 160	5 370*	5 370*	6 360*	6 360*				5 910*	3.53	5 910*	3.53					
3 m	1 990*	9.54	1 690	9.54	3 850*	1 920	4 260*	2 410	4 730*	3 070	5 370*	3 970	6 330*	5 320	7 970*	7 350	9 340*	9 340*		7 440*	2.13	7 440*	2.13					
2 m	2 070*	9.56	1 650	9.56	3 810	1 860	4 560*	2 330	5 150*	2 940	5 960*	3 780	7 230*	5 010	9 440*	6 990	11 430*	10 730		4 330*	2.43	4 330*	2.43					
1 m	2 190*	9.46	1 650	9.46	3 750	1 820	4 560	2 250	5 490*	2 820	6 460*	3 600	7 940*	4 730	10 290*	6 530	7 640*	7 640*		3 320*	2.27	3 320*	2.27					
0 m	2 360*	9.25	1 690	9.25	3 710	1 780	4 480	2 190	5 540	2 720	6 810*	3 450	8 400*	4 520	10 780*	6 240	7 850*	7 850*	4 590*	4 590*	3 430*	1.51	3 430*	1.51				
-1 m	2 590*	8.93	1 790	8.93					4 430	2 140	5 460	2 650	6 940	3 350	8 590*	4 390	11 040*	6 120	9 070*	9 070*	6 350*	6 350*	5 560*	5 560*	3 850*	0.50	3 850*	0.50
-2 m	2 950*	8.48	1 950	8.48					4 440	2 140	5 420	2 620	6 900	3 310	8 570*	4 350	10 940*	6 130	10 880*	9 490	7 950*	7 950*	7 070*	7 070*	5 500*	0.30	5 500*	0.30
-3 m	3 570*	7.92	2 180	7.92							5 450	2 670	6 860*	3 350	8 410*	4 390	10 630*	6 200	13 390*	9 950	9 910*	9 910*	8 430*	8 430*	7 210*	0.37	7 210*	0.37
-4 m	4 390*	7.20	2 570	7.20							5 150*	2 730	6 430*	3 460	7 930*	4 500	9 960*	6 320	13 000*	10 130	13 870*	13 870*	10 340*	10 340*	9 550*	0.73	9 550*	0.73
-5 m	4 890*	6.24	3 270	6.24							5 380*	3 530	6 930*	4 710	8 750*	6 550	11 290*	10 240*	15 600*	15 600*					13 960*	1.50	13 960*	1.50
-6 m	5 770*	4.43	5 570	4.43															6 550*	6 510					7 030*	3.74	7 030*	3.74

SH220NLC-6				SHOE : 500 (mm)G		ARM LENGTH = 2.40 (m)		BOOM : 5.70 (m)																
				BUCKET : SAE/PCSA 0.90 (m <sup>3</sup> )		MAXIMUM REACH = 9.42 (m)																		
Bucket Hook Height	Radius of Load												Min. Radius											
	Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m													
	1	2	1	2	1	2	1	2	1	2	1	2												
(kg)	(m)	(kg)	(m)										(kg)	(m)	(kg)	(m)								
8 m	3 120*	6.65	3 120*	6.65					3 690*	3 690*				3 130*	5.85	3 130*	5.85							
7 m	2 940*	7.53	2 830	7.53			3 800*	3 300	3 950*	3 950*				3 480*	5.73	3 480*	5.73							
6 m	2 860*	8.16	2 390	8.16		3 580*	2 500	4 110*	3 260	4 170*	4 170*			4 180*	5.61	4 180*	5.61							
5 m	2 840*	8.61	2 110	8.61		3 990*	2 460	4 290*	3 170	4 440*	4 160	4 950*	4 950*		4 400*	4.68	4 400*	4.68						
4 m	2 860*	8.90	1 930	8.90		4 230*	2 400	4 520*	3 060	5 080*	3 990	5 870*	5 350*	6 810*	6 810*	5 860*	2.39	5 860*	2.39					
3 m	2 930*	9.05	1 820	9.05	3 280*	1 840	4 490*	2 320	4 960*	2 950	5 670*	3 820	6 820*	5 100	7 980*	7 170	6 450*	3.01	6 450*	3.01				
2 m	3 050*	9.08	1 770	9.08	3 580*	1 800	4 550	2 250	5 530*	2 840	6 220*	3 640	7 650*	4 810	9 290*	6 660	5 840*	3.23	5 840*	3.23				
1 m	3 210*	8.98	1 780	8.98		4 480	2 180	5 530	2 730	6 650*	3 480	8 230*	4 570	10 360*	6 290	5 830*	3.11	5 830*	3.11					
0 m	3 450*	8.76	1 840	8.76		4 420	2 130	5 460	2 650	6 910*	3 360	8 530*	4 400	10 850*	6 100	6 950*	6 950*	5 260*	2.62	5 260*	2.62			
-1 m	3 800*	8.41	1 960	8.41		4 410	2 120	5 410	2 600	6 890	3 290	8 560*	4 320	10 950*	6 090	9 080*	9 080*	6 760*	6 760*	5 400*	1.44	5 400*	1.44	
-2 m	4 320*	7.92	2 170	7.92			5 430	2 630	6 860	3 300	8 470*	4 350	10 730*	6 130	11 790*	9 600	8 790*	8 790*	7 250*	7 250*	6 310*	0.94	6 310*	0.94
-3 m	4 820*	7.26	2 520	7.26			5 340*	2 720	6 610*	3 370	8 130*	4 420	10 190*	6 240	13 210*	10 070	11 450*	11 450*			9 070*	1.03	9 070*	1.03
-4 m	5 070*	6.42	3 080	6.42					5 830*	3 550	7 360*	4 580	9 210*	6 410	11 780*	10 220	15 180*	15 180*			13 240*	1.48	13 240*	1.48
-5 m	4 970*	5.32	4 230	5.32					5 720*	4 660	7 490*	6 530	9 540*	9 540*					10 580*	2.60	10 580*	2.60		

## Lifting Capacity

- Notes: 1. Ratings are based on ISO 10567  
 2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.  
 3. The load point is a hook (not standard equipment) located on the back of the bucket.  
 4. \*Indicates load limited by hydraulic capacity.  
 5. 0 m = Ground.



Load Radius Over Front      Load Radius Over Side

Unit: kg

**SH220LC-6** SHOE : 600 (mm)G  
BUCKET : SAE/PCSA 0.90 (m<sup>3</sup>) ARM LENGTH = 2.94 (m)  
MAXIMUM REACH = 9.90 (m) BOOM : 5.70 (m)

Bucket Hook Height	Radius of Load																						
	Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m	Min. Radius											
8 m	(kg) 2250*	(m) 7.29	(kg) 2250*	(m) 7.29			3040*	3040*				(kg) 2670*	(m) 6.24	(kg) 2670*	(m) 6.24								
7 m	2120*	8.10	2120*	8.10		2490*	2490*	3670*	3620			3680*	6.20	3680*	6.20								
6 m	2060*	8.69	2060*	8.69		3750*	2770	4070*	3600			4080*	6.11	4080*	6.11								
5 m	2050*	9.11	2050*	9.11	2510*	2130	3970*	2730	4300*	3510	4390*	4390*		4440*	5.67	4440*	5.67						
4 m	2070*	9.38	1910	9.38	3360	2100	4180*	2660	4590*	3400	5050*	4450	5700*	5700*	6150*	6150*	5340*	3.57					
3 m	2120*	9.53	1810	9.53	3320	2050	4090	2580	5090*	3270	4260	5750*	5760	8540*	8120	10310*	10310*	8120*	2.23				
2 m	2120*	9.56	1760	9.56	3260	2000	4000	2490	5020	3150	6410	4070	7790*	5450	10230*	7760	11000*	11000*	4850*	2.53			
1 m	2330*	9.48	1770	9.48	3210	1950	3920	2410	4890	3030	6310	3890	8490	5180	11210*	7310	7690*	7690*	3690*	2.39			
0 m	2500*	9.28	1810	9.28	3350	2350	4780	2940	6160	3760	8350	4980	11740*	7030	8150*	8150*	4460*	4460*	3660*	1.72			
-1 m	2750*	8.97	1920	8.97		3810	2310	4710	2870	6050	3660	8210	4860	11980*	6930	9600*	9600*	6830*	5440*	5440*	4170*	0.62	
-2 m	3120*	8.52	2100	8.52		3810	2320	4700	2860	6020	3640	8180	4850	11880*	6950	11680*	11140	8540*	8540*	7820*	7820*	6000*	0.41
-3 m	3680*	7.92	2380	7.92			4750	2900	6060	3680	8220	4890	11520*	7030	14510*	11710	10750*	10750*	9170*	9170*	7920*	7920*	0.48
-4 m	4630	7.14	2850	7.14			4830	2990	6160	3790	8260	5000	10760*	7160	14020*	11900	15110*	15110*	11310*	11310*	10620*	10620*	0.84
-5 m	5240*	6.12	3710	6.12						5690*	3890	7430*	5210	9390*	7390	12100*	11870	16650*	16650*	15800*	15800*	1.63	

**SH220LC-6** SHOE : 600 (mm)G  
BUCKET : SAE/PCSA 1.00 (m<sup>3</sup>) ARM LENGTH = 2.40 (m)  
MAXIMUM REACH = 9.42 (m) BOOM : 5.70 (m)

Bucket Hook Height	Radius of Load																				
	Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m	Min. Radius									
8 m	(kg) 3340*	(m) 6.61	(kg) 3340*	(m) 6.61			3520*	3520*				(kg) 3070*	(m) 5.91	(kg) 3070*	(m) 5.91						
7 m	3150*	7.51	3030	7.51		4090*	3510	3860*	3860*			3400*	5.73	3400*	5.73						
6 m	3070*	8.14	2550	8.14		3750*	2660	4320*	3480	4510*	4490		4520*	5.61	4520*	5.61					
5 m	3040*	8.59	2250	8.59		4150	2630	4650*	3400	4800*	4480	5300*	5300*		4740*	4.79	4740*	4.79			
4 m	3060*	8.89	2060	8.89		4090	2570	4900*	3300	5450*	4320	6270*	5830	7260*	7260*	7980*	3.42	7980*	3.42		
3 m	3140*	9.05	1950	9.05	3240	1980	4010	2500	5060	3180	6100*	4130	7310*	5580	8610*	8010	6330*	3.00	6330*	3.00	
2 m	3140	9.08	1900	9.08	3200	1940	3930	2420	4930	3060	6370	3960	8240*	5290	10050*	7480	5980*	5980*	5980*	5980*	2.32
1 m	3170	8.99	1910	8.99		3860	2360	4810	2960	6210	3800	8430	5050	11230*	7100	6280*	3.12	6280*	3.12		
0 m	3270	8.78	1970	8.78		3810	2310	4730	2880	6080	3690	8240	4890	11770*	6910	7310*	7310*	5650*	5650*	5650*	2.64
-1 m	3480	8.45	2100	8.45		3790	2290	4680	2840	6000	3620	8160	4820	11900*	6920	9560*	9560*	7110*	7110*	5760*	1.50
-2 m	3830	7.97	2300	7.97			4700	2860	6010	3630	8180	4840	11670*	6970	12420*	11220	9230*	7680*	7680*	6680*	0.95
-3 m	4420	7.33	2700	7.33			4800	2950	6080	3710	8250	4920	11100*	7080	14400*	11850	12070*	12070*	9650*	1.03	
-4 m	5340*	6.49	3340	6.49					6130	3890	8040*	5070	10060*	7250	12880*	11920	16050*	16050*	14060*	1.47	
-5 m	5430*	5.36	4610	5.36						6320*	5190	8230*	7360*	10500*	10500*			11820*	2.55	11820*	2.55

**SH220LC-6** SHOE : 800 (mm)G  
BUCKET : SAE/PCSA 1.00 (m<sup>3</sup>) ARM LENGTH = 2.40 (m)  
MAXIMUM REACH = 9.42 (m) BOOM : 5.70 (m)

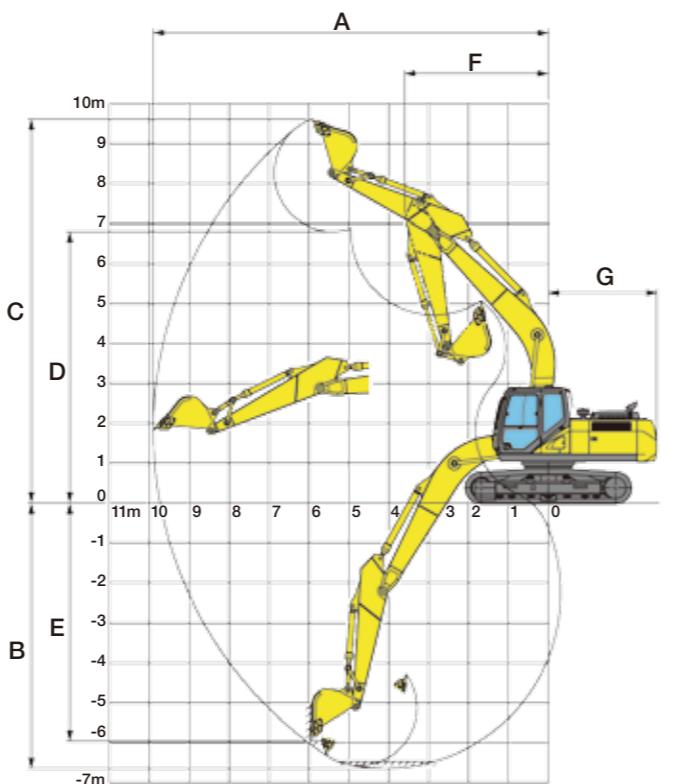
Bucket Hook Height	Radius of Load														
	Max. Radius		9 m	8 m	7 m	6 m	5 m	4 m	3 m	2 m	1 m	Min. Radius			
8 m	(kg) 3340*	(m) 6.61	(kg) 3340*	(m) 6.61			3520*	3520*				(kg) 3070*	(m) 5.91	(kg) 3070*	(m) 5.91
7 m	3150*	7.51	3150	7.51		4090*	3630	3860*	3860*			3400*	5.73	3400*	5.73
6 m	3070*	8.14	2650	8.14		3750*	2760	4320*	3600	4510*	4510				

## Principle Specifications

	SH210-6 STD Specifications	SH220LC-6 STD Specifications	SH220NLC-6 STD Specifications
Base	Boom length	5.70 m	
Engine	Arm length	2.94 m	
Hydraulic System	Bucket capacity (ISO heaped)	0.8 m <sup>3</sup>	0.9 m <sup>3</sup>
Performance	Std. operating weight	20,100 kg	20,400 kg
Others	Make & model	ISUZU GI-4HK1X	21,200 kg
Base	Rated output	117.3 kW (159.5 PS)/1,800 min <sup>-1</sup>	
Engine	Displacement	5.19 ltr	
Hydraulic System	Main pump	2 variable displacement axial piston pumps with regulating system	
Performance	Max. pressure (with auto power boost)	34.3 MPa	36.8 MPa
Others	Travel motor	Variable displacement axial piston motor	
Base	Parking brake type	Mechanical disc brake	
Engine	Swing motor	Fixed displacement axial piston motor	
Hydraulic System	Travel speed	5.6/3.4 km/h	
Performance	Drawbar pull	188 kN	
Others	Gradeability	70% <35°	
Base	Ground pressure	45 kPa	42 kPa
Engine	Swing speed	11.5 min <sup>-1</sup>	
Hydraulic System	Bucket digging force /with power boost	142 kN	152 kN
Performance	Arm digging force /with power boost	103 kN	110 kN
Others	Fuel tank	410 ltr	320 ltr
Base	Hydraulic fluid tank	147 ltr	127 ltr

## Working Range

SH210/220LC-6		
Arm length	2.40 m	2.94 m
Boom length		5.70 m
A Max. digging radius	9,420 mm	9,900 mm
B Max. digging depth	6,110 mm	6,650 mm
C Max. digging height	9,410 mm	9,610 mm
D Max. dumping height	6,590 mm	6,810 mm
E Max. vertical wall cut depth	5,500 mm	5,960 mm
F Min. front swing radius	3,600 mm	
G Rear end swing radius	2,750 mm	
SH220NLC-6		
Arm length	2.40 m	2.94 m
Boom length		5.70 m
A Max. digging radius	9,420 mm	9,900 mm
B Max. digging depth	6,080 mm	6,620 mm
C Max. digging height	9,440 mm	9,640 mm
D Max. dumping height	6,620 mm	6,840 mm
E Max. vertical wall cut depth	5,470 mm	5,930 mm
F Min. front swing radius	3,600 mm	
G Rear end swing radius	2,820 mm	



## Standard Equipment

### [Hydraulic system]

- SIH:S+ hydraulic system
- Operation mode (SP, H and A mode)
- Automatic 2-speed travel
- Automatic power boost
- Arm/boom/bucket reactivation circuit
- Automatic swing parking system
- High-performance return filter

### [Cabin/interior equipment]

- Strengthened cabin
- Top guard OPG level 1(in cab structure)
- Shock-less cab suspension by 4-point fluid mounts
- Built-in type full-colour monitor display
- Tilting console
- Open air introducing pressurised full-automatic air conditioner
- Defroster
- Hot & cool box
- Seat suspension
- Windscreen wiper (with intermittent operation function)
- Cup holder
- AM/FM radio (with muting function and AUX port & USB port)
- Radio mute/Windscreen wiper one-touch control on joystick
- Clock
- Magazine rack
- Accessory case
- Floor mat
- Armrest & headrest
- Ashtray & cigarette lighter
- Cab light (Auto-OFF function)
- Coat hook

### [Safety equipment]

- Rearview mirror (left/right)
- Emergency escape tool
- Retracting seat belt
- Automatic power boost
- Gate lock lever
- Travel alarm (with on and off switch)
- Anti-theft alarm system
- Engine room firewall
- Fan guard
- Engine emergency stop switch
- Engine neutral start

### [Others]

- Auto/one-touch idling
- Auto idle shutdown system
- EMS
- Long-life hydraulic oil
- Two lights (main unit and left of boom)
- Fuel filter
- Fuel prefilter (with water separator and water level sensor)
- Double-element air cleaner
- Grease-enclosed track link
- Large tool box
- A set of tools
- Precleaner

## Accessories (option)

### ■ Cab-top lights



### ■ Rain deflector



### ■ 12V power (DC-DC converter)



### ■ Head guard (OPG level 2)



### ■ Polycarbonate roof top window with sunshade



### ■ Front guard (OPG level 1 or 2)



### ■ Front mesh guard (full/lower)



### ■ Precleaner (automatic exhaust type)

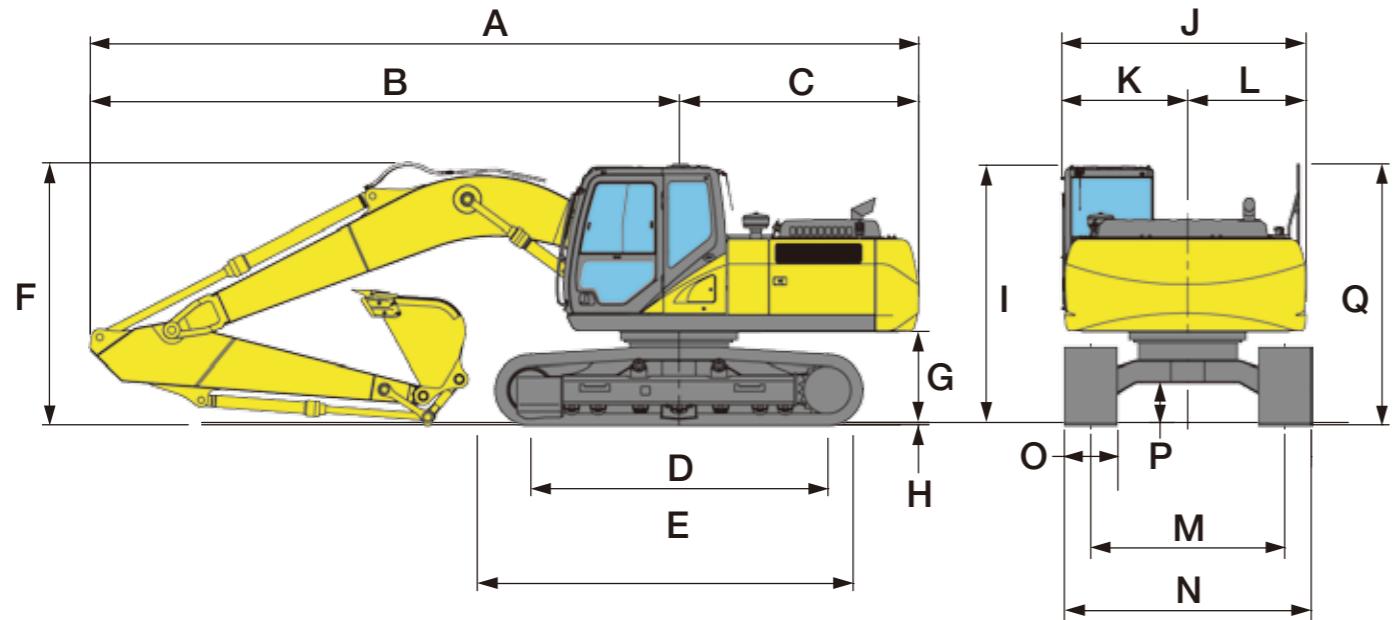


### ■ Air suspension (KAB seat)



### ■ FVM (available for SH210/220LC-6) ■ Refuel pump ■ Hose burst check valve (HBCV) for boom/arm cylinders ■ Rear view camera ■ Side camera ■ ROPS Cabin ■ ISO compliant mirror

Accessories and specifications may differ depending on countries and regions.



Model	SH210/220LC-6	
Arm length	2.40 m	2.94 m
<b>A</b> Overall length	9,460 mm	9,400 mm
<b>B</b> Length from centre of machine (to arm top)	6,740 mm	6,680 mm
<b>C</b> Length from centre of machine (to rear end)	2,720 mm	
<b>D</b> Centre to centre of wheels	3,370 (3,660) mm	
<b>E</b> Overall track length	4,180 (4,470) mm	
<b>F</b> Overall height	3,200 mm	2,970 mm
<b>G</b> Clearance height under upper structure	1,040 mm	
<b>H</b> Shoe lug height	26 mm	
<b>I</b> Cab height	2,950 mm	
<b>J</b> Upper structure overall width	2,770 mm	
<b>K</b> Width from centre of machine (left side)	1,430 mm	
<b>L</b> Width from centre of machine (right side)	1,340 mm	
<b>M</b> Track gauge	2,200 (2,390) mm	
<b>N</b> Overall width	2,800 (2,990) mm	
<b>O</b> Std. shoe width	600 mm	
<b>P</b> Minimum ground clearance	440 mm	
<b>Q</b> Handrail height	2,960 mm	

Figure in ( ): LC type

Model	SH220NLC-6	
Arm length	2.40 m	2.94 m
<b>A</b> Overall length	9,590 mm	9,500 mm
<b>B</b> Length from centre of machine (to arm top)	6,760 mm	6,670 mm
<b>C</b> Length from centre of machine (to rear end)	2,830 mm	
<b>D</b> Centre to centre of wheels	3,660 mm	
<b>E</b> Overall track length	4,460 mm	
<b>F</b> Overall height	3,200 mm	2,970 mm
<b>G</b> Clearance height under upper structure	1,070 mm	
<b>H</b> Shoe lug height	26 mm	
<b>I</b> Cab height	2,980 mm	
<b>J</b> Upper structure overall width	2,540 mm	
<b>K</b> Width from centre of machine (left side)	1,290 mm	
<b>L</b> Width from centre of machine (right side)	1,250 mm	
<b>M</b> Track gauge	1,990 mm	
<b>N</b> Overall width	2,490 mm	
<b>O</b> Std. shoe width	500 mm	
<b>P</b> Minimum ground clearance	430 mm	
<b>Q</b> Handrail height	2,990 mm	